

This page was added on 03 December 2012 to included the Disclaimer below.
No other amendments were made to this Product

DISCLAIMER

Users are warned that this historic issue of this publication series may contain language or views which, reflecting the authors' attitudes or that of the period in which the item was written, may be considered to be inappropriate or offensive today.

CHAPTER 19

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 on social statistics issued by this Bureau. These bulletins comprise *Schools* (13.5), *University Statistics Parts 1, 2, 3* (13.7, 13.8, 13.9), *Colleges of Advanced Education* (13.10) and *Teacher Education* (13.12). The *Quarterly Summary of Australian Statistics* (1.3) contains summarised information on these subjects, and financial aspects are dealt with in the annual bulletins *Public Authority Finance—Commonwealth Authorities* (5.12), *Public Authority Finance* (5.33) and *Public Authority Finance—State and Local Authorities* (5.42). The annual Reports of the respective State education departments provide detailed statistical and other information about particular States. Publications on education in Australia, secondary schooling, and other topics are issued by the Commonwealth Department of Education and Science.

EDUCATION

An account of the development of the Australian school system up to 1929 may be found in Year Book No. 22. In Year Book No. 40 a review of changes which occurred up to 1951 and of the practices then current was presented. The present situation is summarised in the early part of this chapter, in textual material provided by the Commonwealth Department of Education and Science.

Pre-school education

Pre-school centres were first established in the Australian States by voluntary organisations and a large number are still supported and supervised by them. The organisations include kindergarten unions, day nursery and creche associations, pre-school associations and denominational kindergartens. All now receive financial assistance from State governments but the amounts granted vary considerably from State to State. Other pre-schools are subsidised directly by States. In Tasmania pre-school teachers are employed by the State Education Department and in the internal Territories by the Commonwealth Department of Education and Science; buildings are also provided in the Territories. In all cases parents assist in the provision of equipment.

Pre-school centres are situated 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 two groups of children. Active parent participation in the running of the centres is encouraged. A limited number of creches and day nurseries provide full-care in closely settled areas, and there is an increasing demand for care for children of working mothers, met in part by privately run centres of varying standards. In a few cities occasional care is available and there are a few residential centres.

The Australian Pre-School Association is a national body comprising all the voluntary organisations who have as their main concern the welfare and education of children of pre-school age. With some financial assistance from the Commonwealth the Association co-ordinates pre-school work for which it sets standards. It administers and supervises the six Lady Gowrie Child Centres which were established by the Commonwealth in consultation with the Australian Pre-School Association in 1940.

Lady Gowrie Child Centres. These six Centres, one in each State capital city, were planned to give stimulus to progress in the field of child development, and this has led to the study of educational practice at the pre-school level. They provide opportunities for demonstration and research based on early childhood education. Committees of local management for each Centre include psychiatrists, paediatricians, nurses, social workers, educators and lay persons, who, in consultation, have developed an education programme based on child development.

The Centres are financed mainly by Commonwealth grants. The Commonwealth contribution for 1971-72 was \$195,000.

Radio and television bring some experience of pre-school education within the reach of practically every pre-school child in Australia. The Australian Broadcasting Commission pioneered the programme 'Kindergarten of the Air', a twenty-five minute session, broadcast throughout the country from Monday to Friday. This session is designed to reach children in isolated areas. The half-hour television programme 'Play-School' is also available twice each week-day to children of kindergarten age in State capital cities and some country areas.

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). After Federation in 1901 education was one of the responsibilities retained by the States, and these Acts, with subsequent amendments, constitute the legal basis of compulsory education in the Australian States today. The Commonwealth has responsibilities for the provision of education facilities in the Northern Territory and the Australian Capital Territory. The government school system in the Australian Capital Territory is staffed by the New South Wales Department of Education and follows the educational syllabus of that State, the cost being recovered from the Commonwealth Government. Until 1970, a similar arrangement existed with the South Australian Department of Education on the operation of schools in the Northern Territory. However, the Commonwealth Government has taken action to accept direct responsibility for the operation of schools in both the Australian Capital Territory and the Northern Territory and to this end has established the Commonwealth Teaching Service. The Commonwealth also provides direct financial assistance in various forms to schools throughout Australia.

School attendance is compulsory throughout Australia between the ages of six and, at least, fifteen. 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, suffer a physical disability, or in cases of family hardship. Where required, 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 but recently a few major independent schools have become co-educational.

Government school systems

Although the educational systems in the six States are not identical, they have many similar features. Responsibility for framing and implementing educational policy 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, student guidance, research, and the education of atypical children. In New South Wales, Victoria, 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 textbooks, 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 textbook costs are subsidised in the case of students attending government and non-government schools in some States.

Non-government school systems

Approximately 23 per cent of Australian school children were enrolled at non-government primary and secondary schools in 1971, and about 81 per cent of these attended Roman Catholic schools. 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. Non-government schools follow curricula similar to those laid down by State education departments, and prepare their students for examinations conducted by public examining bodies.

The methods adopted by the education authorities to ensure an acceptable standard of education at non-government schools vary from State to State. New non-government schools are inspected so that they might obtain approval from the State education department. The nature of this approval varies but generally the education department must be satisfied that the education provided at a non-government school is efficient and that the buildings and facilities are suitable. In Victoria and Tasmania teachers are required to be registered and the Queensland Education Act was amended recently to provide for the registration of teachers.

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 Heads of Independent Girls Schools of Australia. The National Council of Independent Schools represents all independent schools and aims to promote their interests.

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, 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, students of non-government schools must pay fees.

Certain State scholarships and bursaries are tenable at approved non-government secondary schools. From the establishment of school 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 State Governments and the Commonwealth Government have introduced some system of direct assistance to non-government schools, usually in the form of student allowances. Most States also 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 662-3.

Schools and courses

A diagram of State and Territory school systems, showing current grades, examinations, and age levels is shown on Plate 36 page 635.

Primary education. Though school attendance is not compulsory until the age of six, many children begin school before that age, 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.

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 between metropolitan and country areas. The education departments prescribe syllabuses of instruction, which are drawn up with the assistance of expert committees.

There is no external examination at the end of primary schooling and progression from primary to secondary school is usually automatic. Allocation to particular schools or particular courses is based on the recommendations of the headmaster, general ability tests, tests of achievement in the basic subjects, parents' wishes and the district in which the child lives.

Secondary education. The age of transfer from a government primary to secondary school is usually between twelve and thirteen. In general, students in the early years of secondary schooling study a basic core of subjects together with some electives, specialisation taking place at a later stage in the course. The actual subjects studied depend on the ability of the student and, in some States, the type of school.

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.

Experimental projects in curriculum development are being carried out, and individual schools and teachers have more freedom in choosing their educational programmes. As in the primary schools, increasing use is being made of modern teaching aids, and many of the larger schools have well-equipped libraries, language laboratories and science facilities.

Examinations

For information on examination procedures up to 1971, see Year Book No. 55, pages 485-6 and Year Book No. 57, page 629.

Traditionally, public examinations set by central examining authorities in each State at junior and senior secondary levels controlled and influenced the curricula to a very large extent. In recent years the junior level examinations, taken at the end of the third or fourth year of secondary schooling, have been abolished, or will be shortly, and their place has been taken by internal school examinations and school assessment. While the senior level examinations, taken in the final year and used for matriculation purposes, are still retained in most States, there is a trend towards the abolition of external examinations at this level also. These changes in the examination systems have allowed the development of more broadly-based curricula designed to meet the varying needs, interests and abilities of the students, an increasing proportion of whom are staying on at school beyond the minimum leaving age.

Students may gain their first examination certificate at the end of the third, fourth or fifth year of secondary schooling (see Plate 36, page 635) on the basis of an external or internal examination, a school assessment, or a combination of these, depending upon the State. At this stage, students may qualify for entry to trade courses at technical colleges and to some agricultural colleges, to commercial employment such as junior positions in insurance and banking, to nursing and secretarial courses, and to some positions in the public service and industry. The matriculation examination at the end of the secondary course (known variously as the Higher School Certificate, Leaving Certificate, Matriculation and Senior examination) qualifies students for entry to universities, colleges of advanced education, teachers colleges, institutes of technology, the higher grades of the public service and many commercial positions.

Special facilities for students

Details of medical and dental inspection of school children, and the provision of free milk are given in Chapter 14, Public Health. In Year Book No. 55, a general description is given of provisions for isolated areas, schools of the air and correspondence schools (pages 494 and 495), handicapped children and physical education (page 495), and educational guidance and school broadcasting and television (page 496). The following particulars supplement that information.

Aboriginal education. Aboriginal children in towns and cities attend the same schools as other Australian children, but special schools for Aborigines have been developed on isolated settlements and mission stations, financed partly or wholly from government sources. A special Commonwealth Committee has been set up to advise on the educational and related needs of Aboriginal children enrolled in community schools in the Northern Territory. Education is one of the areas of Aboriginal affairs which has received considerable stimulation from Commonwealth assistance, financial and otherwise, following the 1967 Referendum and *Constitution Alteration (Aboriginals) 1967*.

School broadcasting. Both radio and television school broadcasts continue to be used extensively by schools. They are produced by the Australian Broadcasting Commission and, as a result of the increasing number of transmitting stations, are now available to almost all schools in the Commonwealth. Approximately 91 per cent of schools make some use of the radio programmes and about 70 per cent, of television. During the year almost 3,000 radio programmes and about 300 television programmes were produced and, in addition, over 200 television programmes, relevant to Australian needs, were purchased overseas. The increasing use of audio and videotape recorders by schools, especially in secondary departments, gives a flexibility of usage that has greatly increased the utilisation of programmes. There are about 10 hours of radio and 25 hours of television available each week in each State.

Handicapped children. The Commonwealth Department of Social Services, in conjunction with the Commonwealth Departments of Health and of Education and Science, commenced a survey of handicapped children in 1970. Payments under the *States Grants (Independent Schools) Act 1969*, which provides assistance to eligible independent schools, including special independent schools for handicapped children, commenced in 1970. Assistance to eligible institutions training handicapped children is also available under the *Handicapped Children (Assistance) Act 1970*. See also page 662.

Scholarships and bursaries

All States have schemes of financial assistance to school students, 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 students with their school education. Many non-government schools also award scholarships, on a competitive basis, which enable students to attend the particular schools at reduced fees or without payment of fees.

In 1964 the Commonwealth Government, with the co-operation of the State education departments, introduced a programme of secondary scholarships to encourage successful candidates to complete the final two years of secondary schooling. Further details of the Commonwealth Secondary Scholarships Scheme and the Commonwealth Technical Scholarship Scheme are given on page 654.

Various forms of financial assistance, both government and non-government are available to help Aborigines to undertake further studies. In 1971, over 700 scholarships were awarded by ABSCHOL, a scholarship scheme organised by the Australian Union of Students, 962 primary and 222 secondary scholarships were provided by the Aboriginal Education Incentive Scholarship Fund in Victoria; and 95 scholarships for primary, secondary and adult studies were provided by the Aboriginal Education Council in New South Wales. See page 655 for details of the Aboriginal Study Grants Scheme, begun in 1968 by the Commonwealth.

Subsidised 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. For details of assistance provided by the Commonwealth for the building and equipping of science laboratories and library facilities in secondary schools see pages 662-3.

Textbooks, materials and other equipment

The State education departments supply government schools free of charge with essential equipment including scientific apparatus, maps, blackboards, chalk, 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 students 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 non-government 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 students attending government and non-government schools. The parent 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.

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 costs. Films are held in central libraries and are requisitioned by schools as required for teaching purposes.

Some central libraries are able to provide copies of audio and videotape recordings. Commonwealth financial assistance under the Secondary Schools Libraries Programme is available to State education departments for a range of audio-visual equipment.

Parent 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 parent groups are associated in a federal body, the Australian Council of State School Organisations.

Many non-government schools also have parents associations, which may raise funds for special projects.

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 education statistics. Education research is also carried out by education research units, faculties and departments of education in the universities; departments of teacher education in colleges of advanced education; the Commonwealth Department of Education and Science and the Australian Council for Educational Research.

Curriculum development

While State education departments are responsible for the development of the curricula followed in their schools, the Commonwealth is prepared to consider support for proposals in the field of curriculum development if they are put forward by more than one State. Two such proposals are at present receiving Commonwealth financial support. They are:

Australian Science Education Project. This project, which developed out of the Junior Secondary Science Project initiated by the Victorian, South Australian and Tasmanian Governments has been extended to all States. The Commonwealth will contribute \$750,000 and the States \$450,000 over the five-year period commencing in 1969.

National Committee on Social Sciences Teaching. This Committee was established in 1970 as a joint project between the Commonwealth and the States to examine goals and suggested desirable content for inclusion in the new social science curricula to suit Australian conditions.

The findings of the Advisory Committee on the teaching of Asian Languages and Cultures, a Committee set up by the Commonwealth in 1969, were made public in March 1971 by the tabling of the Committee's report in Parliament. The Committee's findings are being considered by the State and Commonwealth education authorities.

Numbers of schools, teachers and students

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 students 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 students

The statistics of government and non-government schools, teachers and students in 1971 and earlier years are shown in the following tables. For more detailed statistics, see *Schools* bulletin (reference No. 13.5).

NUMBERS OF SCHOOLS, TEACHERS AND STUDENTS, BY CATEGORY OF SCHOOL STATES AND TERRITORIES, 1971

	Non-government schools							Total	All schools
	Government schools	Denominational					Undenominational		
		Church of England	Methodist	Presbyterian	Roman Catholic	Other			
SCHOOLS									
New South Wales	2,377	34	6	12	624	26	91	793	3,170
Victoria	2,197	33	4	11	477	28	18	571	2,768
Queensland	1,228	14	..	4	296	19	12	345	1,573
South Australia	631	10	4	2	122	23	8	169	800
Western Australia	598	9	3	2	169	10	7	200	798
Tasmania	239	4	1	2	49	6	1	63	302
Northern Territory	85	..	2	..	12	1	5	20	105
Australian Capital Territory	49	3	..	..	20	..	..	23	72
Australia—1971	7,404	107	20	33	1,769	113	142	2,184	9,588
1970	7,470	108	19	33	1,781	112	127	2,180	9,650
1969	7,549	110	18	34	1,784	107	121	2,174	9,723
1968	7,636	113	20	38	1,807	109	96	2,183	9,819
1967	7,698	113	20	38	1,818	105	92	2,186	9,884

TEACHERS(a)									
New South Wales p	34,971	991	195	377	6,790	151	590	9,093	44,064
Victoria	28,344	1,166	248	533	4,992	484	294	7,716	36,060
Queensland	12,815	354	..	52	2,597	209	250	3,462	16,277
South Australia	10,047	260	130	96	953	123	121	1,682	11,730
Western Australia	7,322	277	131	104	1,169	51	20	1,752	9,074
Tasmania	3,750	112	24	39	389	88	6	659	4,409
Northern Territory	723	..	22	..	74	11	5	(b)112	834
Australian Capital Territory	1,143	107	..	..	306	..	..	413	1,556
Australia p—1971	99,115	3,266	750	1,201	17,270	1,118	1,285	24,889	124,005
1970	96,085	3,152	741	1,214	16,577	1,057	1,215	23,956	120,041
1969	91,888	3,006	711	1,165	15,413	989	1,139	22,423	114,311
1968	87,559	2,942	693	1,171	15,002	964	1,063	21,835	109,394
1967	82,481	2,817	682	1,140	14,118	887	1,049	20,693	103,174

STUDENTS (SCHOOL CENSUS)									
New South Wales	771,392	14,508	3,040	5,744	189,501	2,529	6,873	222,195	993,587
Victoria	593,933	17,383	4,184	8,320	150,031	7,184	4,113	191,215	785,148
Queensland	299,876	5,720	..	988	75,287	4,106	4,618	90,719	390,595
South Australia	231,440	4,051	2,310	1,534	26,189	2,412	1,380	37,876	269,316
Western Australia	179,889	4,083	2,005	1,504	33,080	995	446	42,113	222,002
Tasmania	78,164	1,612	335	555	10,167	1,315	163	14,147	92,311
Northern Territory	15,168	..	435	..	2,235	214	37	2,921	18,089
Australian Capital Territory	26,709	1,653	..	..	8,235	..	..	9,888	36,597
Australia—1971	2,196,571	49,010	12,309	18,645	494,725	18,755	17,630	611,074	2,807,645
1970	2,160,177	48,315	12,266	18,664	493,849	18,007	16,955	608,056	2,768,233
1969	2,113,975	47,376	12,086	18,623	491,207	17,164	16,530	602,986	2,716,961
1968	2,054,808	46,741	12,055	18,634	490,818	16,704	15,951	600,903	2,655,711
1967	1,990,940	45,944	11,764	18,487	486,738	15,925	15,823	594,681	2,585,621

(a) Excludes teachers-in-training generally. Figures are full-time teachers plus part-time teachers expressed in equivalent full-time units. For basis of calculating equivalent full-time units, see footnote (b) to next table. (b) Excludes unqualified teachers and teaching assistants at mission schools.

NUMBERS OF TEACHERS: STATES AND TERRITORIES, 1971(a)

	Government schools			Non-government schools			All schools		
	Part-time			Part-time			Part-time		
	Full-time	No.	Equiv. f.t.u. (b)	Full-time	No.	Equiv. f.t.u. (b)	Full-time	No.	Equiv. f.t.u. (b)
New South Wales p	33,930	2,434	1,041	8,406	(c)2,041	687	42,336	4,475	1,728
Victoria	26,037	(d)4,175	(d)2,307	7,159	1,646	557	33,196	5,821	2,864
Queensland	12,815	(e)3	(e)	3,258	789	204	16,073	792	204
South Australia	9,631	802	416	1,480	544	202	11,111	1,346	619
Western Australia	7,153	427	169	1,624	451	128	8,777	878	297
Tasmania	3,625	208	79	582	184	77	4,207	392	156
Northern Territory(f)	711	24	12	109	6	3	820	30	14
Australian Capital Territory	1,096	92	47	370	(c)112	43	1,466	204	90
Australia—1971	p94,998	p8,165	p4,071	22,988	5,773	1,901	p117,986	p13,938	p5,973
1970	92,725	6,851	3,360	22,187	5,963	1,769	114,912	12,814	5,129
1969	89,086	5,867	2,802	20,956	5,000	1,467	110,042	10,867	4,269
1968	84,922	5,579	2,637	20,467	5,052	1,368	105,389	10,631	4,005
1967	80,199	5,203	2,282	19,468	4,828	1,225	99,667	10,031	3,507

(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 school. (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) Since 1969, the Queensland Education Department has employed only full-time teachers. The part-time teacher statistics shown refer to government teachers employed by the Department of Aboriginal and Island Affairs. (f) Unqualified teachers and teaching assistants at mission schools are excluded.

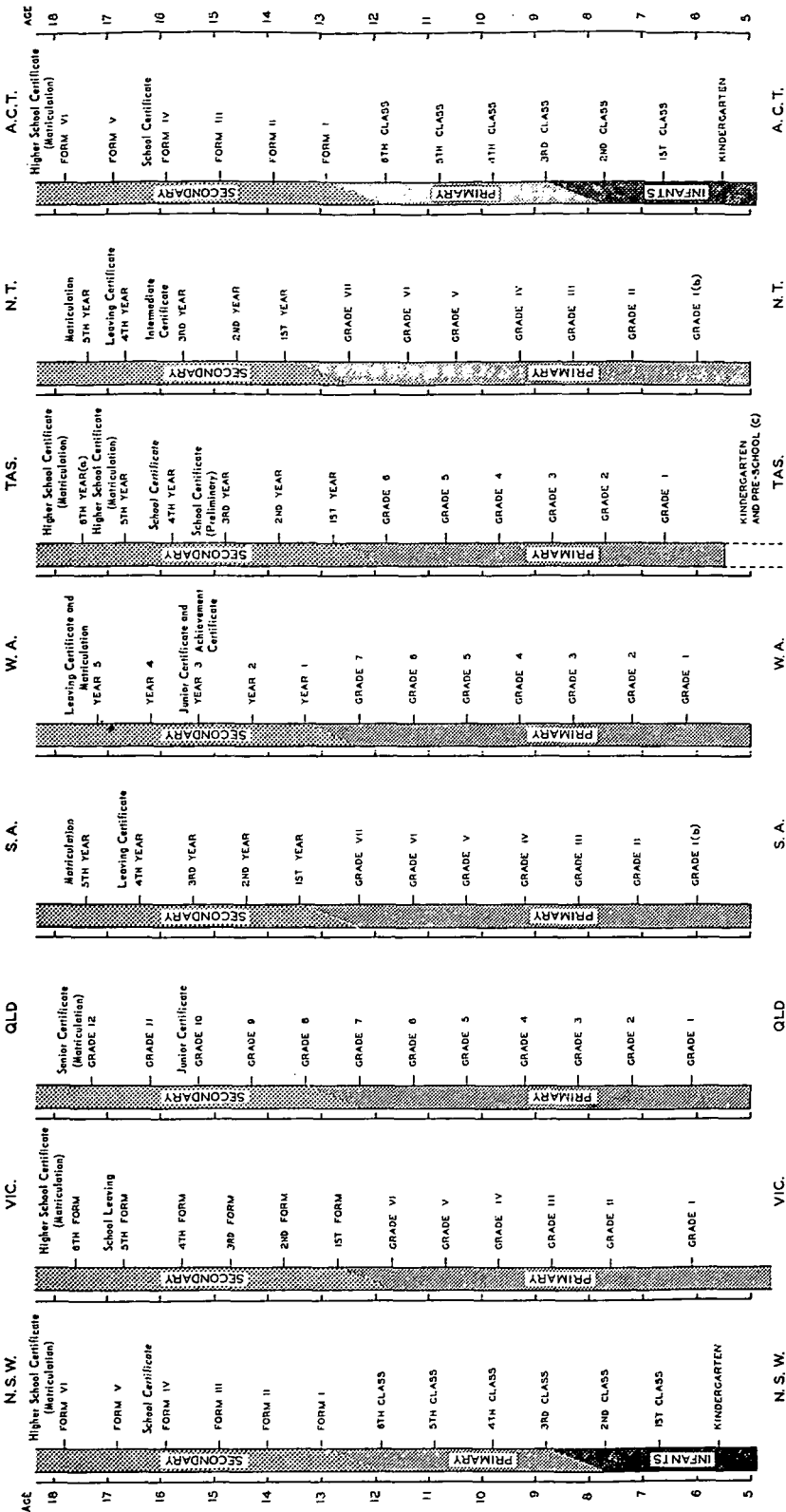
GOVERNMENT AND NON-GOVERNMENT SCHOOLS: STUDENTS, BY SEX, STATES AND TERRITORIES, 1971

(School census enrolment)

	Government schools			Non-government schools			All schools		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
New South Wales	402,903	368,489	771,392	112,045	110,150	222,195	514,948	478,639	993,587
Victoria	312,203	281,730	593,933	93,546	97,669	191,215	405,749	379,399	785,148
Queensland	156,454	143,422	299,876	45,684	45,035	90,719	202,138	188,457	390,595
South Australia	121,026	110,414	231,440	18,707	19,169	37,876	139,733	129,583	269,316
Western Australia	94,644	85,245	179,889	20,040	22,073	42,113	114,684	107,318	222,002
Tasmania	40,784	37,380	78,164	6,754	7,393	14,147	47,538	44,773	92,311
Northern Territory	7,822	7,346	15,168	1,460	1,461	2,921	9,282	8,807	18,089
Australian Capital Territory	13,657	13,052	26,709	5,238	4,650	9,888	18,895	17,702	36,597
Australia—1971	1,149,493	1,047,078	2,196,571	303,474	307,600	611,074	1,452,967	1,354,678	2,807,645
1970	1,130,925	1,029,252	2,160,177	301,935	306,121	608,056	1,432,860	1,335,373	2,768,233
1969	1,107,089	1,006,886	2,113,975	299,095	303,891	602,986	1,406,184	1,310,777	2,716,961
1968	1,077,012	977,796	2,054,808	297,433	303,470	600,903	1,374,445	1,281,266	2,655,711
1967	1,044,464	946,476	1,990,940	294,045	300,636	594,681	1,338,509	1,247,112	2,585,621

GRADES AND EXAMINATIONS IN THE PRIMARY AND SECONDARY SCHOOL SYSTEMS IN EACH STATE AND TERRITORY, 1971

The grade terminology follows, as nearly as possible, that used in government primary and high schools in each State in 1971. It is not necessarily used in all types of schools. The grades have been written in to agree with the age-scale shown on the diagram, in order to indicate differences in age-grade patterns between States. However, age-grade information is not precise enough to allow determination of accurate average age of students in each grade, and the age indications are therefore only approximate. The diagram should not be taken as a comparison of academic standards of grades between States. For a more detailed presentation of the systems operating in each State, reference should be made to diagrams etc. appearing in the annual reports of State Education Departments.



