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CHAPTER XV.

EDUCATION AND RESEARCH.

Note.—For the most recent statistics available on subjects dealt with in this Chapter, reference should be made to the series of mimeograph bulletins Social Statistics and University Statistics issued by this Bureau. The Quarterly Summary of Australian Statistics contains summarized information on these subjects, and financial aspects are dealt with in the annual bulletin Finance, Part I.—Public and Private Finance.

A. EDUCATION.

§ 1. Introduction.

An account of the development of the Australian school system up to 1929 may be found in Official Year Books Nos. 1, 2, 17 and 22. In Official Year Book No. 40, a reasonably complete review of changes which occurred up to 1951 and of the practices then current was presented from material furnished by the Commonwealth Office of Education.

In the sections which follow, the information relating to the educational programme applies mainly to the year 1961. The statistics given in the tables relate to 1960.

§ 2. Education in Australian Schools.

1. Administration.—Primary and secondary education in Australia is provided by both government and non-government schools. Education in government schools is mainly the responsibility of the State Governments, but the Commonwealth Government provides financial assistance to students and meets the full cost of such education in Commonwealth Territories (see Chapter V.). Non-government schools are mainly conducted by religious denominations, subject to certain government controls (see para. 4, p. 581). In general, non-government schools charge fees and are not usually assisted financially by State or Commonwealth Governments.

Although there is a tendency towards regional administration, State educational administration is centralized. The permanent head of the Education Department in each State is responsible to the Minister for Education. Contact with the schools is maintained principally through Inspectors or Superintendents. Departments are usually divided into primary, secondary and technical divisions. Some technical colleges are in a large measure autonomous. Universities are independent foundations, although much of their income is derived from State and Commonwealth grants.

Examination Boards, which represent universities, Education Departments and nongovernment schools, control public examinations and syllabuses, and curriculum committees prepare primary and secondary curricula. State Ministers for Education meet periodically as the Australian Education Council, and Directors of Education meet annually to discuss matters of common interest.

2. The School System.—(i) Compulsory. In all States, there is legislation for compulsory school attendance. The Victorian Education Act was passed in 1872, followed by similar Acts in Queensland (1875), South Australia (1875), New South Wales (1880), and Tasmania and Western Australia (1893).

In 1961, the ages between which children were required by law to attend school were as follows:—New South Wales, 6 to 15 years; Victoria, 6 to 14 years; Queensland, 6 to 14 years; South Australia, 6 to 14 years (children may not leave school until the end of the term during which they reach the age of 14 years); Western Australia, 6 to 14 years; and Tasmania, 6 to 16 years. The full-time employment of children of school age is restricted by law.

In Victoria, South Australia, and Western Australia, amendments to the Acts have provided for the raising of the school leaving age to 15 years, but to date this legislation has not been proclaimed.

(ii) Non-Compulsory. Modern development has demanded a diversity of skills and a general raising of the educational level of the population. The trend towards raising of the school leaving age and the tendency everywhere for children to stay longer at school have been expressions of public realization of this. In recent years, less than half of all children left school when they reached the age limit for compulsory attendance. Indeed, a substantial number now proceed to some form of further education beyond secondary school, either as full-time students, as part-time apprentices or trainees released during the day by their employers, or as part-time evening students.

In the early years of government provision of education, the main emphasis was on the primary school, which catered for children receiving compulsory education and offered a course largely confined to the "tool" subjects, reading, writing and arithmetic. However, a process of extension and differentiation both at the bottom—infants' schools and kindergartens—and at the top—secondary schools—was well under way during the early years of this century.