(a) In Tasmania many students study for the Higher School Certificate over a two year period.
 (b) Preparatory grades are attached to some schools in South Australia and the Northern Territory.
 (c) In Tasmania many students attend two years pre-school, one year kindergarten grade, or one year of both, before entering grade 1.

GOVERNMENT AND NON-GOVERNMENT SCHOOLS: STUDENTS, BY AGE AND SEX
AUSTRALIA, 1971

(School census enrolment)

Age last birthday (years)	Government schools			Non-government schools			All schools		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
Under 6	80,320	75,876	156,196	20,002	20,263	40,265	100,322	96,139	196,461
6	97,734	91,896	189,630	23,935	23,978	47,913	121,669	115,874	237,543
7	102,106	95,196	197,302	25,099	25,160	50,259	127,205	120,336	247,561
8	103,858	97,239	201,097	25,253	25,595	50,848	129,111	122,834	251,945
9	105,429	98,296	203,725	25,952	26,475	52,427	131,381	124,771	256,152
10	105,367	97,820	203,187	26,204	27,030	53,234	131,571	124,850	256,421
11	102,283	95,239	197,522	26,155	26,861	53,016	128,438	122,100	250,538
12	99,717	92,517	192,234	26,452	27,904	54,356	126,169	120,421	246,590
13	97,698	90,051	187,749	25,613	27,563	53,176	123,311	117,614	240,925
14	94,007	86,161	180,168	24,704	26,414	51,118	118,711	112,575	231,286
15	76,372	65,683	142,055	22,280	23,387	45,667	98,652	89,070	187,722
16	48,824	38,412	87,236	16,914	16,122	33,036	65,738	54,534	120,272
17	25,847	18,020	43,867	11,176	8,986	20,162	37,023	27,006	64,029
18	8,301	4,065	12,366	3,188	1,564	4,752	11,489	5,629	17,118
19 and over	1,501	477	1,978	547	298	845	2,048	775	2,823
Total(a)	1,149,364	1,046,948	2,196,312	303,474	307,600	611,074	1,452,838	1,354,548	2,807,386

(a) Excludes the age distribution of 259 students at Government schools in New South Wales.

SCHOOLS: STUDENTS, BY AGE, STATES AND TERRITORIES, 1971

(School census enrolment)

Age last birthday (years)	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Under 6	77,656	60,300	19,005	19,249	8,749	5,820	2,559	3,123	196,461
6	81,647	66,480	34,539	22,261	19,984	7,560	1,895	3,177	237,543
7	86,090	68,006	36,568	22,751	20,865	8,193	1,842	3,246	247,561
8	87,184	68,971	37,202	23,541	21,766	8,272	1,772	3,237	251,945
9	89,741	69,350	38,088	23,825	21,492	8,591	1,741	3,324	256,152
10	89,572	69,439	37,577	24,531	21,625	8,748	1,685	3,244	256,421
11	87,172	67,861	37,132	23,912	21,287	8,615	1,484	3,075	250,538
12	85,990	66,531	36,777	23,709	20,925	8,259	1,339	3,060	246,590
13	83,835	65,704	35,644	23,139	20,315	8,239	1,250	2,799	240,925
14	80,371	63,454	33,971	22,717	19,288	7,758	1,061	2,666	231,286
15	66,118	54,277	23,747	19,235	14,436	6,793	804	2,312	187,722
16	42,591	38,855	12,840	12,995	7,354	3,404	466	1,767	120,272
17	25,803	20,310	5,953	5,556	3,559	1,561	131	1,156	64,029
18	8,524	4,707	1,305	1,441	326	392	49	374	17,118
19 and over	1,034	903	247	454	31	106	11	37	2,823
Total(a)	993,328	785,148	390,595	269,316	222,002	92,311	18,089	36,597	2,807,386

(a) See footnote (a) to previous table.

Universities

Applicants for enrolment in Australian universities are required to have reached matriculation standard, usually 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 also provide post-graduate courses of study.

There are fifteen operative universities in Australia. The James Cook University of North Queensland, which was formerly the University College of Townsville, was raised to the status of a full university in 1970. Details of the courses offered by these universities, together with background information on their teaching and research programmes, and a summary of general university development in recent years, is given in Year Book No. 55, pages 507-9. By 1975, two new universities will be taking students, the Griffith University in Queensland and the Murdoch University in Western Australia. In addition, the Wollongong University College will become an autonomous university in 1975.

The following tables show statistics of university staff, student enrolments, assisted students, degrees conferred, diplomas and certificates awarded, income and expenditure. The first table gives summary statistics for each university and branch whereas the other tables provide State figures only. Reference should also be made to the annual publications *University Statistics, Parts 1-3* for further details.

UNIVERSITIES: SUMMARY STUDENT AND STAFF STATISTICS FOR EACH UNIVERSITY AND BRANCH, 1971

	Students enrolled(a) for			All students	Teaching staff(b)		Non-teaching staff	
	Higher degree courses	Bachelor degree courses	Non-degree courses		Full-time	Part-time(c)	Full-time	Part-time(d)
New South Wales—								
University of Sydney	2,501	13,165	1,348	17,014	1,030	1,322	2,165	93
University of New South Wales—								
Kensington	1,860	12,094	1,601	15,555	950	903	1,795	92
Wollongong University College	77	1,190	70	1,337	85	30	105	5
Broken Hill Division	7	84	16	107	13	10	31	1
Duntroon	..	254	..	254	55	..	2	..
Jervis Bay	..	25	..	25	(e)	(e)	(e)	(e)
Total University of New South Wales	1,944	13,647	1,687	17,278	1,103	942	1,933	98
University of New England	316	4,693	608	5,617	346	100	738	40
University of Newcastle	287	3,071	212	3,570	215	181	249	12
Macquarie University	521	4,383	163	5,067	335	228	485	23
Total New South Wales	5,569	38,959	4,018	48,546	3,029	2,773	5,570	266
Victoria—								
University of Melbourne	1,762	11,784	1,404	14,950	926	1,329	1,836	41
Monash University	1,098	9,003	933	11,034	766	431	1,553	213
La Trobe University	203	2,551	258	3,012	249	97	474	79
Total Victoria	3,063	23,338	2,595	28,996	1,941	1,856	3,862	332
Queensland—								
University of Queensland	1,084	15,592	809	17,485	941	747	1,842	37
James Cook University of North Queensland	124	1,315	25	1,464	140	66	229	2
Total Queensland	1,208	16,907	834	18,949	1,081	813	2,071	39
South Australia—								
University of Adelaide	935	6,980	615	8,530	569	631	1,054	163
Flinders University	136	1,842	174	2,152	180	126	335	63
Total South Australia	1,071	8,822	789	10,682	749	757	1,389	226
Western Australia—								
University of Western Australia	614	7,013	728	8,355	495	592	973	109
Tasmania—								
University of Tasmania	200	2,791	453	3,444	220	260	367	33
Australian Capital Territory—								
Australian National University—								
Institute of Advanced Studies	546	..	6	552	..	..	1,282	..
School of General Studies	187	3,859	224	4,270	323	56	347	..
Total Australian Capital Territory	733	3,859	(f)212	(f)4,804	(g)327	(g)85	(h)2,477	(h)16
Total All Universities	12,458	101,689	9,629	123,776	7,840	7,136	16,709	1,022

(a) Statistics shown refer to net enrolments, i.e. gross enrolments adjusted for students enrolled for more than one course. If a student is enrolled for two or more courses at different levels, the adjustment is made against the lesser level. (b) Excludes research only staff. (c) Expressed as units of 100 teaching hours per annum. (d) Equivalent full-time units. (e) No university staff are attached to the R.A.N. College, Jervis Bay. (f) Adjusted for students enrolled at both the Institute and the School. (g) Includes 4 full-time and 29 part-time positions not allocated to either the Institute or the School. (h) Includes 848 full-time and 16 part-time positions not allocated to either the Institute or the School.

University teaching and research staff

UNIVERSITIES: TEACHING AND RESEARCH STAFF(a), 1971

	Full-time teaching staff (b)						Part-time research staff (e)(f)
	Professors	Associate professors and readers	Senior lecturers and lecturers	Assistant lecturers, demonstrators, etc.(c)	Total	Part-time teaching staff (d)	
New South Wales	296	298	1,666	770	3,029	2,773	269
Victoria	211	171	1,114	445	1,941	1,856	193
Queensland	90	112	567	313	1,081	813	196
South Australia	95	74	455	125	749	757	77
Western Australia	60	51	279	105	495	592	67
Tasmania	31	24	118	47	220	260	11
Australian Capital Territory	39	36	198	54	327	85	572
Australia—1971	821	766	4,395	1,858	7,840	7,136	1,385
1970	799	714	4,130	1,724	7,367	6,845	1,345
1969	777	638	4,011	1,593	7,018	6,423	1,268
1968	721	582	3,706	1,479	6,487	6,264	1,155
1967	663	547	3,497	1,338	6,044	5,337	995

(a) Occupied positions. (b) Excludes research only staff which are shown separately. (c) Includes tutors and teaching fellows. (d) Expressed in units of 100 teaching hours per annum. (e) Excludes research technical staff. (f) In equivalent full-time units of 35 hour: per week.

University students enrolled

UNIVERSITIES: STUDENTS ENROLLED(a), 1971

	Degree courses		Diploma courses		Certificate courses	Other courses (b)	Adjusted total(c)
	Higher degree	Bachelor degree	Post-graduate	Sub-graduate			
New South Wales	5,578	39,124	2,320	16	401	1,380	48,546
Victoria	3,065	24,102	1,458	273	..	1,024	28,996
Queensland	1,208	16,907	366	41	22	405	18,949
South Australia	1,071	8,842	517	61	..	275	10,682
Western Australia	614	7,019	388	..	..	353	8,355
Tasmania	200	2,791	222	13	32	186	3,444
Australian Capital Territory	733	3,859	..	..	..	230	4,804
Australia—1971	12,469	102,644	5,271	404	455	3,853	123,776
1970	11,549	97,357	4,159	990	379	3,531	116,778
1969	10,564	90,738	4,229	1,204	635	3,618	109,662
1968	9,230	84,317	3,596	1,625	459	3,662	101,537
1967	8,562	78,825	3,075	2,093	495	3,555	95,380

(a) Statistics shown refer to gross enrolments, i.e. students enrolled for two or more courses are included in each course for which they are enrolled. (b) 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. (c) Adjusted for students enrolled for more than one course. Where course levels differ, the adjustment is made against the lesser level.

Of the students enrolled in 1971, 84,800 were males and 38,976 were females.

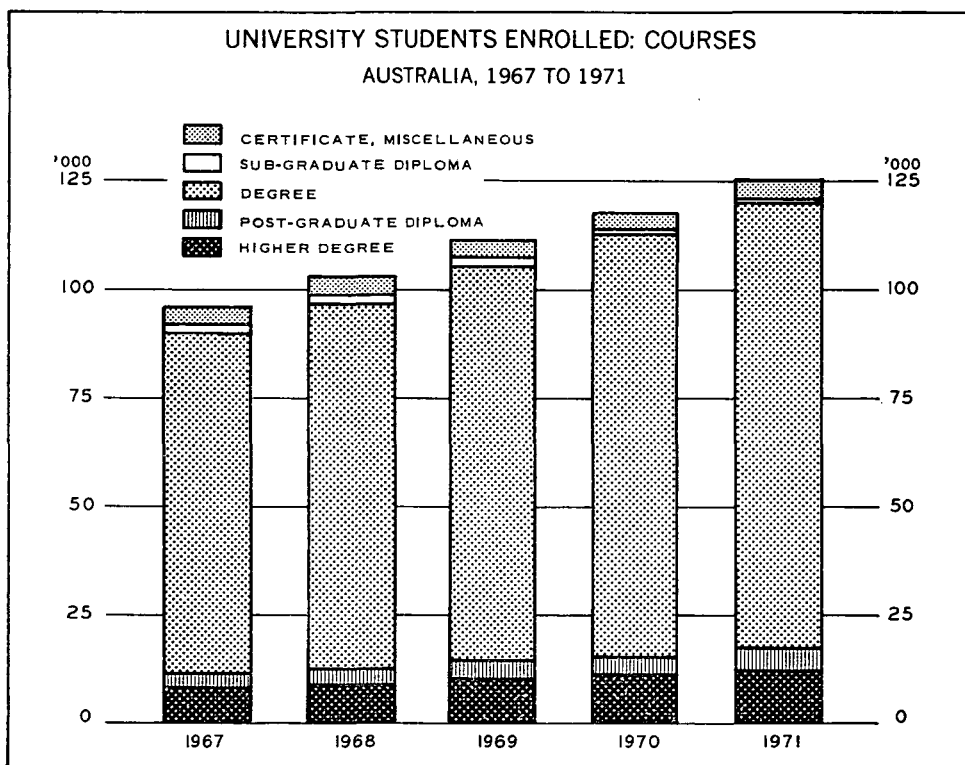


PLATE 37

University students commencing courses

UNIVERSITIES: ENROLMENTS OF STUDENTS COMMENCING HIGHER DOCTOR, PH.D., MASTER AND BACHELOR DEGREE COURSES FOR THE FIRST TIME IN ANY AUSTRALIAN UNIVERSITY, 1971(a)

	Higher doctor degree courses	Ph.D. degree courses	Master degree courses	Bachelor degree courses
New South Wales	14	236	1,273	10,192
Victoria(b)	1	103	318	6,267
Queensland	10	131	191	4,052
South Australia	16	105	235	2,281
Western Australia . . . . .	..	72	118	1,934
Tasmania . . . . .	..	18	32	787
Australian Capital Territory . . . . .	..	131	86	920
Australia—1971	41	796	2,253	26,433
1970	27	856	1,990	26,305
1969	26	849	1,974	25,518

(a) Statistics shown refer to gross enrolments, i.e. students enrolled for two or more courses are included in each course for which they are enrolled. (b) Statistics for the University of Melbourne refer to students enrolling for the first time at that university.

Of students commencing higher and bachelor degree courses in 1971, 18,903 were males and 10,620 were females.

Full-time and other university students by level of course

UNIVERSITIES: FULL-TIME AND PART-TIME STUDENTS ENROLLED BY COURSE LEVEL AND SEX OF STUDENT(a), 1967 TO 1971

Level of course	Males					Females				
	1967	1968	1969	1970	1971	1967	1968	1969	1970	1971
FULL-TIME										
Higher degree	3,479	3,413	3,756	3,963	4,293	609	591	703	783	889
Bachelor degree	37,161	39,397	42,469	45,374	47,311	14,680	16,674	18,634	21,137	23,863
Post-graduate diploma	794	861	911	968	1,148	936	1,098	1,276	1,053	1,731
Sub-graduate diploma	296	361	400	445	67	791	749	800	424	153
Certificate	40	242	438	255	368	36	39	67	36	46
Other	257	250	244	231	318	197	219	248	239	309
Total enrolments	42,027	44,724	48,218	50,936	53,505	17,249	19,370	21,728	23,672	26,991
Number of students(b)	41,404	43,911	47,285	50,290	52,829	15,921	18,824	21,063	23,355	26,608
PART-TIME(c)										
Higher degree	3,727	4,345	5,073	5,685	6,032	747	881	1,032	1,118	1,255
Bachelor degree	19,995	20,508	21,556	22,118	22,232	6,989	7,538	8,079	8,728	9,238
Post-graduate diploma	915	1,119	1,437	1,492	1,561	430	518	605	646	831
Sub-graduate diploma	625	453	382	264	141	381	313	210	157	43
Certificate	393	131	110	75	29	26	47	20	13	12
Other	2,115	2,175	2,192	2,089	2,154	1,002	1,018	934	972	1,072
Total enrolments	27,770	28,731	30,750	31,723	32,149	9,575	10,315	10,880	11,634	12,451
Number of students(b)	27,575	28,559	30,537	31,557	31,971	9,480	10,243	10,777	11,576	12,368
ALL ENROLMENTS										
Higher degree	7,206	7,758	8,829	9,648	10,325	1,356	1,472	1,735	1,901	2,144
Bachelor degree	57,156	60,105	64,025	67,492	69,543	21,669	24,212	26,713	29,865	33,101
Post-graduate diploma	1,709	1,980	2,348	2,460	2,709	1,366	1,616	1,881	1,699	2,562
Sub-graduate diploma	921	814	782	409	208	1,172	1,062	1,010	581	196
Certificate	433	373	548	330	397	62	86	187	49	58
Other	2,372	2,425	2,436	2,320	2,472	1,199	1,237	1,182	1,211	1,381
Total enrolments	69,797	73,455	78,968	82,659	85,654	26,824	29,685	32,608	35,306	39,442
Number of students(b)	68,979	72,470	77,822	81,847	84,800	26,401	29,067	31,840	34,931	38,976

(a) Statistics for 1967 refer to the situation at 31 July; those for 1968 and 1969 to 30 June; and those for 1970 and 1971 refer to 30 April. (b) Adjusted for students enrolled for more than one course. (c) Includes external students.

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 654. 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: SOURCE OF STUDENT ASSISTANCE, 1971

	Source of assistance				Adjusted total(a)	Type of course	
	Commonwealth Government	State Governments	Universities	Other		Higher degree	Other
New South Wales	14,101	5,311	13,627	819	28,588	2,522	31,336
Victoria	10,968	6,007	9,098	259	21,040	1,834	24,498
Queensland	5,269	793	1,396	185	7,643	619	7,024
South Australia	3,794	2,524	1,334	132	7,716	812	6,972
Western Australia	2,548	3,096	237	132	6,013	388	5,625
Tasmania	1,070	678	112	112	1,842	114	1,858
Australian Capital Territory	1,456	402	598	29	2,485	608	1,877
Australia—1971	39,206	18,811	26,402	1,668	75,327	6,897	79,190
1970	35,008	r17,641	r22,979	r1,607	r67,334	r6,537	r70,698
1969	32,425	16,134	22,400	1,983	63,110	6,269	66,673
1968	29,355	14,589	20,392	1,651	57,417	5,473	60,514
1967	27,320	15,499	16,204	1,813	48,728	5,145	55,691

(a) Adjusted for students receiving assistance from more than one source. Statistics from 1968 onwards are also adjusted for students receiving assistance for a higher degree and another course.

University degrees conferred, and diplomas and certificates awarded

UNIVERSITIES: DEGREES CONFERRED, AND DIPLOMAS AND CERTIFICATES AWARDED YEAR ENDED 30 JUNE 1971(a)

	Degrees				Diplomas		
	Higher doctor	Ph.D.	Master	Bachelor	Post-graduate	Sub-graduate	Certificates
New South Wales	24	220	593	5,113	1,127	13	370
Victoria	16	146	271	4,201	694	135	..
Queensland	4	63	61	2,104	257	63	48
South Australia	13	86	59	1,697	221	89	..
Western Australia	1	45	39	910	169	..	..
Tasmania	1	17	5	474	83	2	49
Australian Capital Territory . . . . .	..	81	39	495	..	..	..
Australia—1971	59	658	1,067	14,994	2,551	302	467
1970	54	609	888	13,484	2,324	328	550
1969	53	490	811	13,360	2,237	406	673
1968	31	(13)475	(11)740	(15)11,576	1,939	(9)557	(24)471
1967	40	327	635	10,393	1,454	445	570

(a) Statistics for 1967 refer to the year ended 31 July; those for 1968 onwards refer to the year ended 30 June. Degrees conferred, and diplomas and certificates awarded in July 1967 are therefore included in 1967 and 1968 figures. The numbers involved are shown in brackets.