- 3. The Educational Ladder.—(i) Infants' Schools. It is now customary, although not compulsory, for children to begin school when they are five years old. In larger primary schools they enter the infants' school, and in smaller schools infants' classes, which occupy two or three years, the first year in some States being called "Kindergarten" or "Preparatory". The emphasis in the infants' classes is very much on general development, on play activities and on the informal aspects of the educational processes. Whether in a separate establishment or as a part of a primary school, there is a gradual move towards formal instruction in infants' departments. At the end of the period, most children are able to read with some fluency, carry out simple arithmetical operations founded on the basic number facts, and can write in pencil. In addition, they have acquired skills with art materials and the like. A good deal of the instruction is carried on through activity methods, involving, for example, dramatic work, puppetry, and school "shops". Children then pass at about the age of eight or nine years to the more formal primary school, in which they normally spend four or five years.
- (ii) Primary Schools. The main emphasis in the primary school as distinct from the infants' school still lies on the "tool" subjects (reading, writing and arithmetic) and, in more recent years, on oral language, but the methods of teaching have undergone considerable changes. Changes in the purpose and outlook of educationists, and the raising of the professional standards of teachers, have made for greater freedom for pupils and teachers, some departure from the methods of mass instruction, and the closer linking of the curriculum with the child's social environment.

In general, there is now less emphasis on results than formerly, and basic skills are taught at a somewhat later stage. At the same time, the curriculum has been broadened. More individual instruction has led to a reduction in minimum standards of achievement for the less able, and a stress on curriculum enrichment for the bright. Retardation, i.e., the repeating of grades, has been considerably reduced, the aim being for each child to remain with his age group. In all States, opportunity classes exist for backward children, and in one State opportunity classes are provided for the especially bright.

(iii) Secondary Schools. At the age of 12 or 13 years (in Queensland, 14) children transfer to a secondary school course. In the cities and larger country centres, this is provided in a separate school, but in less densely populated areas secondary classes share the same buildings as primary classes. In rural areas, secondary pupils may share teachers or classrooms with primary pupils, and in one-teacher schools a few secondary students may carry out correspondence assignments under the supervision of the primary teacher-in-charge.

Secondary curricula have developed from the matriculation requirements of the universities. Formerly English grammar and literature, and mathematics, including algebra, geometry and trigonometry, were the core. Languages, chiefly Latin and French, or science, chiefly physics and chemistry, and history had an important place. Geography and drawing were often taken in the first two or three years.

As a result of changes in the academic course for matriculation, greater emphasis has been placed on oral and written expression in the English course and on language generally (English or foreign languages); in two universities, new matriculation regulations require a pass in either mathematics or a foreign language (not necessarily Latin, which in recent years has been less popular than previously). A general science course has been introduced in some States, and social studies, a synthesis of history, geography and civics, is a subject to matriculation level in two States. More emphasis has been placed on art, music and physical education.

In recent years, expert committees in all States have examined the problem of the provision of secondary education for all. The reports made by these committees, perhaps the best known of which is the "Wyndham Report" in New South Wales, have principally recommended the broadening of secondary school studies to provide a basic general education for all students. Alongside the academic course other courses have grown up. In country areas, they may be offered in the same school, or the academic course may even be largely abandoned. In the city, it is usual to offer non-academic courses in separate schools, although there is a trend towards comprehensive high schools offering several types of courses and catering for all the pupils from the district. Schools providing academic courses are usually known as High Schools, while the other types are generally distinguished by such names as Junior Technical Schools and Home Science Schools.

Particular mention should be made of the recent development of the all-stage consolidated school, sometimes with an agricultural bias, found under various names in different States. Tasmania and South Australia adapted the idea of the English village area schools to Australian conditions and established "Area Schools", some of which have farms attached.

The courses followed in the non-academic schools are, in general, broader than in the academic schools. There is less concentration on establishing an academic discipline and method peculiar to each subject, but more attention to correlation between fields of knowledge, sometimes expressed by projects involving them all. Generally, less time is devoted to mathematics and the formal sciences, and more time to practical work and to art and musical appreciation. In English, oral language is emphasized rather more and grammar much less than in the academic schools.

- (iv) State Details. Very brief particulars of the position in each of the States are given on pages 432-3 of Official Year Book No. 40.
- 4. Public Authority and the Non-Government Schools.—In all States, it is compulsory for all children between certain ages to receive education in a government school, unless the child is under "regular and efficient" instruction elsewhere. This may be at home, or in a non-government school. The provision for control over the regularity and efficiency of instruction in the non-government schools varies considerably from State to State. In New South Wales and Western Australia, provision is made for an initial inspection when a new school starts, and for inspections thereafter as the Minister requires, to ensure efficiency. In Victoria and Tasmania, registers are kept of teachers and schools, and both teachers and schools must satisfy the administering authority that they are efficient before registration is granted. Without such registration, neither a teacher nor a school may operate. Provision is made, too, for inspections at any time by the registering authority.

In Queensland, eight grammar schools, which exist by statutory authority and are subsidized by the State, are subject to annual inspection. These are the only non-government schools in Australia for which an annual inspection is prescribed by statute. Other non-government schools in Queensland may be inspected at their own request, but it is possible for these schools—and also those in South Australia—to exist without inspection.

Public authority over schools or institutions having scholars above the compulsory ages is generally less direct. It is effected directly by the registration procedures in Victoria and Tasmania, and in all States there is a measure of indirect control through provisions governing the award of State scholarships, bursaries or other forms of financial assistance to secondary scholars, which are available only in government or approved non-government schools. In New South Wales, also, the Intermediate and Leaving Certificates are awarded only to pupils of schools whose courses of study are approved by the Department of Education.

In all States, non-government schools are required, under the authority of either the Education Acts or Statistics Acts, to furnish certain statistical returns. The form of these returns may be prescribed in the Acts or may be subject to alteration with the Minister's consent.

5. The Organization of Roman Catholic Schools.—There is, in each State capital, an official who acts under the Archbishop as a Director of Catholic Education for the area. Each diocese within the area is, however, autonomous and manages its own educational affairs subject to the local episcopal authority. The State Director has, in addition to possible inspectorial functions within his own diocese, the duty of co-ordination of educational matters within his area, and of liaison with other educational authorities, particularly the State Education Department.

The system includes kindergartens, sub-primary, primary, academic secondary, home science, commercial, agricultural and technical schools, juniorates and seminaries, schools for the mentally and physically handicapped, orphanages and a variety of special schools of a charitable nature for under-privileged or socially handicapped children.

With the exception of a small number of permanent lay teachers and a number of visiting teachers, usually specialists in such matters as physical education, sport, and speech, teaching is done by members of religious orders.

6. The Organization of Other Non-Government Schools.—(i) General. Practically all non-government schools, except a limited number under private ownership, are governed by a controlling body known variously as a School Council or Board of Trustees or Governors.

Although the other non-government schools may be organized into loose forms of association for purposes such as sports, conferences, and uniform conditions, there is no system within each State corresponding in size, detail or organization with the Roman Catholic schools.

The Headmasters' Conference of Australia and the Headmistresses' Association of Australia are composed of headmasters and headmistresses respectively of a number of the larger non-government schools, including some Roman Catholic schools. Neither body has executive powers. One of the chief considerations for the admission of new members is the degree of independence enjoyed by the governing body and principal of the school concerned.

(ii) Church of England Schools. The various types of Church of England schools include small schools associated with a local parish; schools under direct ownership of a diocese; schools established by Acts of the Church Synod, in which the majority of the members of the council are church representatives but which, otherwise, have almost complete independence; and schools conducted by religious orders of the church.

The proportion of members of a school council nominated by the church varies. In some schools, members may also be nominated by parents, by former students, and by the council itself.

In general, schools incorporating the words "Church of England" in their title follow a diocesan syllabus of religious education.