University income and expenditure

UNIVERSITIES: INCOME, 1970

(\$'000)

	Government grants(a)		Other income			Total income
	Cwth Government grants	State Government grants	Donations and endowments(b)	Student fees(c)	Other income	
New South Wales	32,078	35,291	4,728	10,215	4,747	87,058
Victoria	22,011	24,363	2,351	7,011	3,609	59,344
Queensland	8,917	10,080	2,279	4,288	690	26,255
South Australia	9,034	10,269	795	2,027	1,113	23,237
Western Australia	5,901	5,260	1,215	2,145	876	15,396
Tasmania	2,332	2,534	83	882	248	6,079
Australian Capital Territory	28,266	..	382	800	2,379	31,826
Australia—1970	108,539	87,796	11,832	27,368	13,662	249,195
1969	93,887	83,285	11,784	22,825	11,359	223,140
1968	88,788	72,848	11,984	20,919	9,749	204,289
1967	79,872	64,304	10,461	19,145	8,597	182,379
1966	71,012	65,509	10,781	16,653	7,053	171,008

(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 allocated 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.

UNIVERSITIES: EXPENDITURE, 1970

(\$'000)

	Teaching and research	Administration and general overhead	Libraries	Buildings, premises, grounds	Sundry auxiliary expenditure	Total expenditure
New South Wales	51,506	7,809	4,106	16,351	4,600	84,371
Victoria	35,903	5,141	3,106	13,851	3,732	61,732
Queensland	17,844	1,957	1,345	4,736	944	26,827
South Australia	14,375	1,557	1,228	5,559	540	23,259
Western Australia	8,849	1,154	663	2,654	1,034	14,353
Tasmania	3,970	510	397	1,044	254	6,175
Australian Capital Territory	19,432	2,435	1,113	6,411	2,415	31,806
Australia—1970	151,879	20,563	11,957	50,606	13,518	248,524
1969	124,806	17,672	10,375	48,134	12,046	213,034
1968	119,394	15,563	9,129	51,823	11,737	207,645
1967	106,386	13,298	7,915	48,061	9,056	184,714
1966	93,410	11,915	6,857	42,498	7,779	162,459

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 the Commonwealth established the Commonwealth Advisory Committee on Advanced Education to advise it on the continued development of the colleges which provide training with a vocational emphasis, as distinct from the academic education provided by the universities.

In some States the colleges are being developed from existing technological institutions, but new colleges are also being established. The diploma-awarding schools or sections of technical institutions are in the process of being separated from the trade, certificate and other sections of technical education, and of being developed as colleges of advanced education which are now receiving Commonwealth financial assistance.

Many colleges cater for a number of vocations in fields such as accountancy, architecture, art, applied sciences, building, business administration, data processing, domestic science, engineering, librarianship, medical laboratory technology, metallurgy, nutrition, pharmacy, and textile sciences. Provision has been made for teacher education to be conducted in a number of these multi-purpose colleges. Other colleges are specialist institutions, such as agricultural colleges, art schools, conservatoria of music, schools of physiotherapy, occupational therapy and speech therapy/science, and colleges offering courses in forestry, horticulture and nursing administration.

Administrative changes have taken place in the States to co-ordinate the activities of colleges of advanced education. In New South Wales, an Advanced Education Board has been established; in Victoria, the co-ordinating powers of the Victoria Institute of Colleges have been strengthened; a Board of Advanced Education has been established in both Queensland and South Australia; Tasmania has a Council of Advanced Education. In some States provision is also being made for co-ordination of all tertiary education, notably through the Higher Education Authority in New South Wales, the Tertiary Education Commission in Western Australia, and the Joint Consultative Council in Tasmania.

An Australian Council on Awards in Advanced Education has been established by joint action of the six States and the Commonwealth. One of the functions of the Council is to promote consistency throughout Australia in the nomenclature and standards used for awards in advanced education. It aims to do this by consultation between the States and Commonwealth accrediting agencies in the field of advanced education.

Further information about the development of colleges of advanced education can be found in the reports of the Australian Commission on Advanced Education which replaced the former body, the Commonwealth Advisory Committee on Advanced Education, *see* page 656; in particular the First report, 1967-69, the Second Report, 1970-72, and the Third Report, 1973-75. Details of the maximum Commonwealth grants for the development of the colleges are given on page 659.

The following statistics refer to the operative institutions listed in the appropriate States Grants Advanced Education Act as colleges of advanced education and the Canberra College of Advanced Education.

COLLEGES OF ADVANCED EDUCATION: TOTAL ENROLMENTS, BY TYPE OF ENROLMENT AND FIELD OF STUDY, STATES AND A.C.T., 1971

Field of study	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	A.C.T.	Australia			
								Males	Females	Persons	
FULL-TIME STUDENTS											
Agriculture	293	263	287	97	59	..	..	930	69	999
Applied sciences	71	1,178	430	121	227	..	129	1,849	307	2,156	
Art and design	294	1,343	99	363	148	135	..	1,009	1,373	2,382	
Building, surveying and architecture	59	569	..	174	275	52	..	997	132	1,129	
Commercial and business studies . .	289	2,610	259	282	434	25	160	3,198	861	4,059	
Engineering and technology	133	3,233	527	378	417	5	..	4,668	25	4,693	
Liberal studies	12	359	..	104	266	..	111	347	505	852	
Music	289	..	73	..	..	42	..	93	311	404
Para-medical	552	1,050	143	247	303	57	..	570	1,782	2,352	
Teacher education	411	..	..	..	..	293	144	220	628	848
<i>Total enrolments</i>	—1971	2,403	10,605	1,818	1,766	2,129	609	544	13,881	5,993	19,874
	1970	1,881	8,792	1,384	1,471	1,824	238	228	11,378	4,440	15,818
<i>Number of students</i>	—1971	2,403	10,605	1,818	1,766	2,129	609	544	13,881	5,993	19,874
	(a)1970	1,871	8,783	1,384	1,471	1,824	238	228	11,366	4,433	15,799

COLLEGES OF ADVANCED EDUCATION: TOTAL ENROLMENTS, BY TYPE OF ENROLMENT AND FIELD OF STUDY, STATES AND A.C.T., 1971—continued

Field of study	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	A.C.T.	Australia			
								Males	Females	Persons	
PART-TIME STUDENTS											
Agriculture	..	29	3	..	..	..	..	28	4	32
Applied sciences	353	1,430	249	150	315	69	373	2,639	300	2,939	
Art and design	158	616	18	71	203	26	..	656	436	1,092	
Building, surveying and architecture	388	535	401	238	186	22	..	1,711	59	1,770	
Commercial and business studies	1,380	4,126	823	1,316	1,276	413	456	9,105	685	9,790	
Engineering and technology	963	2,604	529	525	563	203	..	5,376	11	5,387	
Liberal studies	10	726	..	86	351	31	216	720	700	1,420	
Music	5	..	..	..	..	9	..	6	8	14
Para-medical	82	330	81	90	86	53	..	291	431	722	
Teacher education	..	..	..	..	..	..	44	8	36	44
Total enrolments	—1971	3,339	10,396	2,104	2,476	2,980	826	1,089	20,540	2,670	23,210
	1970	2,829	9,775	1,712	1,972	2,748	902	752	18,481	2,209	20,690
Number of students	—1971	3,339	10,396	2,104	2,476	2,980	826	1,089	20,540	2,670	23,210
	(a)1970	2,829	9,747	1,712	1,972	2,748	896	752	18,449	2,207	20,656

CORRESPONDENCE STUDENTS

Agriculture	..	..	..	..	1	..	..	1	..	1
Applied sciences	..	115	..	..	46	..	..	130	31	161
Art and design	..	1	..	..	44	..	..	28	17	45
Building, surveying and architecture	..	38	..	..	7	..	..	41	4	45
Commercial and business studies	94	189	..	..	321	..	..	557	47	604
Engineering and technology	..	117	..	..	16	..	..	129	4	133
Liberal studies	..	9	..	..	129	..	..	96	42	138
Music	..	..	..	..	..	..	..	..	..	..
Para-medical	..	255	..	..	2	..	..	102	155	257
Teacher education	..	..	..	..	..	..	..	..	..	..
Total enrolments	—1971	94	724	..	..	566	..	1,084	300	1,384
	1970	..	730	12	..	442	..	957	227	1,184
Number of students	—1971	94	724	..	..	566	..	1,084	300	1,384
	(a)1970	..	716	12	..	442	..	944	226	1,170

ALL STUDENTS

Agriculture	293	292	290	97	60	..	..	959	73	1,032
Applied sciences	424	2,723	679	271	588	69	502	4,618	638	5,256	
Art and design	452	1,960	117	434	395	161	..	1,693	1,826	3,519	
Building, surveying and architecture	447	1,142	401	412	468	74	..	2,749	195	2,944	
Commercial and business studies	1,763	6,925	1,082	1,598	2,031	438	616	12,860	1,593	14,453	
Engineering and technology	1,096	5,954	1,056	903	996	208	..	10,173	40	10,213	
Liberal studies	22	1,094	..	190	746	31	327	1,163	1,247	2,410	
Music	294	..	73	..	..	51	..	99	319	418
Para-medical	634	1,635	224	337	391	110	..	963	2,368	3,331	
Teacher education	411	..	..	..	..	293	188	228	664	892
Total enrolments	—1971	5,836	21,725	3,922	4,242	5,675	1,435	1,633	35,505	8,963	44,468
	1970	4,710	19,297	3,108	3,443	5,014	1,140	980	30,816	6,876	37,692
Number of students	—1971	5,836	21,725	3,922	4,242	5,675	1,435	1,633	35,505	8,963	44,468
	(a)1970	4,700	19,246	3,108	3,443	5,014	1,134	980	30,759	6,866	37,625

(a) Adjusted for students enrolled for more than one advanced level course.

COLLEGES OF ADVANCED EDUCATION: FIRST ENROLMENTS BY FIELD OF STUDY, STATES AND A.C.T., 1971

Field of study	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	A.C.T.	Australia			
								Males	Females	Persons	
Agriculture	170	140	143	55	38	..	..	496	50	546
Applied sciences	168	912	310	103	215	11	268	1,684	303	1,987	
Art and design	180	852	97	156	178	66	..	663	866	1,529	
Building, surveying and architecture	155	340	101	124	135	19	..	820	54	874	
Commercial and business studies	860	2,757	522	523	894	142	299	5,172	825	5,997	
Engineering and technology	419	1,703	294	299	336	54	..	3,091	14	3,105	
Liberal studies	11	644	..	86	369	20	206	611	725	1,336	
Music	81	..	25	..	..	19	..	35	90	125
Para-medical	337	671	67	155	164	45	..	379	1,060	1,439	
Teacher education	163	..	..	..	..	119	188	117	353	470
Total	—1971	2,544	8,019	1,559	1,501	2,329	495	961	13,068	4,340	17,408
	1970	2,082	6,866	1,309	1,083	2,091	400	807	11,418	3,220	14,638

**COLLEGES OF ADVANCED EDUCATION: TEACHING STAFF, BY SUBJECT FIELD
STATES AND A.C.T.(a), 1971**

(Advanced level work of full-time and part-time teaching staff expressed in equivalent full-time units and rounded to whole numbers)

	<i>N.S.W.(b)</i>	<i>Vic.</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>A.C.T.</i>
FULL-TIME STAFF						
Agriculture	44	43	8	7	..	..
Applied sciences	75	314	36	61	14	24
Art and design	22	166	23	18	13	..
Building, surveying and architecture	19	56	25	31	3	..
Commercial and business studies	26	211	30	57	6	18
Engineering and technology	39	326	88	65	4	..
Liberal studies	1	100	13	33	..	25
Music	18	..	..	..	8	..
Para-medical	28	76	28	37	9	..
Teacher education . . . . .	..	..	..	..	32	10
<i>Total—1971</i>	<i>339</i>	<i>1,293</i>	<i>249</i>	<i>309</i>	<i>88</i>	<i>77</i>
1970	252	1,129	226	267	55	43
PART-TIME STAFF						
Agriculture	1	4	3	..	..	..
Applied sciences	17	47	3	6	9	5
Art and design	34	17	6	4	6	..
Building, surveying and architecture	7	17	4	8	3	..
Commercial and business studies	5	33	4	7	9	2
Engineering and technology	8	30	7	4	8	..
Liberal studies . . . . .	..	11	7	4	1	5
Music	11	..	..	..	1	..
Para-medical	7	6	13	3	2	..
Teacher education . . . . .	..	..	..	..	4	3
<i>Total—1971</i>	<i>90</i>	<i>165</i>	<i>47</i>	<i>36</i>	<i>42</i>	<i>15</i>
1970	93	228	31	32	34	12
ALL STAFF						
Agriculture	44	47	11	7	..	..
Applied sciences	91	361	39	67	23	29
Art and design	56	184	29	22	19	..
Building, surveying and architecture	27	73	29	39	6	..
Commercial and business studies	31	244	34	64	15	20
Engineering and technology	47	357	95	69	12	..
Liberal studies	1	111	20	37	1	30
Music	29	..	..	..	9	..
Para-medical	35	82	40	40	11	..
Teacher education . . . . .	..	..	..	..	36	13
<i>Total—1971</i>	<i>428</i>	<i>1,458</i>	<i>297</i>	<i>345</i>	<i>130</i>	<i>92</i>
1970	345	1,357	256	299	89	55

(a) Statistics comparable with other States are not available for Queensland. In 1970 the number of staff teaching at Queensland colleges of advanced education was 307 full-time and 444 part-time. These statistics include staff engaged in teaching in courses which were not at an advanced level. (b) Includes 68 full-time teaching staff at the Mitchell College of Advanced Education for whom details of subject field are not available.

Teacher education

State education departments recruit most prospective teachers for government service from students leaving school after completion of secondary education. 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.

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. Recently, movements have been made in several States towards the autonomy of government teachers colleges. Teacher education is now being conducted at Mitchell (Bathurst), Riverina (Wagga), the Tasmanian, and Canberra Colleges of Advanced Education and the Capricornia and Darling Downs divisions of the Queensland Institute of Technology. Teachers colleges are also conducted by other organisations. For details of Commonwealth financial assistance to the States for building projects. *see* page 660.

In 1971 there were 10 government teachers colleges in New South Wales, 14 in Victoria, 4 in Queensland, 5 in South Australia, 4 in Western Australia, and 1 in Tasmania. Excluding kindergarten teachers colleges (*see* page 648) there were 7 private colleges in New South Wales, 6 in Victoria, 2 in Queensland and 1 in the Australian Capital Territory.

Teachers for government schools

Training of teachers. Most teachers for government primary schools are trained in teachers colleges. Intending secondary school teachers either obtain a university degree with additional professional teaching training such as a Diploma in Education, a diploma or certificate from a teachers college or follow a secondary teaching course at a college of advanced education. 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. Where the specialist course is given at an institution other than the teachers college—e.g. at a university, college of advanced education, technical college, or conservatorium of music, students are generally 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 some States, and in at least one teachers college in every State.

Training for teachers of agricultural subjects in secondary schools consists of either an agricultural college diploma or a university degree course together with professional teacher training. 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, colleges of advanced education, technical colleges, or, in one State, at a university.

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. Courses of a similar nature are available at some colleges of advanced education where teacher education courses are integrated into the general teaching of the college.

The following table shows students undertaking teacher education courses in government and non-government colleges from 1968 to 1971. The figures exclude enrolments of practising and newly qualified teachers, and those teachers at short refresher courses and summer schools. They also exclude non-award students enrolled in part-time courses at the Technical Teachers College, Victoria and technical teacher trainees in Victoria who are undertaking one or two years industrial experience.

TEACHER EDUCATION(a): ENROLMENTS BY AFFILIATION AND SEX
1968 TO 1971

	1968		1969		1970		1971		
	Males	Females	Males	Females	Males	Females	Males	Females	Persons
DEPARTMENTAL STUDENTS									
New South Wales	3,304	5,693	3,650	6,344	4,321	7,226	5,501	9,403	14,904
Victoria	3,629	6,406	1,422	7,104	4,754	8,162	(b)5,024	8,618	13,642
Queensland	836	2,310	966	2,655	1,128	2,797	1,307	3,051	4,358
South Australia	1,404	2,089	1,484	2,299	1,571	2,701	1,748	2,984	4,732
Western Australia	725	1,236	797	1,452	832	1,680	885	1,944	2,829
Tasmania	343	714	355	769	422	776	470	862	1,332
Total	10,241	18,448	11,674	20,623	13,028	23,342	14,935	26,862	41,797
Courses for primary teaching	2,593	9,256	2,840	10,269	3,251	11,184	3,600	12,623	16,223
Courses for secondary teaching	7,376	8,838	8,573	10,008	9,753	12,113	(b)11,312	14,201	25,513
Courses not classifiable as primary or secondary teaching	272	354	261	346	24	45	23	38	61
Total	10,241	18,448	11,674	20,623	13,028	23,342	14,935	26,862	41,797
Enrolled at government teachers college and not enrolled elsewhere	3,501	10,565	4,524	12,196	5,028	13,463	(b)6,092	15,012	21,104
Enrolled at university or other institution—									
Also enrolled at teachers college	6,258	7,304	6,101	7,134	6,483	8,005	6,434	8,332	14,766
Not enrolled at teachers college	482	579	1,049	1,293	1,517	1,874	2,409	3,518	5,927
Total	10,241	18,448	11,674	20,623	13,028	23,342	14,935	26,862	41,797
PRIVATE STUDENTS									
Enrolled at government teachers college	166	309	214	373	227	327	169	386	555
Enrolled at private teachers college	441	972	394	1,190	366	1,586	417	1,732	2,149
Total	607	1,281	608	1,563	593	1,913	586	2,118	2,704
Courses for primary teaching	333	952	310	1,217	295	1,587	301	1,822	2,123
Courses for secondary teaching	251	265	274	284	273	270	271	196	467
Courses not classified as primary or secondary teaching	23	64	24	62	25	56	14	100	114
Total	607	1,281	608	1,563	593	1,913	586	2,118	2,704
ALL STUDENTS									
Courses for primary teaching	2,926	10,208	3,150	11,486	3,546	12,771	3,901	14,445	18,346
Courses for secondary teaching	7,627	9,103	8,847	10,292	10,026	12,383	(b)11,583	14,397	25,980
Courses not classifiable as primary or secondary teaching	295	418	285	408	49	101	37	138	175
Total	10,848	19,729	12,282	22,186	13,621	25,255	15,521	28,980	44,501

(a) Excludes 767 students enrolled at kindergarten teachers colleges in 1968; 877 in 1969; 977 in 1970; and 1,069 in 1971.
(b) Includes 366 males undertaking a two year part-time course at the Technical Teachers College.

The following table shows departmental students enrolled in the first year of their course and also those enrolled in the final year of their course. The figures exclude enrolments in one year courses which are mainly extension courses for students who have qualified as teachers.

DEPARTMENTAL STUDENTS ENROLLED IN THE FIRST AND IN THE FINAL YEAR OF A COURSE, 1971

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Australia		
							Males	Females	Persons
Enrolled in the first year of a course	6,385	(a)4,449	1,910	1,741	1,133	508	5,626	10,500	16,126
Enrolled in the final year of a course	2,950	(a)3,207	1,132	1,029	762	308	2,934	6,454	9,388

(a) Includes 193 and 173 males who are undertaking a two-year part-time course at the Technical Teachers College, for the first year, and the final year of a course, respectively.

In-service 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 and 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.

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 means that teachers are subject to transfer to any part of the State in which they serve.

Training of technical teachers

To preserve links with industry and trade practice, schemes have been developed for the recruitment of specialist tradesmen as teachers and 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 training method, while correspondence courses and visiting lecturers assist the newly appointed tradesman-teacher in country colleges. Variations in 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, as far as possible, 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 junior-secondary or primary teachers has been undertaken by Catholic teachers colleges.

Other non-government schools tend to recruit their staff 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. The Commonwealth Government provides financial assistance to the States for approved building projects provided that the colleges admit a number of private students. Some teacher trainees who will eventually teach in 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, 1971

	Enrolments			Students in final year of a course		
	Males	Females	Persons	Males	Females	Persons
For primary teaching . . .	207	1,595	1,802	57	651	708
For secondary teaching . . .	198	96	294	42	22	64
Not classifiable as primary or secondary teaching . . .	12	41	53	1	11	12
Total	417	1,732	2,149	100	684	784

(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.

For details of Commonwealth financial assistance to teachers colleges *see* pages 660-1.

Pre-school teachers colleges

With the exception of Tasmania, each State has a pre-school or kindergarten teacher training college which provides a three-year diploma course for teachers of children in the 3-8 year age group. In New South Wales, Queensland, South Australia and Western Australia, these colleges are the responsibility of the Kindergarten Union in each of those States and each college is administered by a College Council.

In Victoria, the Melbourne Kindergarten Teachers College is administered by an autonomous College Council. The Day Nursery Teachers College in New South Wales has a similar function to those colleges mentioned above, and is the responsibility of the Sydney Day Nursery and Nursery Schools Association. Pre-school teacher training in Tasmania is provided within the Tasmanian College of Advanced Education which offers a three-year course of training.

In 1971 there were 1,069 students (all female) enrolled for diploma courses at kindergarten teachers colleges, of whom 298 were in their final year.

The Commonwealth Government provides financial assistance for pre-school teachers colleges. For details, *see* page 661.

Technical education

Australian technical colleges offer training in all the major industrial skills and in a wide variety of commercial, artistic and domestic occupations. The main types of courses are described in Year Book No. 55, pages 498 and 499.

The following is an outline of the administration of, and some recent developments in, technical education in each State.

New South Wales has a separate State Department of Technical Education under the Minister for Education and Science. A Technical Education Council advises the Minister, and there is also an advisory council or committee for each technical college, established on a local basis to assist the principal in determining the needs of his own area. These bodies include representatives from industry and commerce.

Victoria. The larger colleges are controlled by their own councils and are affiliated with the Victoria Institute of Colleges. These colleges are at present responsible to the Victoria Institute of Colleges for the development and operation of tertiary courses and to the Education Department for the conduct of non-tertiary courses.

Government-controlled colleges are administered by the Technical Education Division of the Education Department. In general, diploma awarding schools or sections of technical institutions are in the process of being separated from the trade, certificate and other sections of technical education, and of being developed as colleges of advanced education. They are now receiving Commonwealth assistance for this purpose.