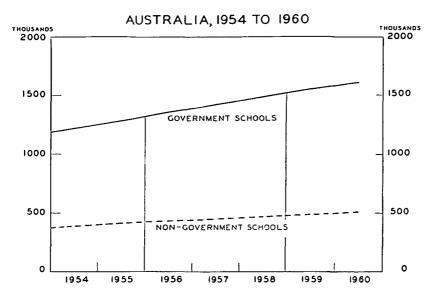
(iii) Other Denominational Schools. In general, control of Presbyterian schools is exercised through School Councils appointed by the General Assembly of the Presbyterian Church in the State concerned. Councils vary considerably in size and in the bodies represented on them. Similarly, appointments to councils of Methodist schools are made by the annual Conference of each State. In Queensland, five schools are operated under the joint auspices of the Presbyterian and Methodist churches.

A limited number of schools are conducted by other denominations, such as the Baptist, Congregational and Lutheran churches and by the Seventh-day Adventists. The Society of Friends conducts one school in Australia, the Friends' School, Hobart.

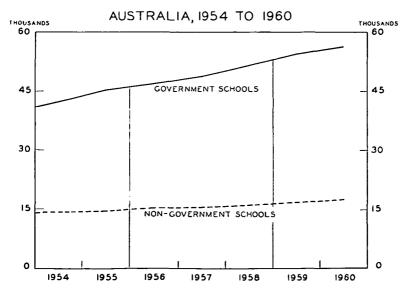
Jewish schools are conducted in several capital cities.

- (iv) Undenominational Schools. There are a number of undenominational schools in Australia. Some of the larger, although not State-operated, have Government nominees on their boards. They include Sydney Grammar School, the Hale School, Perth, and the eight Queensland grammar schools. Other undenominational schools operate under the auspices of corporate bodies, usually in the form of a limited liability company, while others are privately owned. The majority of schools in this last category are small kindergartens, preparatory and primary schools.
- 7. Examinations and Accrediting.—(i) Examinations. The various public examinations which were formerly held at different stages of education were described in previous Year Books, in particular in No. 40 (1954). There are no public examinations in primary school, but each school normally holds internal examinations yearly or half-yearly. In most States, there is no public examination barrier at the end of primary school, and pupils proceed to high schools of various types. The trend is towards greater use of internal examinations and headmasters' recommendations. In Queensland, a Scholarship Examination is held at the end of primary school, and pupils passing this examination qualify for scholarships tenable at government and non-government secondary schools.

STUDENTS ENROLLED



TEACHERS EMPLOYED





There are two important examinations in secondary school—one about half-way through the course, and one at the end. The first examination is usually called the Intermediate or Junior, and pupils sit for this after two, three or four years of secondary study at the age of 15 or 16 years. Many pupils leave school at this stage and enter technical and agricultural colleges, or undertake commerce, insurance, banking certificate, or nursing and secretarial courses. The remaining pupils, after one or two years further study, sit for the Leaving or Matriculation examination and qualify for entry to universities, teachers' colleges, and technical college diploma courses. There are, of course, many variations from State to State, and details of these are given below. Most of the examinations are public ones, set and marked by an external authority and conducted on a state-wide scale, but some examinations are taken internally, or a compromise between these two forms may be arranged to meet special circumstances.

(ii) State Details. New South Wales. The Intermediate Certificate Examination is taken after three years, either internally or externally, at an average age of 15 years, and the Leaving Certificate Examination (Matriculation) is taken after five years, at an average age of 17 years. Following the report made by the Committee Appointed to Survey Secondary Education, it has been decided, from 1962. to make the secondary school course a six-year one, with a School Certificate after four years and a Higher School Certificate after six years.

Victoria. The Proficiency Certificate is taken internally after three years at school, at an average age of 14½ years, the Intermediate is taken at the end of the fourth year, the School Leaving at the end of the fifth year, and the Matriculation at the end of the sixth year. Pupils at approved schools may be accredited for the Intermediate and Leaving—i.e., the Certificate is awarded under certain conditions by the Education Department on the recommendation of the school principal.

Queensland. The Junior Public Examination is taken at the end of second year; pupils are then aged about 16 years. The Senior Public Examination (Matriculation) is held at the end of fourth year.