Queensland. Technical colleges in Queensland are administered by a branch of the State Education Department. This branch also administers the Technical Correspondence School, which provides instruction in many courses to students in remote areas. Those institutions offering diploma courses in technological fields are now colleges of advanced education, which function as autonomous institutions and receive Commonwealth financial assistance. At present, they also offer technical courses at the certificate level.

South Australia. Technical colleges are administered by a branch of the State Education Department. For a number of years, the South Australian Institute of Technology has offered courses which lead to a level of qualification below that of full professional status. The courses provide for those employed in the area between the tradesman and the professionally qualified person.

Western Australia. Technical schools, colleges and education centres are administered by a division of the Western Australian Education Department and offer a wide range of technician and vocational courses related to commerce, industry, agriculture and the home. In addition, the Technical Educational Division offers study programmes for students undertaking the examinations of other examining bodies, as well as general education and leisure-type activities. The Technical Extension Service of the Division offers a wide range of correspondence instruction.

Tasmania. Technical education is controlled by the Tasmanian Education Department through a Board of Technical Education whose chief administrative officer is the Director of the Technical Education Branch. There are technical colleges in five centres: Hobart, Launceston, Devonport, Burnie, and Queenstown. The Tasmanian College of Advanced Education is being developed and since January 1972 has taken over all diploma courses. Technical colleges will in future be concerned with apprenticeship/trade, post-trade and technical courses, and commercial and general courses at the certificate level.

The numbers of colleges, teachers and enrolments in each State and Territory during 1970, and for Australia for the period 1966 to 1970 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. Whilst details for colleges of advanced education are included, the basis of collection differs from that used for advanced level courses, statistics of which are given on pages 642-3.

**TECHNICAL EDUCATION: COLLEGES, TEACHERS AND ENROLMENTS
STATES AND TERRITORIES, 1970**

	Teachers				Students enrolled		
	Colleges	Full-time	Part-time	Total	Males	Females	Persons
New South Wales(a)(b)(c)(d)	60	1,793	4,435	6,228	106,039	56,579	162,618
Victoria(e)	93	4,848	2,260	7,108	n.a.	n.a.	69,558
Queensland(d)	18	677	1,006	1,683	25,350	4,193	29,543
South Australia(d)	27	664	1,773	2,437	n.a.	n.a.	40,982
Western Australia(d)(f)(g)	83	943	1,911	2,854	45,747	26,659	72,406
Tasmania	9	181	640	821	6,087	2,191	8,278
Northern Territory	2	16	97	113	1,736	2,650	4,386
Australia—1970	292	9,122	12,122	21,244	n.a.	n.a.	387,771
1969	296	8,883	11,499	20,382	n.a.	n.a.	398,078
1968	275	9,041	11,746	20,787	n.a.	n.a.	388,824
1967	230	8,071	11,144	19,215	n.a.	n.a.	376,915
1966	226	7,475	10,836	18,311	n.a.	n.a.	375,003

(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 6,877 in 1970; 6,105 in 1969; 5,956 in 1968; 5,578 in 1967; and 4,855 in 1966. (c) Figures include teachers and students at 131 associated centres and 4 mobile units. (d) Includes correspondence course teachers and students. (e) Prior to 1969 statistics of senior technical schools affiliated with the Victoria Institute of Colleges were included. Teachers include those at both senior and junior technical colleges. (f) Teachers represent number of teaching positions. (g) Country extension centres are now counted separately.

Commonwealth assistance to technical education is shown on page 660.

Agricultural and forestry education

There are agricultural faculties in universities in all States. Ten of the faculties provide various degree courses in agricultural science and agricultural economics and there are also three faculties of veterinary science. Besides undergraduate courses, these faculties collectively provide a wide range of post-graduate diploma courses as well as facilities for training for higher degrees.

At least one government agricultural college in each State, except Tasmania, is a college of advanced education. The primary role of these colleges is to train students for professional extension work or technology roles in the agricultural services. An exception is Muresk in Western Australia, which, like Marcus Oldham (an independent college in Victoria), places emphasis on farm management. Orange Agricultural College in New South Wales will also concentrate on farm management training when it opens in 1973.

At the sub-tertiary level, other colleges which aim to teach the principles and practices of agriculture and farm management to those intending to take up farming as a career are being developed in New South Wales, Victoria, Queensland and Tasmania. There is also a wide range of technical training available.

Training in forestry at undergraduate and post-graduate levels, is provided by a Department of Forestry in the Faculty of Science within the Australian National University. A four-year degree course is offered, but the first year of this course may be undertaken, by arrangement, at any other university. The University of Melbourne provides a four-year degree course in forestry and at the Victorian School of Forestry, Creswick, a three-year diploma course can be taken.

Other education

Conservatoria of music, schools of art, etc.

In addition to the conservatoria of music which are attached to universities or which constitute separate colleges of advanced education, there is the Canberra School of Music which offers a four-year full-time diploma course of theoretical and practical studies. Some schools of art have been developed into colleges of advanced education or included as departments in such colleges, and offer courses in printing, sculpture, and design as well as in basic art.

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 an affiliated 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 1971 there were 44 students enrolled, of whom 6 were Royal Australian Air Force personnel. Courses at the new Australian Joint Services Staff College commenced in January 1970. The College provides higher training for selected service officers and certain officers of the Commonwealth employed in Departments associated with defence matters. College courses cover political, defence and economic subjects and are of six months duration. For further information on service training and educational facilities, see Chapter 4, Defence.

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, 1971**

<i>Establishment</i>	<i>Enrolments</i>	<i>New entrants during year</i>	<i>Number completing course during year</i>
OFFICERS AND OFFICER CADETS(a)			
Staff Colleges—			
Australian Staff College	72	72	72
Royal Australian Air Force Staff College	30	30	29
Officer cadets—			
Royal Australian Navy—			
Royal Naval College	137	68	32
H.M.A.S. <i>Lonsdale</i>	11	5	..
Royal Military College	311	95	51
Royal Australian Air Force—			
R.A.A.F. Academy	112	38	21
R.A.A.F. Diploma Squadron	143	53	34
APPRENTICES AND OTHER RECRUITS(b)			
Royal Australian Navy—			
Naval artificer apprentices	545	188	139
School of Technical Training	22	17	29
Junior recruits	725	725	593
Topmen scheme	91	70	45
Academic Instructors(c)	5	2	3
Army Apprentice School	484	194	439
Royal Australian Air Force—			
School of Technical Training	409	179	116
School of Radio	141	62	33

(a) Includes 300 cadets enrolled for university courses and 154 enrolled at an institute of technology. (b) Includes 14 apprentices enrolled at institutes of technology. (c) Non-commissioned officers engaged on part-time instructional duties and part-time study at teachers training college.

The Australian School of Pacific Administration

The Australian School of Pacific Administration, which used to train students in the various aspects of service and administration in Commonwealth Territories including teaching, is now an important centre for training Papuan New Guineans. For details of its new role, see Chapter 28, The Territories of Australia.

Because of a change in role, most of the existing training activities for both Papua New Guinea and the Northern Territory undertaken at the School of Pacific Administration are being phased out. In 1972, the School trained 51 Australians doing final year teacher training before commencing service in Papua New Guinea and the Northern Territory. The School also undertook training of Australians for service as patrol officers in Papua New Guinea and Aboriginal welfare officers in the Northern Territory.

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.

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.

Post-school study courses

As part of the quarterly population survey (*see* Chapter 20, Employment and Unemployment) a survey was conducted in all States and Territories in August 1968 to obtain estimates of persons enrolled for courses of study or training outside school. The results of the survey supplement data about enrolments collected from schools and other institutions, and present a general indication of post-school education. For details of the survey *see* Year Book No. 56, pages 640-44.

Migrant education

The Department of Immigration is responsible for migrant education as part of its responsibility for migrant integration generally. Migrant education includes not only the teaching of English but also counselling and instruction to prepare migrants for life in their new environment and to assist them to integrate more quickly into the Australian community.

Following a major review by the Government of migrant education early in 1970, increasing emphasis has been placed upon accelerated and more specialised forms of instruction and on developing courses designed to meet the varying needs of individual groups of migrants. The programme now includes full-time intensive courses for professional and other well-educated migrants, accelerated courses particularly suited to workers and migrant women, special courses for migrants in industry, daytime classes for migrant women and a special language programme for migrant children in government and independent schools.

Courses in English are arranged in conjunction with State education departments, colleges of advanced education and other approved educational bodies. Advice on aspects of teaching English, co-operation in the arrangement of teacher training courses and the production of suitable teaching and learning materials is provided by the Department of Education and Science.

The Australian Government allocates funds to the Intergovernmental Committee for European Migration which, in Greece, Italy, Germany and Austria, provides pre-embarkation class and correspondence instruction for intending migrants to Australia. The Department itself arranges language and orientation courses in Turkey and Yugoslavia and distributes a recorded introductory English language course in Finland. The Governments of Holland, Belgium and Spain assist with courses conducted in these countries. Language instruction is given by Departmental Education Officers on ships carrying significant numbers of non-English speaking migrants to Australia.

A radio/correspondence course in English is conducted in Australia in co-operation with the ABC and in May 1971 an educational television programme was commenced by arrangement with Station Channel WIN 4 Wollongong.

Prior to the new initiatives announced by the Government in 1970, expenditure on migrant education had been to the order of \$1 million annually. Following the new initiatives, expenditure has increased, rising to \$3.875 million in 1970-71 and to \$6.38 million in 1971-72. Expenditure in the financial year 1972-73 is estimated to be some \$10 million.

The *Immigration (Education) Act 1971* was introduced to give legislative authority for the ongoing programme. The Act came into force on 12 May 1971.

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 were 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 below*), since its inception in Australia has been interested in adult education.

Overseas students

Information about overseas students in Australia is available from three statistical series. The Department of Education and Science compiles statistics of *government sponsored overseas students* in Australia. The statistics of government sponsored students in institutions of higher learning are compiled from records held by that Department; those of other government sponsored students are estimates from information held by the Department of Foreign Affairs. In June 1971, there were 1,736 government sponsored overseas students in institutions of higher learning, and 538 other government sponsored students. These figures exclude some personnel of overseas armed forces taking courses at Australian Defence Colleges. Altogether, there were 2,274 government sponsored overseas students in Australia in 1971. Students under the Colombo Plan Technical Co-operation Scheme numbered 1,592. The largest numbers of government sponsored students came from Malaysia, Indonesia, South Vietnam, and Thailand.

The Department of Immigration prepares statistics of overseas students in Australia who have been admitted under the *Private Overseas Student Programme*. In 1971, there were 10,440 students (7,059 males and 3,381 females) undertaking courses or training in Australia under the Programme; 5,902 from Malaysia, 1,356 from Hong Kong, and 884 from Singapore. Courses chosen were mainly in engineering and building (1,754), economics and commerce (1,394), medicine (including para-medical) and dentistry (1,826), and general and school courses (2,797).

Overseas students enrolled for advanced level courses in Australian education institutions are enumerated annually. The institutions reported some 7,982 enrolments in 1971, about 6,131 at universities, 1,577 at colleges of advanced education and some 274 at other institutions.

Organisations associated with education

Australian Council for Educational Research

The Australian Council for Educational Research, a non-government 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 aims are 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.

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 outlined in Chapter 28, The Territories of Australia; various schools and colleges for the Defence Services are referred to on pages 650-1, and other activities which may be considered broadly as educational are referred to in the section on Broadcasting and Television in Chapter 12, Transport, Communication and Travel. Details of Commonwealth expenditure on education are provided on pages 663-7.

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 administers per-capita grants to non-government (i.e. independent) schools for running costs and is involved in curriculum development projects. The Department is responsible for the various Commonwealth scholarship schemes, for the schemes of Queen Elizabeth II Fellowships and Queen's 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 and develops courses and materials for migrant education. 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 and the Northern Territory.

The *Australian Universities Commission* and the *Australian Commission 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 *Canberra College of Advanced Education*. The Department of the Environment, Aborigines and the Arts is responsible for the National Library and for art, literature and other cultural activities in which the Commonwealth is interested.

Scholarship Schemes

Commonwealth scholarships. The Commonwealth Government provides financial assistance to students through five major scholarship schemes. A total of 29,800 new awards were made available in 1972 under these schemes.

Under the *Commonwealth Post-graduate Research Awards Scheme*, 700 new awards were made available in 1972 for students undertaking research 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. In 1972, 100 awards were made available under the scheme of Commonwealth Post-graduate Course Awards for full-time students taking Masters degrees by course work. Both groups of awards carry a stipend of \$2,600 per annum and certain other allowances.

The *Commonwealth University Scholarship Scheme* made provision for 12,500 scholarships in 1972. Of these, 8,500 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. The remaining 4,000 scholarships are Later Year Awards for students who have already completed one or more years of a university course. A small quota of awards from each group is set aside as Mature Age Scholarships for students who have reached the age of thirty years. Scholarship holders have their fees paid and may receive a living allowance subject to a means test. The maximum rates of living allowances are \$1,100 per annum in the case of scholars living away from their parents and \$700 for scholars living with parents.

The *Commonwealth Advanced Education Scholarships Scheme* made provision for 4,000 scholarships in 1972 for students taking approved courses of advanced education at institutions other than universities. Benefits are similar to those for university scholarships.

The above schemes are the main responsibility of the *Commonwealth Scholarships Board* which is responsible for advising the Government on the policy and administration of Commonwealth post-graduate awards and university and advanced education scholarships. The Board, under its former title of the Universities Commission, was established by the *Education Act* 1945. It consists of a chairman and three other members.

Under the *Commonwealth Secondary Scholarship Scheme* students compete each year for 10,000 scholarships which will 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.

The *Commonwealth Technical Scholarship Scheme* made available 2,500 new awards in 1972 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.

COMMONWEALTH SCHOLARSHIPS: NUMBERS OF SCHOLARS IN TRAINING
30 JUNE 1971

Type of award	N.S.W.(a)	Vic.	Qld	S.A.(b)	W.A.	Tas.	Aust.
Post-graduate—							
Awarded—							
In 1971	331	222	95	91	35	18	792
Prior to 1971	528	283	127	139	59	27	1,163
Total	859	505	222	230	94	45	1,955
University scholarship—							
Awarded—							
In 1971	4,786	3,187	1,646	1,068	827	279	11,793
Prior to 1971	8,716	6,605	3,032	2,005	1,432	585	22,375
Total	13,502	9,792	4,678	3,073	2,259	864	34,168
Advanced education scholarship—							
Awarded—							
In 1971	891	902	381	268	318	63	2,823
Prior to 1971	720	1,138	497	330	247	111	3,043
Total	1,611	2,040	878	598	565	174	5,866
Secondary scholarship—							
Awarded—							
In 1971	3,711	2,685	1,425	976	792	311	9,900
Prior to 1971	3,670	2,717	1,384	904	753	248	9,676
Total	7,381	5,402	2,809	1,880	1,545	559	19,576
Technical scholarship—							
Awarded—							
In 1971	1,077	669	218	209	190	65	2,431
Prior to 1971	647	626	263	215	110	56	1,917
Total	1,724	1,295	481	424	300	124	4,348

(a) Includes the Australian Capital Territory.

(b) Includes the Northern Territory.

Australian Agricultural Council Scholarships. At the request of the Australian Agricultural Council the Department of Primary Industry makes available from the Commonwealth Extension Services Grant funds 12 scholarships annually (two in each State) to students in Australia who have qualified for a Commonwealth University Scholarship and who wish to proceed to an approved course of study leading to a degree in Agricultural Science, Agricultural Engineering, Agricultural Economics, Rural Science or Veterinary Science. The purpose of the awards is to foster interest in agriculture and related fields of study.

As at 30 June 1971, there were 54 students holding Agricultural Council Scholarships in Australia.

Aboriginal Study Grants. Awards under the Aboriginal Study Grants Scheme have been made since 1969 to assist Aborigines to take courses of study after leaving school. They provide full-time students with fees, a living allowance of \$1,100 per annum and other allowances; and the part-time students with fees and incidental expenses. In 1971, 499 students held grants.

Aboriginal Secondary Grants. This scheme assists students to continue schooling beyond the school leaving age by paying living costs, fees and other allowances. At 30 June 1971, 3,515 students held grants.

Canberra Teacher Education Scholarships. These awards were offered for the first time in 1971 and assist students undertaking courses of teacher training at the Canberra College of Advanced Education. The Scholarships are unbonded and benefits are similar to those for Advanced Education Scholarships. At 30 June 1971, there were 44 students holding awards.

Commonwealth Teaching Service Scholarships. This scheme was introduced in 1972 to assist students taking courses of teacher training who, on completion of that training, would become members of the Commonwealth Teaching Service. There were 200 awards available in 1972. They are unbonded and entitle holders to payment of all compulsory fees and to a living allowance, which is not subject to a means test, at the rate of \$700 per annum for a scholar living at home and \$1,100 per annum for a scholar living away from home.

Advisory bodies

The Commonwealth Government has established various advisory bodies whose fields of concern relate to matters of education. The Australian Universities Commission advises the Commonwealth Government on university development and details of its work may be found on page 657. The Australian Commission on Advanced Education was established as a statutory body by an Act of Parliament in December 1971. It replaces the Commonwealth Advisory Committee on Advanced Education. The Commission 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. The Queen's Fellowships Committee advises the Minister on the merit of nominees and applicants for Senior Fellowships and Fellowships under this scheme which provides for high level and post-doctoral research in marine science. The Advisory Committee on Research into the Crown-of-Thorns Starfish advises the Commonwealth Minister for Education and Science and the Queensland Minister for Primary Industries on the merits of applications for grants on Crown-of-Thorns starfish research and suggests the allocation of funds. The Australian Advisory Committee on Research and Development in Education was established in 1970. Its functions are to initiate research in areas of importance in education, to recommend assistance for the training of educational research personnel and to direct attention to the application of research findings.

International relations

An account of the relations and exchanges in the field of education before 1969 between Australia and other countries can be found in Year Book No. 55, pages 526-527.

The Department of Education and Science is responsible for the administration of various schemes concerned with international co-operation in education.

A feature of Australian UNESCO activities for 1971 was the interest shown in the promotion of the studies of cultures of the Pacific Islands. The Director-General of UNESCO had, following Australian and New Zealand initiatives, made funds available for this purpose, and the Australian UNESCO Committees, as a contribution to the international UNESCO programme, organised two related specialist meetings in 1971. The first attempted to define priorities for cultural preservation and development; the second was concerned with the improvement of library and documentation services. For both meetings the Department of Education and Science arranged for specialists sponsored by UNESCO to participate. The UNESCO programme of studies is expected to extend over five or six years, and the Australian UNESCO Committees will continue to advise on the Australian contribution.

The year 1971 saw the establishment of the Australian UNESCO Committee for Man and the Biosphere (MAB). MAB will deal with the rational conservation of natural resources and the Committee has been set up to advise on this new international UNESCO programme. Australia was elected to the International Co-ordinating Council for MAB for the 1971-72 biennium, and a delegation attended the first Council meeting in November. Australia was also represented at several other inter-governmental scientific meetings convened by UNESCO, concerned with the International Hydrological Decade, the World Science Information System (UNISIST), and the International Geological Correlation Programme.

In August 1971, the UNESCO International Advisory Committee on Natural Resources Research met in Australia at the invitation of the Australian Government.

Under the scheme of Commonwealth Co-operation in Education, the Department of Education and Science arranged short study programmes in Australia for a group of senior educationists from Africa and the Pacific and recruited Australian educationists to occupy key posts in developing countries of the Commonwealth.

As part of Australia's contribution to the Commonwealth Co-operation in Education programme, special training courses for teachers from Commonwealth countries were arranged in 1971 by the Department of Education and Science. A group of Ugandan infant teachers commenced a two year course in infant teaching methods at Wollongong Teachers College conducted by the New South Wales Department of Education. A one year course in infant teaching methods was also held at Wollongong and was attended by teachers from Fiji, Guyana, Gilbert and Ellice Islands, Mauritius, Western Samoa and Zambia. Similarly, teachers from Fiji, Ghana, Gilbert and Ellice Islands, Kenya, Malawi, New Hebrides, Nigeria, Tonga, Western Samoa and Zambia attended a one year course in primary teaching methods conducted by the South Australian Education Department in Adelaide. Macquarie University conducted a six months mathematics workshop and a one year course in development education for overseas educational administration. A course for inspectors of

schools was arranged by the Victorian Education Department. Other programmes followed by overseas educationists under Commonwealth Co-operation in Education Training Awards were the post-graduate diploma in education, home science, secondary school science, primary school science, industrial arts, automobile engineering, welding, stenography teacher training, primary school arts and crafts, arts and crafts for disabled children, teaching of the deaf, music, and physical education.

Under the Commonwealth Scholarship and Fellowship Plan, the Department of Education and Science is responsible for the award of Australian scholarships to students from other Commonwealth countries and for the nomination of Australian graduates for awards offered by other Commonwealth countries. In 1971 Australian awards were taken up by students from Britain, Canada, Ceylon, Fiji, Ghana, Guyana, Hong Kong, India, Jamaica, Malaysia, Malta, New Zealand, Nigeria, Pakistan, Singapore, Tonga, and Uganda. Awards were offered to Australia by Britain, Canada, India, Hong Kong, Ghana, Nigeria, Ceylon, Pakistan, Jamaica, and Trinidad/Tobago.

The Department of Education and Science acts as the selection agency for post-graduate scholarships offered to Australian students by other governments. In 1971 scholarships were offered by 21 governments to Australian scholars. The Department is also responsible for the administrative procedures in connection with selection for the various types of travel grants offered by the Australian-American Educational Foundation to Australian scholars and educationists for study in the United States of America. Sixty-five Australians and 42 Americans took up the awards offered by the Foundation in 1971.

Australia became a member of the Organisation for Economic Co-operation and Development (OECD) in June 1971 (for details see Chapter 6, International Relations) and has begun to participate in the Organisation's activities in education. Australia has participated in sessions of the OECD Education Committee held in Paris and was represented at the Inter-governmental Conference on the Utilisation of Highly Qualified Personnel, held in Venice in 1971. In association with the Department of Foreign Affairs, the Department of Education and Science liaises with State education departments and other relevant bodies on educational matters arising from Australia's membership of OECD.

Commonwealth grants for education purposes

Grants for research purposes. The Second Report of the Australian Universities Commission recommended that during the calendar years 1964, 1965 and 1966 a total of \$10 million should be provided for universities to support research activities at the post-graduate level, half the sum to be provided by the Commonwealth and half by the States. The Australian Research Grants Committee, which is entrusted with the task of advising on the allocation for particular research projects, was established in April–May 1965. Its immediate function was to advise the Commonwealth on the distribution of the \$4 million for the year 1966.

At the beginning of 1967 it was decided that the Committee would continue to function through the 1967–1969 triennium, and was asked to recommend to the Commonwealth Government the distribution of \$9.2 million for the triennium, to be provided solely by the Commonwealth. Details of the distribution of this money may be obtained from the *Australian Research Grants Committee, Report 1967–69*. An amount of \$12.5 million (later increased to \$13.1 million to cover rises in academic salaries) was allocated by the Commonwealth for the 1970–72 triennium and details of its distribution can be obtained from *Grants Approved for 1970*, *Grants Approved for 1971*, and *Grants Approved for 1972* published by the Committee. A report for the 1970–72 triennium was published in mid 1972. For details of Commonwealth expenditure under the scheme in 1970–71 see page 666.

Grants for universities. The Australian Universities Commission, a statutory body established under the *Australian Universities Commission Act, 1959–1971*, advises the Minister for Education and Science on matters in connection with the grant of Commonwealth financial assistance for universities in the States and the Australian Capital Territory. To date, the Commission has presented four triennial reports. The total financial support for universities provided by Commonwealth and State governments on the Commission's recommendations for the years 1961 to 1975 has exceeded \$2,900 million, including fees. Since the Australian universities are almost wholly dependent on government finance, the Australian Universities Commission plays a key role in the determination of the growth and balanced development of the Australian university system.

Prior to the establishment of the Commission, there were nine universities—the Universities of Sydney, New South Wales, New England, Melbourne, Queensland, Adelaide, Western Australia, Tasmania and the Australian National University. Since 1958, an additional six universities have been established on the recommendations of the Commission. These universities are the University of Newcastle and Macquarie University in New South Wales, Monash and La Trobe Universities in Victoria, James Cook University of North Queensland and Flinders University of South Australia.

In the 1973-75 triennium two new universities will commence to take students, Griffith University in Brisbane and Murdoch University in Perth, and, in addition, the Wollongong University College will become an autonomous university in 1975.

The Fifth Report of the Australian Universities Commission was published in 1972 and recommended total grants from Commonwealth and State sources for State universities of over \$894 million for the 1973-75 triennium. It also recommended grants totalling \$122 million for the Australian National University. These recommendations were accepted by the Commonwealth Government which passed legislation to provide financial assistance for State universities in the 1973-75 triennium on the basis of the programme recommended by the Commission.

A summary of the maximum grants by the Commonwealth for all universities for the 1973-75 triennium and for the 1967-69 and 1970-72 triennia is shown in the following table. Details of Commonwealth payments for universities are given on pages 664-6 and an historical summary of the financial assistance provided for universities by the Commonwealth Government is given in Year Book No. 55, pages 515-18.

**ALL UNIVERSITIES: SUMMARY OF MAXIMUM COMMONWEALTH GRANTS FOR
THE 1967-69, 1970-72 AND 1973-75 TRIENNA
(\$'000)**

<i>Type of Grant</i>	<i>1967-69</i>	<i>1970-72</i>	<i>1973-75</i>
Recurrent grants—			
General	174,968	267,731	362,295
Teaching hospitals	810	1,036	1,354
Student residences	1,950	2,588	4,215
<i>Total recurrent grants</i>	<i>177,728</i>	<i>271,355</i>	<i>367,864</i>
Building grants—			
Building projects	50,683	58,922	65,301
Teaching hospitals	4,927	2,460	2,990
Student residences	11,524	12,489	3,904
<i>Total building grants</i>	<i>67,134</i>	<i>73,871</i>	<i>72,195</i>
Equipment	985	2,047	22,720
Research . . . . .	..	4,000	3,000
<i>Total Commonwealth grants for all universities(a)</i>	<i>245,847</i>	<i>351,273</i>	<i>465,779</i>
<i>Total State grants for State universities(b)</i>	<i>278,980</i>	<i>401,219</i>	<i>550,085</i>
Total	524,827	752,492	1,015,864

(a) Including receipts from fees of the Australian National University.

(b) Including receipts from fees of State universities.

The Commonwealth makes the above grants available to the States on the following bases.

<i>Grant</i>	<i>Basis</i>
Recurrent grants for general university purposes and for teaching hospitals.	The Commonwealth Government provides \$1 for each \$1.85 available from State grants and students' fees.
Recurrent grants for halls of residence and affiliated residential colleges.	Wholly supported by the Commonwealth Government.
Grants for equipment, for special research and for all buildings other than affiliated residential colleges.	The Commonwealth Government provides \$1 for each \$1 provided in State grants.
Grants for buildings for affiliated residential colleges.	The Commonwealth Government provides one half of the approved project cost, the remainder being provided by the State government and the residential college on various bases.

**MAXIMUM COMMONWEALTH GRANTS TO UNIVERSITIES FOR THE 1973-75
TRIENNium**
(\$'000)

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	A.C.T.	Aust.
Recurrent grants—								
General	98,962	65,776	32,323	24,621	18,488	8,025	114,100	362,295
Teaching hospitals	475	433	189	123	94	40	..	1,354
Student residences	1,365	1,100	690	225	270	200	365	4,215
<i>Total recurrent grants</i>	<i>100,802</i>	<i>67,309</i>	<i>33,202</i>	<i>24,969</i>	<i>18,852</i>	<i>8,265</i>	<i>114,465</i>	<i>367,864</i>
Building grants—								
Building projects	20,911	14,543	7,740	6,396	6,566	1,345	7,800	65,301
Teaching hospitals	928	231	148	1,158	300	225	..	2,990
Student residences	1,346	1,099	944	90	385	40	..	3,904
<i>Total building grants</i>	<i>23,185</i>	<i>15,873</i>	<i>8,832</i>	<i>7,644</i>	<i>7,251</i>	<i>1,610</i>	<i>7,800</i>	<i>72,195</i>
Equipment	9,140	5,540	2,705	2,790	1,750	795	..	22,720
Research	1,135	850	350	375	200	90	..	3,000
Total Commonwealth grants for all universities(a)	134,262	89,572	45,089	35,778	28,053	10,760	122,265	465,779

(a) Including receipts from fees of the Australian National University.

Grants for colleges of advanced education. The Commonwealth continues to be advised by the Australian Commission on Advanced Education. The following tables provide details of grants for the 1967-69 and 1970-72 triennia.

**COLLEGES OF ADVANCED EDUCATION: SUMMARY OF
MAXIMUM COMMONWEALTH GRANTS FOR THE 1970-72 AND
1973-75 TRIENNIA**
(\$ million)

Type of grant	1970-72	1973-75
Capital	57.37	87.30
Recurrent	57.28	108.04
Unmatched library	0.50	0.50
Special matched library . . . . .	..	1.00
Research and investigation	0.25	0.25
Capital assistance to student residences (non-collegiate) . . . . .	..	1.00
Capital assistance to student residences (country) . . . . .	..	0.50
Recurrent assistance to student residences (collegiate)	0.01	0.50
Total	115.41	199.09

The Commonwealth makes the above grants available to the States on the following bases.

Grant	Basis
Capital	\$1 Commonwealth for every \$1 State
Recurrent	\$1 Commonwealth for every \$1.85 of income from fees and State grants
Unmatched library	No matching grant required
Matched library	\$1 Commonwealth for every \$1 State
Research	No matching grant required
Capital—Student residences (non-collegiate)	\$1 Commonwealth for every \$1 State (up to a maximum of \$2,500 for each student place)
Capital—Student residences (country)	\$1 Commonwealth for every \$1 State
Recurrent—Student residences	Basic grant <i>plus</i> full-time student per capita contribution of \$60 per annum

**COLLEGES OF ADVANCED EDUCATION
MAXIMUM COMMONWEALTH GRANTS FOR THE 1970-72 TRIENNIUM
(\$ million)**

<i>Type of grant</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>A.C.T.</i>	<i>Aust.</i>
Capital	21.05	25.50	7.75	10.00	7.50	3.90	11.60	87.30
Recurrent	22.09	33.33	10.00	9.47	14.04	4.21	(a)14.90	108.04
Unmatched library(b) . . . . .	..	..	..	..	..	..	..	0.50
Special matched library(b) . . . . .	..	..	..	..	..	..	..	1.00
Research and investigation(b) . . . . .	..	..	..	..	..	..	..	0.25
Capital—Student residences (non-collegiate)(b) . . . . .	..	..	..	..	..	..	..	1.00
Capital—Student residences (country)(b) . . . . .	..	..	..	..	..	..	..	0.50
Recurrent—Student residences (collegiate)(b) . . . . .	..	..	..	..	..	..	..	0.50
Total	43.14	58.83	17.75	19.47	21.54	8.11	26.50	199.09

(a) Grants less fees received. (b) State details of expenditure on this item are not yet separately available.

Grants for technical training. These grants are made under the *States Grants (Technical Training) Acts* 1964, 1965, 1968 and 1971. The grants are for capital expenditure on buildings and equipment for use in technical training. 'Technical training' means the training of persons for engagement in trades, technical occupations, and agricultural or other rural occupations below the tertiary level. From the time the scheme began in July 1964 to June 1971 the following amounts were advanced to the States, the allocation being based on total population.

**TECHNICAL TRAINING: COMMONWEALTH GRANTS TO THE STATES
FOR THE PERIOD JULY 1964 TO JUNE 1971
(\$'000)**

<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>All States</i>
26,103	19,766	10,162	6,601	5,055	2,313	70,000

The scheme was extended for a further three years ending 30 June 1974. Maximum Commonwealth grants to the States for the triennium ending 30 June 1974 are shown in the following table.

**TECHNICAL TRAINING: MAXIMUM COMMONWEALTH GRANTS
FOR THE TRIENNIUM ENDING 30 JUNE 1974
(\$'000)**

<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>All States</i>
13,320	10,030	5,250	3,390	2,870	1,140	36,000

For details of grants to the States for technical training during 1970-71, see page 665.

Grants for teachers colleges. The scheme commenced on 1 July 1967, and was extended for a further three years with available funds increasing from \$24 million for the 1967-70 triennium to \$30 million for the 1970-73 triennium. The grants to teachers colleges are for capital expenditure on approved building projects including the planning, erection, alteration and extension of a building plus the necessary furniture and equipment. The *States Grants (Teachers Colleges) Acts* 1967 and 1970 provide that 10 per cent of places (new or replacement) resulting from the expenditure of Commonwealth grants must be available for private students, i.e. students not bonded to State education departments. (For full details of the Commonwealth's role in teacher education, reference should be made to the report issued in 1972 of the Senate Standing Committee on Education, Science and the Arts.)

**TEACHERS COLLEGES: ALLOCATIONS OF COMMONWEALTH GRANTS
FOR SIX YEARS ENDING 30 JUNE 1973
(\$'000)**

<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>All States</i>
17,400	14,850	6,780	6,800	5,600	2,570	54,000

It is estimated that the expenditure of Commonwealth grants on teachers colleges provided 5,677 places (4,371 new and 1,306 replacement places) during the period 1967-68 to 1969-70 and it will provide 6,000 places (3,520 new and 2,480 replacement places) during the period 1970-71 to 1972-73.

For details of Commonwealth grants for teachers colleges during the period 1967-68 to 1970-71, see page 665.

The Commonwealth also decided to support the introduction of teacher education into the colleges of advanced education and to provide funds for this purpose under the normal sharing arrangements for expenditure on colleges of advanced education in the States. During the triennium ending 30 June 1974, teacher training will be supported at the following colleges of advanced education: the Mitchell (Bathurst) and Riverina (Wagga) Colleges of Advanced Education in New South Wales; the Queensland Institute of Technology, Darling Downs (Toowoomba) and Capricornia (Rockhampton), and the Launceston and Hobart branches of the Tasmanian College of Advanced Education. Teacher education commenced at the Canberra College of Advanced Education in 1971.

Pre-school teachers colleges grants. In 1968 the Commonwealth provided \$2,500,000 for capital expenditure on approved building projects in connection with the provision of pre-school or kindergarten teacher training facilities. An approved building project includes planning, erection, alteration of a building plus the necessary furniture and equipment. The primary purpose of the grants was to double the capacity of the colleges for the training of pre-school teachers.

While pre-school teacher training is a function of the State Education Department in Tasmania, in the other States it is administered by the private organisations shown in the table below. The Commonwealth's allocations made under the *States Grants (Pre-school Teachers Colleges) Act 1968*, were as follows.

**PRE-SCHOOL TEACHERS COLLEGES: AMOUNTS GRANTED TO EACH STATE
ORGANISATION RESPONSIBLE—1968
(\$)**

<i>State</i>	<i>Name of college</i>	<i>Body of trustees conducting or owning property of college</i>	<i>Amount</i>
New South Wales	Nursery School Teachers College	The Sydney Day Nursery and Nursery Schools Association Incorporated	650,000
	Sydney Kindergarten Teachers College	The Kindergarten Union of New South Wales Incorporated	225,000
Victoria	Melbourne Kindergarten Teachers College	The Trustees of the Melbourne Kindergarten Teachers College	210,000
Queensland	Brisbane Kindergarten Teachers College	The Creche and Kindergarten Association of Queensland	350,000
South Australia	The Kindergarten Teachers College	The Kindergarten Union of South Australia, Incorporated	670,000
Western Australia	Meerilinga Kindergarten Teachers College	Kindergarten Association of Western Australia, Incorporated	175,000
Tasmania	Launceston Teachers College		220,000
Total			2,500,000

When the approved building projects are completed the number of places available at pre-school teacher training colleges will be 1,750, an increase of 1,024 places since 1967.

Per capita grants to independent (i.e. non-government) schools.

The States Grants (Independent Schools) Act 1969 provided for the introduction in 1970 of special purpose grants to be made to the States for transmission to independent schools (non-government) as a per capita contribution from the Commonwealth towards their recurrent expenditure. The Act also provided for the payment of per capita grants for students attending non-government special schools for handicapped children.

The per capita grants per student during 1970, 1971 and 1972 are as follows.

**RATES OF PER CAPITA GRANTS PAID TO
INDEPENDENT (NON-GOVERNMENT) SCHOOLS
DURING 1970 TO 1972
(\$)**

<i>Type of student</i>	1970	1971	1972
Primary	35	35	50
Secondary	50	50	68

Australian Capital Territory and Northern Territory. The Commonwealth Government provides a per capita grant to non-government schools in the Australian Capital Territory and the Northern Territory on the same basis as that shown above plus a local component which is broadly equivalent to the per capita grants paid by the State governments to non-government schools in the States. The local per capita component paid during 1972 is as follows: primary students \$35, secondary students, forms 1 to 4 \$45, forms 5 and 6 \$50.

Non-government schools in the Australian Capital Territory and the Northern Territory also receive 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, the costs for school building projects. For details of payments made under the Act during 1970-71, see page 667.

For details of the total amounts of per capita grants paid to independent (non-government) schools, see page 665.

Grants for science laboratories. From July 1964 to June 1975, \$123.3 million will have been distributed to the States in unmatched grants for science buildings and equipment in government and non-government secondary schools. Grants to State schools have been provided on the basis of proposed programmes agreed to between the Commonwealth and State Ministers of Education. Grants to independent schools are approved by the Commonwealth Minister for Education and Science in accordance with their entitlement to assistance and on the basis of reports by an Advisory Committee on Standards for Science Facilities in Independent Schools; State advisory committees representing independent schools allocate priorities within their own State.

Grants for library facilities in secondary schools. During the three-year period January 1969 to December 1971, the Commonwealth distributed \$27 million for the development of library facilities (erection, alteration or extension of library buildings and provision of furniture, equipment, books, and library materials) in government and non-government secondary schools in the States. A further \$30 million has been provided for the same purposes in the 1972-74 triennium. Besides the Commonwealth Secondary Schools Libraries Committee, the Commonwealth, as with the science facilities scheme, has the advice of two advisory committees in each State, one representative of Roman Catholic secondary schools and the other representative of other non-government secondary schools. The maximum amounts available to the States during the present triennium are shown below. For details of payments made under the Act during 1970-71, see page 665.

**SECONDARY SCHOOL LIBRARIES: MAXIMUM COMMONWEALTH
GRANTS FOR THE TRIENNIUM ENDING 31 DECEMBER 1974
(\$'000)**

<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>All States</i>
10,897	9,292	4,015	2,691	2,048	1,056	30,000

Following the Commonwealth contribution, in 1968-69, towards meeting the urgent need for more trained librarians to staff the new and existing libraries, further funds were made available during the period 1969-70 to 1971-72. These funds enabled the Commonwealth to sponsor several short specialist courses in various aspects of school librarianship in conjunction with State education departments and other interested organisations. During 1970-71, 1,145 principals, librarians and teachers from government and non-government schools, as well as teachers college lecturers and principals, educational administrators, and university and advanced college teacher training staff, attended courses. Expenditure in connection with the courses during the period 1968-69 to 1971-72 totalled approximately \$143,000.

Expenditure on education

The statistics in this section are intended to give a broad indication of the extent and direction of both government and private effort in the field of education in recent years. They have been compiled in accordance with national accounting concepts, and, apart from some minor revisions which have been incorporated where later information became available, are consistent with the estimates included in *Australian National Accounts, 1970-71* (No. 7.1). These figures can therefore be related to other national accounts aggregates. For explanation of the relevant national accounting concepts, reference should be made to *Australian National Accounts, 1970-71* and also to *Public Authority Finance: Commonwealth Authorities, 1970-71* (No. 5.12), from which figures included in this section have also been taken.

The emphasis given in this section to the outlays of the public sector in part reflects the relative importance of that sector in the provision of education services, but is also a reflection of lack of detailed information relating to educational activities in the private sector. Sufficient information is given, however, to show the order of magnitude of private sector spending, and also to show aggregate demand for education services and facilities.

Public authority sector

The figures which follow form part of a comprehensive statistical programme to reclassify the transactions recorded in the 'conventional' accounts of all public authorities into a national accounting presentation. As part of this programme, the outlay of public authorities is classified by *function*, so as to reveal the broad purposes for which the public authorities undertake expenditure programmes. These figures relate to those outlays which have been identified as being primarily designed to serve the purposes of 'education', broadly as defined in the United Nations System of National Accounts. Included therefore are outlays on administration and regulation of school systems and institutions of higher learning and educational research; on provision, inspection and support of primary and secondary schools, colleges and universities, technical training institutions, schools for the handicapped, adult education facilities, pre-school centres, etc.; on scholarships, research grants, etc.; and on subsidiary services such as transportation of school children and fare concessions. Expenditures on school medical and dental services and provision of free milk for school-children are not included, as these are regarded as primarily serving the purpose of health.

Application of this, or any other, definition of 'education' is far from being a straightforward matter. A particular item of expenditure may serve two or more distinct functions, and there is likely to be a degree of arbitrariness in deciding which is the primary function—the items referred to at the end of the previous paragraph are illustrative of this problem. In other cases a recorded expenditure figure may relate to more than one function, but it may be very difficult in practice to separate them. Military colleges serve both defence and education functions. The usual practice is to classify these organisations to defence: but this practice may be of doubtful validity in the case of military colleges which are affiliated with universities. There are similar problems with the education of nurses. An initial difficulty here is that of satisfactorily identifying these expenditures in the accounts of hospitals. But even if that problem could be overcome there would still be some question as to whether this expenditure should belong in education or health. The lack of separate data decides the issue for the present—expenditure on the education of nurses in hospitals is classified to health—but the development of tertiary level courses in nursing at colleges of advanced education must eventually lead to reconsideration of this approach. There is also a problem in allocating these expenditures between the public and private sectors. Similar difficulties exist with post-graduate medical education. Another class of borderline cases relates to in-service training schemes. Here the usual practice is to classify expenditures to the primary function of the organisation providing the training: therefore all expenditures on cadetship schemes are treated in this way. Allowances paid to trainee teachers are regarded as in-service training expenditures—but in this case the primary

function of their employers happens to be education, so that these expenditures are included in the figures in this statement. Expenditure on research by universities cannot be clearly separated from expenditures related to teaching; all expenditure by universities is therefore classified to education.

Apart from giving emphasis to the broad purposes of public sector outlays, a national accounting presentation of the transactions of public authorities is also designed to facilitate the study of their impact on the rest of the economy. In the following tables the outlays of the public authorities engaged in providing education services or financing their provision by other bodies, public or private, have accordingly been broken into: broad categories of final expenditure on goods and services (i.e., net current expenditure, and expenditure on new fixed assets); capital financing items (e.g. net expenditure on existing assets); transfers to the private sector (cash benefits, grants for private capital purposes) which become a source of finance for that sector's own final expenditures; and transfers between public authorities (Commonwealth grants to the States).

Detailed analyses have not been prepared of the accounts of all public authorities providing or financing education services, but methods of analysis have been adopted which reflect the net effect of the transactions of authorities not fully analysed (such as the State universities). Private non-profit organisations are covered by recording their net current expenditure on goods and services as final expenditure by public authorities and persons: that is, the current grants to these organisations by public authorities are treated as public authorities' final expenditure, and fees, donations, etc. paid to them by persons are included in personal consumption expenditure. Current expenditure of non-profit organisations is therefore covered, being approximately equal to their income from grants and fees. For reasons of practicality, grants for capital purposes by public authorities to private non-profit organisations are treated as transfers, so that the capital expenditure of these organisations is wholly recorded in the private sector.

Local authorities have no responsibility for the provision of education services, and only participate in this field of activity to the extent of providing some support to pre-school centres in some States. These expenditures have been included in the figures for the public sector given in the last table in this section, but their impact is negligible. To all intents and purposes therefore the outlays of Commonwealth authorities and State authorities shown in the following tables may be taken together as constituting the outlay on education by all public authorities.

Commonwealth authorities

Details of outlay on education by Commonwealth authorities are given in the following table.