South Australia. The Intermediate Examination is taken at the end of third year, at an average age of 15½ years, the Leaving Certificate (Matriculation) at the end of fourth year, and the Leaving Honours at the end of fifth year.

Western Australia. The Junior Certificate Examination is taken at the end of third year by pupils aged about 15½ years; the Leaving (Matriculation) is taken at the end of fifth year. Certain schools are approved for accrediting in a few subjects at the Junior Certificate Examination.

Tasmania. The Secondary School Certificate (an internal examination) is taken at the end of third year, when pupils are aged about 15½ years, the Schools Board Certificate is taken at the end of fourth year, and the Matriculation at the end of fifth year. Certain schools are approved for accrediting for the Schools Board Certificate.

§ 3. Numbers of Schools, Teachers and Pupils.

1. General.—The government schools shown in the following tables include primary, secondary, junior technical, correspondence and subsidized schools, but exclude senior technical colleges, evening schools and continuation classes.

Particulars relating to senior technical colleges are given in § 6, page 594.

Pupils enrolled may be counted in a number of ways, such as "gross enrolment", "net enrolment", and "average weekly enrolment". Throughout the tables in this section the figures shown for the numbers of pupils are the "census enrolment", which means the number of children enrolled on a chosen day, usually in the first week of August.

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2. Statistical Summary.—The numbers of schools, teachers and pupils for 1960 are shown in the following table.

SCHOOLS: NUMBER, TEACHERS, PUPILS, 1960.

SCHO	OLS:	NOMB	EK, II	EACHE	RS, PU	РΠЭ,	1900.		
Type of School.	N.S.W.	Vic.	Q1d.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
		Nu	ÆBER OF	Scноо	LS.				
Government(a)	2,699	2,154	1,521	654	521	286	14	18	7,867
Non-Government— Denominational— Church of England	35	36	16	13	9	5		3	117
Hebrew	2	5			2]	::		9
Lutheran	3	7	(b) 2 (b) 5	13	3	1	• • •	::	25 23 35
Presbyterian	13	14	3	2	2	i!			35
Roman Catholic	671	439	267	122	173	44	2	9	1.727
Seventh-day Adventist Other	17	7	3	3 2	1 1	3	••	• • •	38
Undenominational	68	35	10	5	123	5	••	::	246
Total Non-Govern- ment	816	551	306	163	318	60		12	2,228
Total—All Schools				817	839	346		30	10,095
10tal—All Schools	3,515	2,705	1,827	617	839	340	10	30	10,093
Tı	ACHERS	(EXCLU	DING T	EACHER	s in Tr	LAINING)).		
Government(a)	19,601	c 14,934	8,774	6,272	4,097	2,540	168	316	56,702
Non-Government-	1 1								
Denominational—									
Church of England	796	788	272	235	168	105	• •	48	2,412
Hebrew Lutheran	15	94 9	31	76	3		• •	• • •	112 133
Methodist	184	188	108	89	66	25		::	660
Presbyterian	339	385	57	_80	58	19			938
Roman Catholic	5,245	2,826	1,869	787 11	758	304	14	89	11,892
Seventh-day Adventist Other	33	28 102	'	26	21	54	• • •	• • •	122 184
Undenominational	533	325	135	88	224	37	_::		1,342
Total Non-Govern-	7104	4745	2 470	1 201	1 200	- 1			12.20
ment	7,184	4,745	2,479	1,392	1,300	544	14	137	17,795
Total—All Schools	26,785	19,679	11,253	7,664	5,397	3,084	182	453	74,497
	I	UPILS	(Census	ENROI	MENT).				
Government(a)	587,060	422,395	239,082	166,714	119,788	65,284	3,363	8,595	1,612,281
Non-Government-									
Denominational—					(d)	(e) 1,798			
Church of England	11,626 197	13,957 1,550	4,374	4,280	3,192 47	1,798	• •	802	40,029
Lutheran	197	258	448	1,369	"				1,794 2,272
Methodist	2,693 5,316 164,599	3,675 7,295	1,964	1,549	1,370	353		::	11,604
Presbyterian	5,316	7,295 127,275	751	1,364	1,176 26,886	289	775	2:340	16.191
Roman Catholic Seventh-day Adventist	929	493	59,353 137	24,873	26,886 365	8,809 148		3,342	415,912
Other		1,989		495	70	814	::	::	415,912 2,232 3,368
Undenominational	6,403	4,083	2,889	1,280	4,095	505			19,255
Total Non-Govern-									
ment	191,960	160,575	69,916	35,370	37,201	12,716	775	4,144	512,65
Total—All Schools	779,020	582 070	308 008	202 084	156 000	78,000	4,138	12 730	2,124,938