COMMONWEALTH AUTHORITIES: OUTLAY ON EDUCATION, 1966-67 TO 1970-71
(\$'000)

	1966-67	1967-68	1968-69	1969-70	1970-71
Current outlay—					
Net current expenditure on goods and services—					
Department of Education and Science	2,113	2,852	3,744	4,972	6,959
Australian Universities Commission	195	197	217	229	223
Australian Capital Territory education services(a)	4,980	5,780	6,767	7,853	10,184
Northern Territory education services(a)	1,794	3,432	4,579	5,541	7,701
Australian National University	12,852	15,019	17,381	19,842	27,237
Canberra College of Advanced Education . . . . .	..	43	267	936	1,653
Child migrant education scheme . . . . .	..	..	..	82	1,698
Australian Broadcasting Commission—School broadcasts, etc.	888	817	873	902	970
Melbourne University—Meteorology	12	12	12	12	12
Sydney University—School of Public Health and Tropical Medicine, etc.	547	623	628	743	822
Non-government schools—assistance(a)					
Australian Capital Territory	274	377	629	787	1,232
Northern Territory . . . . .	..	17	30	86	157
Total	23,655	29,172	35,126	41,785	58,849
Cash benefits to persons—					
Commonwealth scholarship scheme—					
Post-graduate	2,432	2,899	3,588	4,526	5,209
University	13,890	13,383	16,268	18,160	22,519
Advanced education	660	754	1,001	1,628	2,793
Secondary	6,243	6,474	6,558	6,738	6,791
Technical	816	1,031	1,123	1,162	1,096
Soldiers' children education scheme	2,462	2,720	3,154	3,203	3,407
Aboriginal study grants . . . . .	..	..	62	190	326
Aboriginal secondary grants . . . . .	..	..	..	522	2,201
Other(b)	680	719	753	854	941
Total	27,184	27,979	32,508	36,982	45,283

For footnotes see end of table.

COMMONWEALTH AUTHORITIES: OUTLAY ON EDUCATION, 1966-67 TO 1970-71—continued
(\$'000)

	1966-67	1967-68	1968-69	1969-70	1970-71
E. Grants for private capital purposes—					
Non-government schools—					
Australian Capital Territory	170	50	397	841	688
Northern Territory	7	6	7	32	145
Residential colleges—Australian National University	80	1,435	428	196	990
Aboriginal advancement . . . . .	..	129	31	229	188
Total	257	1,619	863	1,298	2,011
Transfers overseas(c)	726	791	801	941	1,017
Grants to the States—					
Universities	34,262	39,912	43,534	50,436	58,877
Colleges of advanced education	2,472	5,273	6,282	10,658	15,743
Australian Research Grants Committee grants	2,038	3,154	2,879	3,446	4,170
Non-government schools—per capita grants . . . . .	..	..	..	12,177	24,253
Aboriginal advancement . . . . .	..	..	151	289	273
Total	38,771	48,338	52,846	77,005	103,317
Total current outlay	90,593	107,899	122,144	158,011	210,477
Capital outlay—					
Expenditure on new fixed assets—					
Department of Education and Science	9	48	125	55	59
Australian Capital Territory education services	4,549	4,801	4,741	6,833	5,594
Northern Territory education services	1,274	1,958	1,710	5,604	4,810
Australian National University	4,275	6,285	5,664	3,402	5,940
Canberra College of Advanced Education	25	439	808	1,501	2,426
Child migrant education scheme . . . . .	..	..	..	27	147
Sydney University—School of Public Health and Tropical Medicine, etc.	76	112	113	110	79
Total	10,208	13,644	13,160	17,533	19,055
Grants to the States—					
Universities	16,354	16,329	19,097	17,233	16,346
Colleges of advanced education	3,681	6,647	8,080	9,486	14,837
Teacher training colleges . . . . .	..	4,518	6,322	13,160	2,470
Pre-school teachers' colleges . . . . .	..	..	170	309	856
Science laboratories	10,163	12,587	11,762	12,898	13,062
School libraries . . . . .	..	..	1,703	7,540	13,257
Technical training facilities	9,894	13,877	7,587	9,878	12,535
Aboriginal advancement . . . . .	..	..	656	655	672
Total	40,092	53,958	55,377	71,160	74,034
Total capital outlay	50,300	67,602	68,537	88,693	93,089
Total outlay on education	140,893	175,501	190,681	246,704	303,566

(a) For further details of outlay in the Territories, see p. 667. (b) Includes the following items: Forestry scholarships, C.S.I.R.O. research studentships, scholarships and allowances to students in the A.C.T. and special scholarships to students in the N.T., and Australian Agricultural Council scholarships. (c) Relates mainly to expenditure in connection with Commonwealth Educational Co-operation Scheme.

As may be seen from the table, Commonwealth outlays are directed very largely towards the financing of outlays on education by the States and the private sector. Direct expenditure by the Commonwealth relates mainly to the costs of administering its support programmes and its own educational research activities, the provision of education services in the internal territories, expenditures of statutory bodies (i.e. the Australian National University, the Canberra College of Advanced Education, and the Australian Broadcasting Commission), expenditure on the education of Aborigines by the Northern Territory administration, and the costs of the child migrant education programme.

Grants to the States

Financial assistance to the States specifically for education purposes constitutes the major item of outlay on education by the Commonwealth. The allocation of the various categories of grants to individual States in 1970-71 is shown in the following table. The grants themselves have been described earlier, *see* pages 657-63.

**COMMONWEALTH AUTHORITIES: GRANTS TO THE STATES
SPECIFICALLY FOR EDUCATION PURPOSES, 1970-71
(\$'000)**

	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>All States</i>
Current—							
Research grants	1,565	954	395	759	296	202	4,170
Universities	23,594	16,238	7,517	5,811	3,900	1,818	58,878
Colleges of advanced education	3,478	6,191	1,567	1,420	2,333	754	15,743
Non-government schools—per capita grants	9,017	7,832	3,640	1,526	1,682	556	24,253
Aboriginal advancement	135	65	13	28	26	7	273
<i>Total current</i>	<i>37,789</i>	<i>31,280</i>	<i>13,132</i>	<i>9,544</i>	<i>8,237</i>	<i>3,337</i>	<i>103,317</i>
Capital—							
Universities	4,050	5,990	3,124	2,369	384	429	16,346
Colleges of advanced education	4,068	4,902	1,097	2,353	1,903	514	14,837
Technical training	4,846	3,912	1,457	1,191	804	325	12,535
Teacher training colleges	546	1,250	431	140	3	100	2,470
Science laboratories—							
Government schools	2,684	2,041	1,389	692	530	390	7,726
Non-government schools	1,979	1,505	778	510	391	174	5,336
School libraries	5,990	3,199	1,466	1,343	779	480	13,257
Pre-school teachers colleges	25	1	350	480	..	..	856
Aboriginal advancement	11	..	327	84	250	..	672
<i>Total capital</i>	<i>24,199</i>	<i>22,800</i>	<i>10,419</i>	<i>9,162</i>	<i>5,044</i>	<i>2,411</i>	<i>74,034</i>
Total outlay	61,988	54,079	23,550	18,706	13,282	5,750	177,351

Outlay on education in the internal territories

As mentioned previously, the Commonwealth Government is responsible for the provision of education services in the Australian Capital Territory and the Northern Territory. Details of Commonwealth outlay on education in the Territories are given below; further information may be found in Chapter 28, The Territories of Australia.

**COMMONWEALTH AUTHORITIES: OUTLAY ON EDUCATION
IN THE INTERNAL TERRITORIES, 1970-71
(\$'000)**

<i>Australian Capital Territory</i>	<i>Northern Territory</i>
Current outlay—	Current outlay—
Current expenditure on goods and services—	Current expenditure on goods and services—
Australian Capital Territory education services—	Northern Territory education services—
Government schools and colleges—	Government schools and colleges—
Pre-schools 424	Pre-schools 261
School transport 478	School transport 335
Repairs and maintenance 260	Repairs and maintenance 146
Payment to N.S.W. Department of Education 7,150	Commonwealth Teaching Service 150
Canberra Technical College 1,016	Payment to S.A. Department of Education, and teacher moving expenses 3,462
School of Music 101	Other 588
Other 925	Non-government schools—
Non-government schools—	Student allowances 76
Student allowances 616	Assistance for buildings 81
Assistance for buildings 615	Total 5,099
Total 11,585	Less receipts—Technical education and other 14
Less receipts—Technical education and other 169	Net current expenditure 5,085
Net current expenditure 11,416	Aboriginal advancement 2,773
Canberra College of Advanced Education 1,653	Total net current expenditure 7,858
Total net current expenditure 13,069	
Cash benefits to persons—	
University scholarships(a) 58	
Secondary school bursaries and textbook allowances(a) 100	
Total cash benefits 158	
Grants for private capital purposes—	
Non-government schools, capital works 688	
Total current outlay 13,915	
Capital outlay—	
Expenditure on new fixed assets—	
Australian Capital Territory education services—	
Government schools and colleges—	
Pre-schools 41	
Primary schools 2,300	
Secondary schools 2,540	
Canberra Technical College 30	
Plant and equipment 160	
Furniture and fittings 237	
Other building and related expenditure 286	
Total 5,594	
Canberra College of Advanced Education 2,426	
Total capital outlay 8,020	
Total outlay(b) 21,935	
	Cash benefits to persons—
	Northern Territory Scholarships 204
	Grants for private capital purposes—
	Non-government schools, capital works 145
	Total current outlay 8,207
	Capital outlay—
	Expenditure on new fixed assets—
	Northern Territory education services—
	Government schools and colleges—
	New buildings and works 4,068
	Plant and equipment 124
	Furniture and fittings 45
	Total 4,237
	Aboriginal advancement 573
	Total capital outlay 4,810
	Total outlay 13,017

(a) Excludes Commonwealth Secondary and Technical Scholarships. (b) Excludes the Australian National University.

State authorities

The following table shows the outlay on education by State authorities, financed from their own resources (including general purpose grants from the Commonwealth), and from Commonwealth grants for education purposes.

STATE AUTHORITIES: OUTLAY ON EDUCATION
1966-67 TO 1970-71
(\$ million)

	1966-67	1967-68	1968-69	1969-70	1970-71
Net current expenditure on goods and services—					
New South Wales	208	228	252	299	} n.a.
Victoria	163	187	217	257	
Queensland	61	71	83	99	
South Australia	58	64	71	82	
Western Australia	44	50	57	71	
Tasmania	21	24	26	30	
<i>Total</i>	555	625	706	838	1,010
Expenditure on new fixed assets—					
New South Wales	65	60	73	75	} n.a.
Victoria	46	54	55	60	
Queensland	16	16	24	26	
South Australia	16	15	18	21	
Western Australia	13	15	15	20	
Tasmania	4	5	7	7	
<i>Total</i>	160	165	191	209	236
Expenditure on existing assets	1	..	..	1	..
Cash benefits to persons	13	17	22	27	27
Grants for private capital purposes	4	8	7	9	10
Total outlay on education	733	815	926	1,084	1,283
<i>of which—</i>					
New South Wales	280	298	338	389	} n.a.
Victoria	213	247	278	323	
Queensland	80	92	113	132	
South Australia	75	80	90	107	
Western Australia	59	67	75	94	
Tasmania	26	29	33	38	

All public authorities

The outlay on education of all public authorities consists of the final expenditure on goods and services of the Commonwealth and State authorities and transfers by these authorities to the private sector. These figures are brought together in the following table, and are related to the total outlay (on all functions) by all public authorities to give an indication of the share of government resources devoted to education.

OUTLAY ON EDUCATION: ALL PUBLIC AUTHORITIES
1966-67 TO 1970-71
(\$ million)

	1966-67	1967-68	1968-69	1969-70	1970-71
Commonwealth authorities—					
Net current expenditure on goods and services	24	29	35	42	58
Cash benefits to persons	27	28	33	37	45
Transfers overseas	1	1	1	1	1
Grants for private capital purposes . . . . .	..	2	1	1	2
Expenditure on new fixed assets	10	14	13	18	18
Grants to the States—					
Current	39	48	53	77	103
Capital	40	54	55	71	74
<i>Total Commonwealth</i>	<i>141</i>	<i>176</i>	<i>191</i>	<i>247</i>	<i>302</i>
State authorities—					
Net current expenditure on goods and services	555	625	706	838	1,010
Cash benefits to persons	13	17	22	27	27
Grants for private capital purposes	4	8	7	9	10
Expenditure on new fixed assets	160	165	191	209	236
Expenditure on existing assets	1	..	..	1	..
<i>Total State</i>	<i>733</i>	<i>815</i>	<i>926</i>	<i>1,084</i>	<i>1,283</i>
<i>less Grants from Commonwealth for education purposes</i>	<i>79</i>	<i>102</i>	<i>108</i>	<i>148</i>	<i>177</i>
Outlay financed from States' own resources and from non-specific Commonwealth grants	654	713	818	936	1,106
<i>Total outlay on education</i>	<i>795</i>	<i>889</i>	<i>1,009</i>	<i>1,183</i>	<i>1,408</i>
Total outlay on all functions	7,346	8,108	8,656	9,733	10,572
	per cent	per cent	per cent	per cent	per cent
Outlay on education as percent of total outlay	10.8	11.0	11.7	12.2	13.3

Total expenditure on education

Total expenditure on education can be measured by adding to the outlay of the public sector (as shown in the previous table) the final expenditure on education which the private sector finances from its own resources, or alternatively by adding together the final expenditures of both sectors (i.e. by consolidating out the public authority transfers, and also any net transactions in existing assets).

Final expenditure on education by the private sector consists of personal consumption expenditure on education services, and expenditure on new fixed assets—mainly by private non-profit organisations, and financed in part by the grant from public authorities for private capital purposes. These grants are treated as transfers rather than final expenditure of public authorities as with the current grants, and are recorded as a source of funds for capital formation in the national capital account. Personal consumption expenditure on education services is an estimate of fees paid by persons to government schools (mainly technical and agricultural colleges), fees and gifts to universities and school fees (other than boarding fees) paid to non-government schools, business colleges, etc., and is based largely on information relating to fees charged and enrolments at these institutions. Expenditure on such items as school books, uniforms, etc. and expenditure by parents associations on school equipment are included in categories other than education services (such as clothing, etc., newspapers, books, etc., and household durables). Private gross fixed capital expenditure in the field of education is estimated from statistics of the value of work done on new building and major additions to buildings of private educational institutions.

Estimates for these items of final expenditure of the private sector have been combined with the figures for public sector expenditure in the following table to provide a measure of total expenditure on education. This latter item may also be regarded as a measure of the aggregate demand for education services and facilities by the community and can therefore be related to the supply of goods and services available from domestic production (i.e. gross national product). This relationship is shown in the table as an indicator of total community effort in the field of education.

EXPENDITURE ON EDUCATION: AUSTRALIA 1966-67 TO 1970-71
(*\$ million*)

	1966-67	1967-68	1968-69	1969-70	1970-71
Public authority sector—					
Net current expenditure on goods and services	579	654	741	880	1,068
Expenditure on new fixed assets	170	179	204	227	254
<i>Total expenditure (1)</i>	749	833	945	1,107	1,322
Transfers to the private sector and expenditure (net) on existing assets	46	56	64	76	85
<i>Total outlay</i>	795	889	1,009	1,183	1,408
Private sector—					
Personal consumption expenditure	119	133	144	156	173
Expenditure on new fixed assets	35	31	27	37	46
<i>Total expenditure (2)</i>	154	164	171	193	219
<i>less</i> transfers from public authorities and sales (net) of existing assets	46	56	64	76	85
Expenditure financed from the private sector's own resources	108	108	107	117	134
<i>Total expenditure on education (1) and (2)</i>	903	997	1,116	1,300	1,541
Gross National Product	22,757	24,279	27,215	30,071	33,087
	per cent	per cent	per cent	per cent	per cent
Expenditure on education as percent of Gross National Product	4.0	4.1	4.1	4.3	4.7

CULTURAL ACTIVITIES**Cultural organisations****Australian Council for the Arts**

The Australian Council for the Arts commenced operation in 1968 as the Commonwealth Government's adviser on financial support for the arts and on policies for their development throughout Australia. The Council provides basic support for State drama companies, national touring companies such as the Australian Ballet and the Australian Opera, regional organisations such as the West Australian Ballet and the Queensland Opera Company, and the three federal co-ordinating and entrepreneurial organisations—the Australian Elizabethan Theatre Trust, Arts Council of Australia and Musica Viva. The National Institute of Dramatic Art and the Australian Ballet School are largely supported by the Australian Council.

In addition to grants which are given on an annual basis, a number of programmes have been set up from which assistance is given throughout the year, and applications for assistance are invited through regular advertising in the national press. A training programme helps to train theatre personnel as well as artists, a research programme examines the needs of the arts and suggests new areas for assistance, and an international programme enables Australians to have the opportunity of seeing overseas companies and Australian companies to travel overseas. In addition a development fund assists a wide variety of projects throughout Australia in the fields of drama, Aboriginal arts, music, festivals, film and television, youth and education as well as assisting Australians engaged in the performing arts to spend a period abroad for additional training. A special projects fund enables new areas of assistance to be developed, for example craft programmes and community programmes, as well as assisting multi-media and environmental work.

Australian Ballet Foundation

The Australian Ballet Foundation was formed in 1961 by the Australian Elizabethan Theatre Trust and J. C. Williamson Theatres Ltd to establish a national ballet company, which gave its first performance on 2 November 1962.

The establishment of a permanent Australian company, the appearance of the world's leading artists with the company, the commissioning of works by Australian composers, choreographers and designers and presentation of the company overseas were achieved within the first three years.

The Australian Ballet receives subsidies from the Federal Government (through the Australian Council for the Arts), the six State Governments and the major municipal bodies (through the Australian Elizabethan Theatre Trust). It also receives support from private corporations and individuals. The Australian Ballet has its headquarters and studios in Melbourne.

Australian Opera

The Australian Opera was created in 1956 under the auspices of The Australian Elizabethan Theatre Trust to form the basis of a national touring opera company. It was known as The Elizabethan Trust Opera Company until the end of 1969 when The Australian Opera formed its own Board of Directors. In its early years the company retained only a core of full-time administrative officers and engaged its singers for each annual season. These seasons involved the presentation of three operas in most years and a tour circuit covering each State of the Commonwealth. In addition small country touring companies travelled through New South Wales, Queensland, Victoria and South Australia. It currently employs a chorus of thirty-eight singers, and forty-three principal singers on a permanent basis and a total administrative, technical and music staff of thirty people. It uses on a year-round basis one of the two orchestras maintained by The Australian Elizabethan Theatre Trust.

In 1971 The Australian Opera gave 251 capital city performances (eleven different productions) and a touring company gave 51 performances of 'The Marriage of Figaro' in the four States previously mentioned.

The Australian Opera receives Government grants through the Australian Council for the Arts and the Australian Elizabethan Theatre Trust.

Australian Elizabethan Theatre Trust

The Australian Elizabethan Theatre Trust, originally formed to present drama, opera, ballet and puppetry throughout Australia, has accorded full autonomy to most of the performing companies established by the Trust in its earlier years. The Marionette Theatre of Australia continues to operate under Trust administration. The Trust's major functions now are to supply certain financial guarantees to the independent performing companies; to maintain two orchestras to service the requirements

of the Australian Opera and the Australian Ballet; to administer the complex subscription booking systems on which both of these companies now operate; to maintain a Production Division executing costume and scenery designs; and to act as entrepreneur in the touring of theatre features from overseas and Australian sources.

The Trust receives annual grants from the Commonwealth Government, the State Governments, and some capital city councils and its revenue is supplemented by subscriptions from members and donations from business houses.

Arts Council of Australia

The Arts Council of Australia has divisions (and more than 140 branches) in all State and Territories. A Federal Secretariat was opened in Canberra in 1969 but moved to Sydney in 1971.

The Federal Secretariat of the Arts Council and the Divisions receive funds from the Australian Council for the Arts. The Divisions also receive State Government assistance and some activities of the Council are supported financially by non-metropolitan local government bodies. The New South Wales Division is represented on the Adult Education Advisory Board in that State, and on the Music Committee of UNESCO. The Tasmanian Division is represented on, and works closely with, the Adult Education Board of that State.

The Arts Council works to bring the arts to country centres and metropolitan and country schools, and is also concerned with taking the arts to children. Tours by high standard companies in opera, ballet, drama, puppets, etc., operate throughout the year. The Arts Council works closely with regional companies in organising country tours for these bodies.

The Council handles a wide range of art exhibitions in city and country areas. Summer schools and other courses for drama, painting, pottery, music, and other arts are an established feature, as are weekend schools of drama, music, painting and pottery. Yearly drama festivals are conducted and school tours are organised.

Australian National Trusts

The Australian National Trusts were founded to further the preservation of lands, places, buildings, works, and articles which are of national importance because 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 Act 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 38,000. 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 all States the National Trusts receive some financial support from the State Governments. The Commonwealth supports the Council through an annual grant of \$5,000 for administrative purposes, and in 1972 a further annual grant of \$50,000 was approved, this grant being intended for capital expenditure on the basis of national priorities. The Commonwealth also provides support through taxation concessions.

The number of properties owned or controlled by the Trust exceeds sixty. These include houses, natural reserves, a powder magazine, a police station, a gaol, two paddle steamers and a hulk, a joss house, and a garden. The Trusts have also established a register of buildings (totalling several thousand) 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. The Committee is advised on the commissioning of portraits by the Commonwealth Art Advisory Board (*see below*).

Commonwealth Art Advisory Board

The Commonwealth Art Advisory Board is the Government's adviser on all matters pertaining to the visual arts. The Board is also responsible for the purchase of works of art for the National Collection which embraces historical and contemporary Australian works, contemporary art on a world-wide basis, art of the Pacific Basin, and art of South and South-East Asia. The National Collection will ultimately be housed in the proposed Australian National Gallery which is to be built in Canberra.

On behalf of the Government, the Board organises and finances exhibitions of Australian art overseas and contributes towards the cost of exhibitions from overseas which come to Australia under the patronage of State Art Galleries.

Commonwealth Literary Fund and Advisory Board

The Advisory Board gives expert advice on literary matters to a Committee of three parliamentarians which administers the Fund. The Committee is traditionally under the Chairmanship of the Prime Minister.

The Commonwealth Literary Fund's purpose is to assist and promote the development of Australian literature. The Fund awards fellowships each year to enable selected writers to devote themselves full-time to literary projects; such fellowships have a maximum value of \$8,000 each a year. Assistance is given to publishers for the publication of manuscripts considered to be of high literary merit and through State adult education authorities for programmes of lectures on Australian literature. The Fund also provides financial support to Australian literary magazines and operates a scheme of pensions for Australian writers of national stature.

Advisory Board, Commonwealth Assistance to Australian Composers

The Advisory Board, Commonwealth Assistance to Australian Composers, was established in 1967 to advise the Government on financial support for the composition of music in Australia and on the promotion of the work of Australian composers in Australia and abroad; the Advisory Board is the responsible Commonwealth body in all matters relating to these areas. The Advisory Board's activities in connection with direct assistance to composers include full-time fellowships for composing music, the maximum value of a full-time fellowship being \$8,000 a year; special projects grants with a maximum value of \$2,000 each a year; assistance for the commissioning of works by Australian composers and programmes for young composers.

In the matter of promoting the work of Australian composers the Advisory Board offers assistance for the publishing of music, the copying of scores, and the copying of parts of scores for performance; assistance towards the costs of recording Australian compositions; and assistance through State Adult Education authorities and other bodies for lecture/recitals, seminars, work shops, etc., aimed at developing interest in Australian music.

Film production

Australian National Film Board

The Australian National Film Board advises 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 Board has twelve members with the Secretary of the Department of the Interior as chairman, and the remainder representative of Commonwealth departments, State government instrumentalities, and other interested organisations.

Commonwealth Film Unit

The Film Division of the News and Information Bureau, Department of the Interior, is the official film production and distribution agency for Commonwealth departments and instrumentalities.

It is referred to as the Australian Commonwealth Film Unit. It distributes theatrical and television Film Unit productions in Australia and overseas through 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 of Australia.

The Film Unit produces films for general exhibition, as well as training and special purpose films. In 1971-72 the Film Unit produced approximately 139 reels of new films and 182 reels of foreign versions of existing films. While many films are released commercially abroad, the emphasis is on distribution of educational and information films through non-theatrical circuits. 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.

Australian Film Development Corporation

The *Australian Film Development Corporation Act 1970* provided for the establishment of an Australian Film Development Corporation to encourage the making of Australian cinematographic and television films and to encourage the distribution of such films within and outside Australia. The Corporation administers a fund which had an initial capital of one million dollars which is added to from time to time as the Government decides. The Corporation makes investments in films, makes loans to film and television producers, and will guarantee repayment of loans made to producers of Australian films.

Australian Film and Television School

Establishment of the Australian Film and Television School was announced in April 1972. It will offer courses in film and television production. Before the School is operating, an Interim Training Scheme will provide a twelve months basic film and television course to students with some experience in the media. The scheme will also include a series of advanced seminars for people already professionally engaged in the industry.

The Interim Council for the Australian Film and Television School administers a programme of assistance for projects of artistic and technical quality. Support is given to experimental film and television programmes, to television programmes of quality where special factors may inhibit channels commissioning them, to script development and to other general and educational projects such as festivals, workshops and filmmakers' publications.

Censorship

National Literature Board of Review

The National Literature Board of Review was established in 1968, following Commonwealth-State agreement, 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 censorship

The Commonwealth Government's powers over censorship of films under the Customs Act extend only to imported films and imported advertising matter. 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. The censorship organisation comprises the Censorship Board of seven persons and a Cinematograph Films Board of Review, with headquarters in Sydney. Importers have a right of appeal to the Minister.

All States have agreed with the Commonwealth that the Commonwealth Film Censorship Board and the Cinematograph Films Board of Review are the censorship authorities for the purpose of the State Acts and have agreed to vest in these Boards the power to classify films as suitable for general exhibition or not. The authority to censor films made in Australia for commercial exhibition and advertising is given to the Commonwealth Board by the State Acts.

Thirty-five mm films for exhibition in picture theatres. In 1971, 1,356 films comprising approximately 6.5 million feet, were examined. This represented approximately 1,203 hours screening time. Of these films, 388 originated in the United Kingdom, 269 in the United States of America and 699 in other countries. Principal suppliers among the last mentioned were: U.S.S.R. (160), Italy (65), France (55), and Greece (52). Included in these figures were 600 full-length feature films which constitute the main theatrical attractions. Principal suppliers were: the United States of America (177), the United Kingdom (101), U.S.S.R. (82), Italy (53), France (43), Greece (40), and Japan (21). Forty feature films were rejected and cuts were made from 104. There were 30 appeals; 19 against rejection, 5 against proposed eliminations and 6 against rejection of advertising material. Nine appeals were allowed and 21 disallowed. Feature films classified as suitable for general exhibition numbered 115, and 407 were considered not suitable for children. Of the latter, 36 films were awarded the 'R' (Restricted) certificate and 154 were recommended for showing to mature audiences only. While the 'G' (General), 'N.R.C.' (Not Recommended for Children) and 'M' (Mature) classifications are advisory, children between the ages of 6 and 18 are excluded by law from seeing 'R' films. In addition to these imported films, 115 thirty-five mm films of 178,160 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, 6,111 sixteen mm films of 5,089,020 feet were examined. These were films commercially produced for screening in theatres used by business undertakings for advertising and instructional purposes, and for screening in churches, schools and universities.

Eight and 9.5 mm films. Approximately 272,000 feet of 8 mm and 9.5 mm films were examined.

Television films. In 1971, 7,974 films for use on television, predominantly 16 mm, of approximately 11.32 million feet, were examined. The number of films is not a true indication of volume because many were of short duration and because these figures include a number of videotapes converted to their 16 mm cine film equivalents. In terms of screening time, the films and tapes censored for television amounted to approximately 5,242 hours. On a footage basis the United States of America supplied 63 per cent of the total imports and the United Kingdom 30 per cent. Four television films were rejected outright and an additional 52 were classified as unsuitable for televising. Eliminations were made from 486. Of the nine appeals, five were allowed.

Foreign language films. Countries other than Australia, the United Kingdom and the United States of America supplied 332 of the 35 mm foreign language films imported for theatrical exhibition, of which 239 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 6,111 sixteen mm films examined, 932 originated from non-English speaking countries. The chief supplying countries were Germany (298), Japan (218), Italy (139), France (137) and U.S.S.R. (131).

Museums and art galleries

A museum or art gallery is considered for statistical purposes 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 683-4), 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

The following table classifies by States and Territories and by ownership the institutions in Australia which have been identified in 1971 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, 1971
(Number)

	Major institutions			Other institutions			All institutions
	Museums	Art galleries	Mixed institutions	Museums	Art galleries	Mixed institutions	
State or Territory—							
New South Wales	3	(a)1	..	4	3	2	13
Victoria	3	1	..	5	7	2	18
Queensland	1	1	..	1	2	..	5
South Australia	1	1	..	7	2	..	11
Western Australia	1	1	..	3	1	..	6
Tasmania . . . . .	..	..	2	..	..	..	2
Australian Capital Territory	1	..	1	1	..	..	3
Ownership—							
Commonwealth Government	1	..	1	1	..	..	3
State Governments	8	(a)5	1	3	..	1	18
Municipal authorities	1	..	1	6	7	1	16
Private trusts . . . . .	..	..	..	5	6	1	12
Universities . . . . .	..	..	..	1	1	1	3
Private . . . . .	..	..	..	5	1	..	6
Total museums and art galleries	10	(a)5	3	21	15	4	58

(a) Closed for alteration from October 1970 to May 1972.

Some descriptive detail in respect of the major institutions is given on pages 547 to 549 of Year Book No. 55.

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.

An account of the establishment, growth and functions of the National, Commonwealth, and State libraries is given on pages 533-538 of Year Book No. 55.

Commonwealth libraries

National Library of Australia, Canberra. The National Library maintains and develops a national collection of library material, representative of all the major countries of the world, and it is also responsible for assembling a comprehensive collection relating to Australia and the Australian people. In fulfilment of the latter statutory function it seeks to preserve 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 1968* 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 Rex 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 of Australiana, acquired in 1970. The Library maintains a permanent exhibition of paintings, prints, and other historical material selected from its various collections.

In association with the Library of New South Wales, the Library is engaged on a microfilming project to copy original records relating to Australia which are held in Great Britain and other overseas countries.

Australian National Bibliography, which appears weekly, monthly, quarterly and annually, lists books published in Australia and books dealing wholly or substantially with Australian subjects or written by Australian authors. It is now computer produced and the records are available in machine-readable form. Catalogue cards for Australian books listed in the bibliography are also made available. The publications of the Australian governments, included in *Australian National Bibliography*,

are also listed quarterly and annually in *Australian Government Publications*. A select list of authoritative Australian books of reference and research value is published annually as *Australian Books*. A similar list of serials is published in successive editions under the title *Current Australian Serials*. The Library's principal activity in subject bibliography is its *Australian Public Affairs Information Service*. A listing of maps and atlases, included in *Australian National Bibliography* from 1961 to 1967, has since that time been recorded in a separate quarterly publication entitled *Australian Maps*.

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, maintained in card form, was commenced in 1960 and since then all the larger and an increasing number of the smaller libraries have reported their monograph accessions to the National Library. 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 Organization.

Under an agreement with the United States National Library of Medicine, the Library has, since 1969, operated a regional Medical Literature Analysis and Retrieval (MEDLARS) Centre. The Australian MEDLARS Service contributes indexed entries to this system and on request provides computer-produced bibliographies of recent and current material to workers in the various bio-medical fields.

The National Library acts as a central library of documentary and educational films, its film collection containing approximately 9,000 titles, together with Australian historical films. It published *Australian Films: a Catalogue of Scientific, Educational and Cultural Films, 1940-58* in 1959 and annual supplements in succeeding years.

The National Library's collections contain over 1,250,000 volumes, 25,000 paintings, pictures and prints, 100,000 photographs, 54,000 reels of microfilm, 3,800 running feet of manuscripts, 60,000 motion picture stills, 18,000 reels of moving picture films, 230,000 maps, and 500,000 aerial photographs.

Patent Office Library. The Library of the Commonwealth Patent Office, Canberra, contains approximately 15,800 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 over 12,000,000. 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 and Information Services located in East Melbourne, each of the Divisions has specialised collections covering such subjects as food research, building research, soil research, chemistry, physics, animal health, and fisheries. The Central Library maintains a union catalogue of the holdings of all CSIRO libraries.

The Australian War Memorial Library. In the War Memorial library are housed the documentary and pictorial records of Australia's fighting services in wars in which they have participated. The printed records section contains over 70,000 volumes, a large collection of military maps, newscuttings and newspapers, sound recordings, war posters, and postage stamps. 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. Adequate facilities exist for public research and requests for information are met where practicable.

The Commonwealth Parliamentary Library. The library is organised to provide a specialised service to the Commonwealth Parliament. The two main sections are the Legislative Research Service and the Legislative Reference Service. The Research Service comprises six groups—(i) Defence, Science and Technology; (ii) Education and Welfare; (iii) Finance, Industries, Trade and Development; (iv) Foreign Affairs; (v) Law and Government; (vi) Statistics. The groups are staffed by specialists who prepare analyses and interpretations of specific issues with which the Parliament is or may be concerned. These are usually in written form but may consist of consultations with individual Members of Parliament or the Committees of Parliament. The Research Service also provides specialised information for Members. The Reference Service answers questions and provides information on any subject, mainly from books, government documents, Hansard reports, periodical articles, and newspapers. The Library collection is concentrated on topical material, supported by a wide collection of standard references; it totals 25,000 titles, including 8,000 serial titles. The Library publishes the *Parliamentary Handbook* which is a standard reference work, a series of periodical abstracting bulletins, occasional annotated reading lists and a fortnightly accessions list.

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

Library services in the Territories. The Northern Territory Library Service maintains five centres in the Territory. At 30 June 1971, stocks totalled 71,949 volumes which were held at the following centres: Darwin, 32,605; Nightcliff, 9,576; Alice Springs, 17,606; Tennant Creek, 6,398; Katherine, 5,764. The National Library, through its Extension Services Section, conducts the Canberra Public Library Service to residents of the Australian Capital Territory, to whom 1,188,430 loans were made in 1970-71. At 30 June 1971, 338,006 volumes were held, 201,293 at adult libraries, and 136,713 at children's libraries.

State libraries

New South Wales, At 30 June 1971, 186 councils had established libraries in terms of the Library Act, 1939-1970. During 1970-71 they spent on their libraries \$6,950,431 including \$1,856,132 received in subsidy. There are 268 libraries, of which 93 are in the metropolitan area and 175 in the country. There are also 25 bookmobiles, of which one is in Sydney, 10 in the suburbs of Sydney, and 14 in country municipalities and shires. These libraries contain 4,651,701 volumes. The State Library provides a central cataloguing service for municipal and shire libraries constituted under the Act.

Under the Library of New South Wales Act, 1969, the former Public Library of New South Wales became the Library of New South Wales. It includes a General Reference Department of 630,239 volumes, an Extension Service, together with the Shakespeare Tercentenary Memorial Library, and the Mitchell and Dixon Libraries and Galleries which are mainly devoted to Australian and Pacific material. The Extension Service lends books to municipal and shire libraries and to individual borrowers. The total stock of the Service is 80,282 volumes, and 29,547 books were lent to public libraries and individual borrowers during 1970-71. In 1971 there were 266,447 volumes in the Mitchell Library, in addition to manuscripts, maps and other material. The total number of volumes in the Library of New South Wales now exceeds 1,017,104 apart from manuscripts, historical pictures, and other material. The Library maintains an adult education section servicing adult education activities for the Universities of Sydney and New England and the Workers' Educational Association.

Other important libraries in New South Wales are: Teachers Colleges, 373,312 volumes; the City of Sydney Public Library, 234,336; Department of Technical Education, 335,975; Railway Institute, 170,385; Parliamentary Library, 142,500; Australian Museum, 40,000; Government Transport Institute, 25,269; New South Wales Teachers' Federation Library, 26,000; Workers' Educational Association, 15,740; and the Library at the National Herbarium, over 12,000 volumes.

Victoria. During 1971-72, 173 councils shared Government library grants amounting to \$1,734,100. Of this amount, \$1,606,100 was direct municipal library subsidy. With the addition of expenditure from these councils' own funds the total expenditure on municipal library services for 1971-72 was nearly \$5,321,000. In 1970-71, 1,017,000 borrowers used the free library services now totalling 3,234,716 books, to the extent of 17,086,000 issues.

Particularly in the country, services have been developed by means of regional libraries. These services, of which there are 27 at present, comprising a total of 127 councils, consist of groups of councils which pool their resources, book-stocks and trained staff. The Victorian Government provides an Establishment and Regional Library Development Grant of \$100,000 per annum.

There are 16 bookmobile services operating in Victoria, 12 in country regions and 4 in the metropolitan area.

The collections of the State Library of Victoria total about 1,095,000 items. Of these the La Trobe collection consists of 54,000 volumes as well as many pictures, manuscripts and old newspapers. The State Library receives 7,500 periodicals, annuals and newspapers. The Library also administers the State Archives, which comprise 55,000 shelf feet of records.

Queensland. The holdings of the Public Library of Queensland and its extension services in 1970-71 were: main reference collection, 235,701 volumes and 14,140 maps and pamphlets; Country Extension Service, 92,971; Oxley Memorial Library, 29,058 volumes and 50,350 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. In 1970-71, 86 local authorities were conducting 152 library services. The Brisbane City Council has established 22 of these libraries, also a mobile library to serve eight outlying suburban areas, and a bookmobile which takes books to incapacitated people. There were 133 libraries in Queensland free to adults. To help overcome the problems of a large area and sparse population, various local authorities have established 4 regional library services with headquarters at Charleville, Barcardine, Mount Isa and Emerald, respectively. During 1970-71 the State Government provided a grant of \$946,241 from consolidated revenue to finance the activities of the State Library, to pay subsidies to local bodies conducting free library services, and for the acquisition or improvement of library buildings and equipment and to pay lesser subsidies on books, equipment and maintenance to local bodies conducting subscription libraries.

At 30 June 1971 the Parliamentary Library of Queensland held about 100,000 volumes and pamphlets.

South Australia. The Reference Department of the State Library of South Australia contains 281,955 volumes and receives over 3,000 periodical titles. There are 58,781 volumes in the Adelaide Lending Service. The Country Lending Service has 520,245 volumes. The Adelaide Lending Service lent 330,077 books in 1970-71, and the Country Lending Service, 156,339.

The library of the Parliament of South Australia held approximately 60,000 volumes in 1971.

There are 31 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 1971 these local public libraries contained 274,735 books. There were 145,166 registered borrowers. During 1970-71, 2,083,872 books were lent.

Western Australia. The Library Board of Western Australia administers the State Reference Library and the Central Music Library, and provides all books and related services to 133 local public libraries throughout the State. Its stocks at 30 June 1971 were 1,068,289 volumes, comprising circulation stock (including books in public libraries), 754,681 volumes, State Reference Library, 295,983 bound volumes and Central Music Library, 4,386 books on music and 13,239 scores.

Tasmania. The Tasmanian Library Board administers the State Library in Hobart, the extension of library services throughout the State and State aid to libraries. State Government expenditure on library services in 1970-71 was \$821,200. A regional library system commenced in April 1965 in 5 north-western municipalities, with headquarters in Burnie, and smaller libraries in other large towns and a bookmobile in rural areas. A second regional library system, with headquarters in Launceston, was opened on 1 July 1971. Fourteen southern municipalities are served by 2 bookmobiles based in Hobart and a bookmobile serves schools in the Hobart metropolitan area. At 30 June 1971 the State Library in Hobart held 140,384 reference volumes and 112,624 lending volumes. The Board provided to municipal libraries by way of subsidy 318,710 books out of a total book-stock of 381,256 available for this purpose.

The State Library continued to provide a library of documentary films (4,539) and recorded music (14,350 discs) available for loan throughout the State.

University libraries

A description of libraries in Australian universities appears on pages 539-41 of Year Book No. 55. The following table shows the number of books and pamphlets held, accessions during the year, and expenditure on libraries for each university. For further information, see annual mimeograph publication *University Statistics—Part 2: Staff and Libraries* (No. 13.8).

UNIVERSITY LIBRARIES

<i>University</i>	<i>Books and pamphlets</i> (a)	<i>Accessions during year</i> (b)	<i>Expenditure</i> (c)
	'000	'000	\$'000
Sydney	1,358	61	1,640
New South Wales	609	49	1,125
New England	292	18	385
Newcastle	176	18	375
Macquarie	281	39	580
Melbourne	593	29	1,176
Monash	434	50	1,341
La Trobe	130	20	589
Queensland	662	46	1,119
James Cook	52	9	226
Adelaide	594	31	782
Flinders	178	26	446
Western Australia	409	25	663
Tasmania	229	19	397
Australian National	555	51	1,113
Total	6,553	492	11,957

(a) 30 April 1971.
31 December 1970.

(b) Year ended 30 April 1971.

(c) During year ended

Children's libraries and school libraries

For details of Commonwealth grants for the development of secondary school library services, see pages 662-3 of this chapter.

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. The Education Department provides for the building of libraries in secondary and technical schools, and new primary schools with 10 or more classrooms. A subsidy of up to \$9,000 is available to other primary schools for library buildings. Library furniture is provided, establishment grants are given to new schools for the purchase of books, and the Government provides an annual per capita grant to all schools. At June 1971, 466 primary, 252 secondary, and 89 technical schools had central libraries.

Queensland. In Queensland, 148 libraries are free to children. The Brisbane City Council conducts 22 of these, also a mobile library to serve eight outlying suburbs. Country children may borrow from the Country Extension Service which has 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 \$1 for \$1 subsidy from the Department of Education.

South Australia. A children's library of 45,742 volumes is used by school classes and individual children living in the metropolitan area. In 1970-71, 187,563 books were lent. A lending service for young people from thirteen to eighteen years of age has a stock of 17,006 volumes, and in 1970-71, 88,745 loans were recorded.

Western Australia. The Education Department provides library services, issues materials and gives library allocations for library resources purchased by schools. All government high schools are provided with library accommodation and furniture and their libraries are staffed by school librarians according to the size of the school. New high schools are issued with books to a value of \$1,500 in each of their first three years and all high schools receive an annual issue of books and an allocation for book purchases. New primary schools are issued with books to the value of \$200 or \$400 in their first year according to their student enrolments. All government and 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 available, or in premises provided by the parents and citizens associations. Some new primary schools are being provided with a resource centre (i.e. a library and an audio-visual aids centre) as part of their construction. Annual issues of books are made to all primary schools, varying according to the size of the school, and assistance is provided for the purchase of library books. The Charles Hadley Travelling Library provides 700 boxes of books which are circulated to all small schools, mission schools, and special classes. Children who are unable to attend school 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 26,513 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 Section of the Division of External Services of the State Library, which has a stock of 169,074 books. Libraries have been built up in most schools, with Education Department subsidies matching local funds to levels determined by the size of the school. A new Central Library Service Branch offers bibliographic and technical advice on school library development.

Book publishing

Statistics of book publishing in Australia and the External Territories are prepared from data supplied by the National Library of Australia, which receives copies of all books and pamphlets published in Australia and the External Territories, although not necessarily in the year of publication.

The method of counting conforms with international practice. Each title is counted as one unit. The statistics cover all non-periodical publications published in Australia. They refer to 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 received

The following table shows the number of publications received by the National Library in 1971 by subject classification and publisher. Trade publishers are those organisations set up predominantly for publishing, whose title output is significant and widely available throughout the bookselling trade; marginal publishers, commercial art firms for whom publishing is subsidiary to their main function. Comparative figures are given for receivals from 1967 to 1970.

**AUSTRALIAN PUBLICATIONS RECEIVED BY THE NATIONAL
LIBRARY IN 1971: SUBJECT GROUP AND PUBLISHER**

	<i>Books</i>	<i>Pamphlets</i>	<i>Total</i>
Subject group—			
Bibliography, libraries, general	39	54	93
Philosophy, psychology	25	9	34
Religion, theology	102	78	180
Social sciences	629	1,349	1,978
Linguistics, philology	62	12	74
Science	234	138	372
Technology, business	365	390	755
Art, amusement	146	136	282
Literature—			
History of literature, literary criticism	3	..	3
Anthologies, school editions	24	2	26
Australian literature	184	80	264
Other literature	39	24	63
Geography, travel	109	94	203
History, biography	125	71	196
All publications	2,086	2,437	(a)4,523
Publisher—			
Government	428	1,566	1,994
Trade	1,216	336	1,552
Marginal—			
Commercial(b)	71	49	120
Societies and institutions	315	448	763
Private individuals	56	38	94
Total	2,086	2,437	4,523
Annual receivals—			
1970	2,215	2,654	4,869
1969	1,890	1,986	3,876
1968	1,711	1,689	3,400
1967	1,601	1,769	3,370

(a) Includes 34 publications in languages other than English and 15 publications translated from the original language. (b) Firms for whom publishing is subsidiary to their main function.

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.

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 co-ordinate 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

An account of the development of the Commonwealth Archives Office and a detailed description of its functions appear on pages 543-4 of Year Book No. 55. The Archives Office functions as a central agency for the control of records created by the Commonwealth Government which are no longer required in the day-to-day business of government. At 30 June 1971 the total holdings of the Archives Office throughout Australia amounted to 497,000 shelf feet of records, including 198,000 feet of permanent material, such as files, manuscripts, registers, cards, books, maps, plans, models, paintings, films, photographs, microfilms, recordings and tapes. The Office regulates access to all Commonwealth records, whether in its custody or held by departments, in accordance with the Government's access rules. These provide that, with certain exceptions, Commonwealth records which are 30 years old or more are available on open access to all accredited members of the public. In January 1972 the Government decided that the thirty year access rule should apply to Cabinet papers also; and that because of their special interest, the remainder of the Cabinet papers up to the end of 1945 should be released for public examination. It further decided that departmental papers for this period should become available at the same time as Cabinet papers. The Archives Office provides an advisory service to inquirers, 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. During 1970-71 some 290,000 items were lent to departments. The Office carries out searches for departments and provides information from the records in its custody. Some 8,100 requests for these services were received in 1970-71. 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 and 212 public search tickets are currently valid. During 1970-71 inquiries were received from 418 researchers. There were 8,000 daily visits to archives search rooms and repositories by officials and the public, and 53,000 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. In 1971 records surveys were conducted in the Northern Territory, Papua New Guinea and Norfolk Island. The Office maintains liaison with similar organisations in overseas countries and is a national member of the International Council on Archives, established under the auspices of UNESCO.

Archives Office of New South Wales

The Archives Authority of New South Wales is a statutory corporation established under the Archives Act 1960 and has custody and control of the State archives. These are preserved in the Archives Office of New South Wales.

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 when 35 years old are generally open to holders of a reader's ticket.

The State archives at 31 December 1971 occupied 33,535 feet of shelving. This excludes more than 16,000 maps and plans besides other records which cannot be readily measured. 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. The holdings of the Archives Office amount to over 12,000 shelf feet (including non-public records).

Three parts of a 'Guide to the Public Records of Tasmania' have been published and five further record groups are being inventoried for publication. 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 inquirers. A panel of private researchers is available who hire their services to inquirers who wish to undertake prolonged search of documents.

Australian National University Archives

The Australian National University Archives was established in 1954 when the records of the Australian Agricultural Company were acquired, and in 1959 its collecting activities were expanded to include records of employee organisations. The University now holds a collection of the records of businesses (approximately 132 accessions) and of trade unions (approximately 186 accessions). The aim is to gather primary source material to support advanced research within the University in economic history, history, and political science. Detailed arrangement and description are undertaken and close liaison is maintained with scholars in the Research School of Social Sciences to keep the collecting policy abreast of trends in research. Scholars from other universities are also helped, and reference work is carried out to answer inquiries. The University Archives include deposits which have been microfilmed and pamphlet collections of interest to research workers in political history.

Business Archives Council of Australia

The Business Archives Council of Australia works for the preservation of business records and promotes the writing of business history. The Council itself does not collect business records. The main collecting centres are the Archives of the Australian National University, the University of New England and University of Melbourne. The University of New England concentrates on rural industries. The Australian National University and the University of Melbourne have large collections on a wide range of business activity, and are notable for records of trade unions and mining companies respectively.

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. They occupy sixty-six acres and contain a large 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, occupy about seventy acres and contain an aquarium. In 1970-71 admissions to the grounds were 869,652. The receipts of the zoological department of the Taronga Park Trust amounted to \$789,991 in 1970-71 and expenditure was \$657,576. Exhibits at 30 June 1971 comprised 926 mammals, 2,644 birds, 328 reptiles, 73 amphibians and 1,418 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. In October 1970, an extension was made to the Royal Botanic Gardens by the purchase of 395 acres at Cranbourne on Mornington Peninsula for purposes of a Botanic Gardens and Research Institute devoted to the growing, display and study of Australian native plants.

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

Queensland

Botanical gardens have been established in Brisbane and in several other cities. The Brisbane Botanic Gardens 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.

Initial development has started on a new botanic gardens in the foothills of Mount Coot-tha, about three miles from central Brisbane. The area being developed is approximately 200 acres.

South Australia

The Adelaide Botanic Gardens covers 45 acres and contains collections of Australian and exotic plants from low rainfall and sub-tropical regions. In 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 expected to be opened to the public by the mid-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 botanical garden and arboretum for the native plants of Western Australia is in King's Park, a reserve of almost 1,000 acres close to the centre of Perth. The indigenous flora of the State is represented in the Western Australian collection by approximately 1,200 species which have been successfully brought to maturity. Trees native to the southern half of the State are grown as specimens in the arboretum.

Regular field work is undertaken to collect material and carry out botanical exploration. Seed of native plants collected is distributed from surplus stocks to botanical institutions throughout the world and sold to private growers and nurserymen. An annual seed list offers from 1,000 to 1,300 species. About 15,000 packets of seed are distributed each year.

Experimental work in propagation of native plants is carried out and information acquired is passed on to growers through State branches of the Society for Growing Australian Plants and its journal. Facilities are provided for the employment and ancillary training of students enrolled in the three-year course of the Western Australian Certificate of Horticulture and Park Administration.

The Zoological Gardens at South Perth have an area of 44 acres and are under the control of the Zoological Gardens Board. Animals, birds and reptiles are exhibited. During the year 1970-71, 423,520 people paid for admission into the zoo and in addition, 4,014 disadvantaged children and adults were admitted free.

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.

There are three, main, privately owned, wildlife sanctuaries and zoos, each with a few exotic animals, at Granton near Hobart, at Punch Bowl near Launceston and at Westbury, 20 miles from Launceston. The Launceston City Council keeps a small collection of animals and birds at City Park.

Northern Territory

The Darwin Botanical Gardens occupy seventy-four acres and feature thirty acres of tropical plants of both native and overseas origin. Four acres are used for an amphitheatre and contain a number of native and exotic plants. The Gardens are controlled by the Corporation of the City of Darwin.

Australian Capital Territory

The Canberra Botanic Gardens on the lower slopes of Black Mountain have been under development since 1950. The gardens are on a 100-acre site and are being developed for the study of the botany, propagation, and cultivation of Australian native plants. The Gardens were opened for public inspection in 1967 and were officially opened in 1970.

The Tidbinbilla Nature Reserve covers 12,500 acres of the Upper Tidbinbilla Valley, about 25 miles from Canberra. Approval for its establishment was given in 1962 and it was declared a Nature Reserve under the Public Parks Ordinance on 27 October 1971. This Reserve has proved a great attraction for visitors with the attendance figure rising from 42,700 in 1967 to approximately 114,000 in 1971. The Jervis Bay Nature Reserve in the Commonwealth Territory of Jervis Bay consists of 10,670 acres of coastal area. Although the area has been managed as a reserve over a number of years, the Reserve was declared on 7 October 1971. Both Tidbinbilla and Jervis Bay Nature Reserves are designed to conserve the indigenous plant and animal communities and to enable the public to see the fauna in their natural habitat.

SCIENTIFIC AND INDUSTRIAL RESEARCH IN AUSTRALIA

Background

Scientific research in Australia increased considerably with the outbreak of the 1939-45 War and research activities continued to expand in the period of rapid post-war economic growth. Prior to 1939 Australia's research effort had been oriented towards the biological sciences, but under the stimulus of military requirements, this effort spread to the physical sciences and to problems of industrial technology. Research in the medical and social sciences also increased. With the overall research expansion a growing number of government agencies, both Commonwealth and State, university departments and industrial organisations established scientific programmes related to their various areas of interest and responsibility.

Much of the present day research effort is directed towards the development of natural resources and of primary and secondary industries. For information about research in the rural industry and the mineral industry, see Chapters 22 and 26 respectively. There is also considerable scientific research effort in the areas of medicine, space, the environment, social sciences, and atomic energy.

Commonwealth Government

The Commonwealth Government has played a key role in the war time and post-war development of the national scientific effort through programmes of research and related scientific activities in its own establishments and in funding scientific activities generally.

Over thirty Commonwealth Government agencies are engaged in research and scientific activities having a wide range of interest including development of natural resources and of primary and secondary industries; health; communications and transport; atomic energy; defence. Details of these activities are contained in annual reports of the individual agencies. A brief description of the research activities of the Department of Supply is given in Chapter 4, Defence.

Through its own agencies the Commonwealth Government engages in extensive research in the area of defence science (for details see page 96). Research programmes are undertaken to meet Australia's defence needs and to fulfil agreed commitments under international arrangements. Australia has co-operated with allied nations in scientific projects of defence significance, particularly where such projects add to technological development in Australia.

Commonwealth Scientific and Industrial Research Organization

The Commonwealth Scientific and Industrial Research Organization (CSIRO) is Australia's largest civil scientific body and now has a staff of about 6,400 including some 2,000 professional scientists. Its main function is to carry out scientific research for the primary and secondary industries of the Commonwealth and its Territories. It does not conduct defence research, medical research or atomic energy research. The other powers and functions of CSIRO as defined in the *Science and Industry Research Act 1949*, include:

- training of scientific research workers and the awarding of scientific research studentships and fellowships;
- making of grants in aid of pure scientific research;
- 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;
- testing and standardisation of scientific apparatus and instruments and the carrying out of scientific investigation connected with standardisation;
- collection and dissemination of information relating to scientific and technical matters; and
- publication of scientific and technical reports, periodicals and papers.

CSIRO 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 is located in Canberra and 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.

CSIRO has thirty-four Divisions, each working in some particular area of research such as animal health, tropical pastures or textile physics. 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 Head Office is in Canberra and Regional Administrative Offices are located at Brisbane, Canberra, Melbourne, and Sydney. The Organization also has an Australian Scientific Liaison Officer in London and Scientific Counsellors in Washington and Tokyo.

The Organization's total budget for 1971-72 was about \$71,000,000. Nearly four-fifths of this was provided directly by the Commonwealth Government, the remainder being contributed by primary industry, individual companies, Australian and overseas government instrumentalities and private foundations.

Australian Institute of Marine Science

The Australian Institute of Marine Science, to be established at Townsville, Queensland, over the next five years is one of the most recent ventures in scientific research by the Commonwealth Government. It has been proposed that this new Institute give particular attention to the ecology of the Great Barrier Reef and of associated biological systems, and that it undertake oceanographic research in the Coral Sea and northern Australian waters.

Nuclear Energy

The Australian Atomic Energy Commission is a statutory corporation which functions under the direction of the Minister for National Development. It consists of five members. The Commission 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. 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. A detailed description of its activities is contained on pages 560-562 of Year Book No. 55.

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 \$331,000 in 1970-71. 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.

Nuclear Power

In October 1969 the Commonwealth Government announced a proposal to build a nuclear power station of 500 megawatt capacity at Jervis Bay, on the New South Wales south coast, by 1975, subject to a satisfactory tender. This followed discussions early in 1969 between the Commonwealth and all State Governments. However, in June 1971 the Government decided to defer the decision indefinitely.

Nuclear Fuel

Important discoveries of uranium have recently been made in the Northern Territory. Although their full extent has not yet been determined, early estimates suggest that Australia will become a major producer of uranium. This has led to some preliminary investigations into the possibility of establishing a nuclear fuel industry with considerable export potential.

State governments

Scientific programmes of the six State governments are directed mainly towards agriculture, fisheries, forestry, public health, water supply and power generation, engineering and construction, and areas of the social sciences. These research programmes are generally of an applied nature and are related directly to the various responsibilities of the departments and instrumentality concerned. State government research programmes extend to such fields as physical and mental health, child welfare, vocational guidance, etc., and represent an important contribution to Australia's overall research effort.

Universities

The fifteen universities in Australia are engaged in an extensive and diverse range of research programmes in the physical and earth sciences, medicine, agriculture and biological sciences, and social sciences. University research is mostly of a fundamental character although some university departments are also concerned with applied research directed to the solution of practical problems. The Council of the University of New South Wales in 1959 established a non-profit research and development company, Unisearch Ltd., which provides technical advice and service for both large and small industrial organisations.

The post-war growth of university research has been accompanied by rapid development of post-graduate studies which, prior to the late 1950s, were undertaken mainly overseas. In 1971, 6,816 students were enrolled at Australian universities for higher degrees in science-oriented subjects.

Details of the courses offered in Australian universities together with background information on their teaching and research programmes, and a comprehensive summary of general university development in recent years are given in Year Book Number 55, 1969 pages 507-9. The reader should also refer to the handbooks and calendars published by each university.

Industry

An increasing amount of research and development is being undertaken by Australian industries. Firms with major research programmes are mainly in the chemical, pharmaceutical, electronic, sugar, paper, mining and steel industries. Several industries have established research institutes or associations.

Productivity promotion

Two complementary organisations—the Productivity Group Movement and the Productivity Promotion Council of Australia are concerned with distinct areas of productivity promotion. Executive and administrative services for them are provided by the Department of Labour and National Service.

Productivity Group Movement. The role of productivity groups is to improve the productivity performance of individual member undertakings. Groups were first formed in New South Wales and Victoria in 1957 and were later established in all States. At 29 February 1972, there were 229 groups comprising 4,853 member undertakings throughout the nation.

A group consists of about twenty members whose representatives meet regularly to engage in the exchange of practical ideas and experiences and seek improvement in the effectiveness of members' operations. There are three main types of productivity groups: mixed industry groups which bring together knowledge and experience from a wide variety of fields; single industry groups whose members are in the one industry (for example, printing, transport, timber); and professional type groups comprising people such as production engineers and personnel managers.

In each State there is a Productivity Groups Advisory Council which is a forum for the exchange of ideas among the groups and seeks to serve their common interests. At the national level there is a Productivity Groups National Committee on which each State Council is represented. This Committee publishes *Quest*, a quarterly news magazine for groups, arranges productivity group publications and films, and develops national themes and group expansion programmes.

Productivity Promotion Council of Australia. The complementary body is the Productivity Promotion Council of Australia which was inaugurated in September 1969. It is concerned with community education in productivity, stimulation of senior management's interest in productivity promotion, and collaboration with other professional bodies in arranging joint activities on factors affecting productivity. It is also committed to help the expansion of the productivity group movement.

Membership of the Council is drawn from organisations, business concerns, government and semi-government bodies and individuals. Finance is provided by members' subscriptions on a sliding scale based on type and size of undertakings.

The Council operates through a National Committee, State Branch Committees and Standing Advisory Panels. The National Committee is composed of nominees from major national employer and employee associations, Commonwealth government departments and a number of individual experts. Branch committees have been established in New South Wales, Victoria, Queensland and South Australia.

Other research (including joint projects)

Antarctic research

Australia has participated in scientific research in the Antarctic region since 1911. The Antarctic Division of the Department of Supply maintains permanent bases at Mawson, Davis and Casey on the Antarctic continent and one on Macquarie Island. Scientists from Government agencies and universities are engaged in continuing research programmes relating to many aspects of the Antarctic environment.

Space projects

Australian participation in scientific projects making use of artificial earth satellites began with facilities established as a contribution to the programme of the International Geophysical Year (1957-58).

Deep space tracking stations constructed and operated at a number of sites in Australia through joint arrangements with the United States of America have played an important role in the American manned space flight programmes. For details, see page 96.

Astronomy

One of Australia's significant contributions to scientific endeavour at the international level has been in the fields of optical and radio astronomy. Largely by expertise in these areas Australia plays a significant role in international space research. Programmes in optical astronomy have been in progress for many years. However, the growth of radio astronomy has occurred mainly since the 1939-45 War.

Mount Stromlo and Siding Spring Observatory. The astronomical research facilities of the Australian National University are located at Mount Stromlo (Canberra) and Siding Spring Mountain (Coonabarabran). The staff of the observatory are academic staff of the University's Institute of Advanced Studies and the permanent headquarters are 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.

The observatory is the principal centre of optical astronomical research in the southern hemisphere. The research facilities are second only to the great observatories of the south-western United States, and because of their latitude observations can be made on parts of the sky permanently inaccessible to northern astronomers. The functions of the observatory 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 research 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 observatory has 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 observatory are published in international scientific periodicals, principally in the *Monthly Notices of the Royal Astronomical Society* and the *Astrophysical Journal*.

Mount Stromlo is situated at 35° 19' 16" south latitude and 149° east longitude at an altitude of 2,560 feet. It is 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 facilities were 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.

The Siding Spring astronomical site 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 some of the best environmental conditions for astronomical research to be found anywhere in Australia—considerably better than at Mount Stromlo.

The Anglo-Australian telescope project. Early in 1967, the United Kingdom and the Australian Government agreed to collaborate in the construction and operation of a 150-inch optical telescope to be located at Siding Springs (and quite separate from the existing Australian National University facilities). The *Anglo-Australian Telescope Agreement Act* 1970 established the Anglo-Australian Telescope Board in February 1971 and this Board is the constructing and operating authority. The new instrument, which is scheduled for completion at the end of 1974, will be one of the largest optical telescopes in the southern hemisphere. It will play an important part in complementing the work of the existing 210 feet radio telescope located at Parkes (New South Wales).

Agreement with United States of America

In the fields of civil science a formal agreement with the United States relating to scientific and technical co-operation was signed in October 1968. This agreement was to broaden and expand already existing co-operation between the Australian and American civilian scientific communities by providing additional channels for scientific collaboration in the civil field between the two countries. Since the signing of the agreement, co-operative research activities have been arranged in a number of fields including atmospheric sciences, arid lands research, problems of drug dependence, photosynthesis and biomedical research.

Funding of Scientific Research in Australia

A substantial proportion of the Commonwealth Government's overall financial support for research in Australia is devoted to research carried out within the Commonwealth's own agencies. In addition, the Commonwealth Government has established a number of fund granting schemes to promote research which is carried out in other sectors of the economy.

For example, support for research in the natural and social sciences and in the humanities is provided through the *Australian Research Grants Committee* which was established in 1965. The majority of the research supported under this scheme is carried out in the universities. Funds for allocation by the Committee are \$13.25 million for the 1970-72 triennium. A brief description of the history and activities of the Australian Research Grants Committee is given on page 657.

For over 30 years Commonwealth moneys have been allocated by the *National Health and Medical Research Council* for the support of medical research.

To encourage industrial research and development in Australia 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 to Australian manufacturing and mining companies for increased research and development expenditure.

Companies employing professional research staff are assisted in their own research and development, but the Act also provides 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 provided \$13 million for this purpose in 1971-72. Special taxation concessions also apply to expenditure on research and development.

The Commonwealth Government also contributes to *Research Trust Funds* which obtain portion of their revenue from levies on production by particular industries. Allocations are made from these trust funds for research in several primary industries.

A survey now in progress, project SCORE (Survey and Comparisons of Research Expenditure) is aimed at the collection of comprehensive information on financial and man-power resources devoted to scientific research and development in Australia. Data is being sought on the research and development (R and D) in both natural and social sciences from four sectors of the economy—government, business enterprise, higher education and private non-profit—for the year 1968-69. The survey will provide information on the distribution of R and D expenditure between the fields of science, the source of funds for R and D, the nature of expenditure, as well as on man-power. The analysed information will be comparable with similar data collected and published by other countries and is expected to be of considerable value and importance to those concerned with the management and planning of science and technology in Australia.

Scientific societies

Royal Societies

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

ROYAL SOCIETIES, DECEMBER 1971

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	A.C.T.
Year of charter	1,866	1,859	1,884	1,880	1,913	1,844	1,930
Number of members	345	605	273	294	260	541	140
Volumes of transactions issued(a)	104	114	82	95	61	105	..
Number of books in library	38,736	33,500	74,049	27,000	8,500	37,600	..
Societies on exchange list	394	336	310	369	247	320	..

(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, co-ordinates Australian contributions to international co-operative scientific ventures, organises meetings of scientists, holds symposia, and arranges for visits of scientists from other countries to Australia. It also administers research fellowships provided by industry.

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 few places are reserved for Fellows who have rendered conspicuous service in the cause of science. No more than nine new Fellows are elected in any one year. Its present membership is 156 Fellows.

The Academy is financed by general and special purpose grants from the Commonwealth Government and from private sources. The Academy is managed by an elected council comprising a president, treasurer, three secretaries and ten 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 and principal offices are in Canberra.

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

This Association was founded in 1887. Its objects are 'the advancement of science and scholarship through the communication of knowledge and the promotion of a spirit of co-operation among scientific workers, scholars and those in sympathy with science and scholarship generally, especially in Australia, New Zealand and the Australian Territories'. The 44th ANZAAS Congress was held in Sydney on 14 to 18 August 1972, and the 45th Congress will be held in Perth, 13 to 17 August 1973. Further ANZAAS Congresses are set down for Canberra, January 1975, Hobart 1976, Melbourne 1977, New Zealand 1979 and Adelaide 1980.

The ANZAAS Central Office is in Sydney and Divisions operate in New South Wales, Victoria, South Australia, Western Australia, Papua New Guinea, the Australian Capital Territory, and New Zealand.

Other scientific societies

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.

The Australian Academy of the Humanities is concerned with the advancement of scholarship and of interest in an understanding of Language, Literature, History, Philosophy and the Fine Arts.

The Academy of the Social Sciences in Australia encourages the advancement of the social sciences in Australia and acts as the Australian member of international non-governmental organisations concerned with social sciences.