⁽a) Excludes Senior Technical Colleges.
(b) Presbyterian and Methodist Schools' Association.
(c) At 30th June, 1960.
(d) Estimated. Includes Kindergartens.
(e) December, 1960.

3. Growth of Schools.—The numbers of schools, teachers and pupils in Australia are shown in the following table for years 1956 to 1960.

SCHOOLS:	NUMBER.	TEACHERS.	PUPILS.	AUSTRALIA.
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Particulars.	1956.	1957.	1958.	1959.	1960.
Number of Schools— Government Schools(a) Non-Government Schools	7,650 2,088	7,712 2,122	7,761 2,128	7,833 2,195	7,867 2,228
Total—All Schools	9,738	9,834	9,889	10,028	10,095
Number of Teachers(b)— Government Schools(a) Non-Government Schools	46,968 15,194	48,807 15,690	51,797 16,320	54,857 16,973	56,702 17,795
Total—All Schools	62,162	64,497	68,117	71,830	74,497
Number of Pupils(c)— Government Schools(a) Non-Government Schools	1,355,293 432,962	1,425,126 453,980	1,496,256 474,845	1,558,518 493,594	1,612,281 512,657
Total—All Schools	1,788,255	1,879,106	1,971,101	2,052,112	2,124,938

⁽a) Excludes Senior Technical Colleges. (b) Excludes teachers in training.

(c) Census

Particulars of the average daily attendance at schools for a series of years back to 1891 may be found in earlier issues of this Year Book.

4. Ages of Pupils.—The ages of pupils at government and non-government schools at the school census date 1960 (which for most States was in August) are shown in the following table.

SCHOOLS: AGES OF PUPILS, AUSTRALIA, 1960. (Census Enrolment.)

Age last Birthday (years).		Gover	nment Sc	hools.	Non-Gov	ernment S	Schools.	Total—All Schools.		
		Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.
Under 6		66,453 82,129	62,908 77,457	129,361 159,586		45,244	89,620	192,958	185,609	378,567
7	••	83,773	79,000	162,773	23,025	24,010	47,035	106,798		
ŝ		82,165 81,294	76,791 75,723	158,956 157,017		23,120 23,354	45,749 45,581	104,794 103,521	99,077	204,705 202,598
10 11	• • •	81,094 78,708	75,386 73,155	156,480 151,863		23,603 23,313	46,013 45,091	103,504 100,486		202,493 196,954
12		78,788	71,576	150,364	22,452	24,410	46,862	101,240	95,986	197,226
13 14	::	84,390 61,418	76,522 52,624	160,912 114,042		26,264 20,716	49,668 39,908	107,794 80,610	102,786 73,340	
15	::	38,765	29,592	68,357	14,440	14,797	29,237	53,205	44,389	97,594
16 17 and ov	rer	17,318 8,830	11,909 4,513	29,227 13,343		8,174 3,318	17,785 10,108	26,929 15,620	20,083 7,831	47,012 23,451
Tota	ı İ	845,125	767,156	1,612,281	252,334	260,323	512,657	1.097,459	1.027.479	2,124,938

The ages of all pupils in each State at the same date are shown in the following table.

SCHOOLS: AGES OF PUPILS: 1960.

(Census Enrolment.)

Age last Birthday (years).	N.S.W.	Vic.	QId.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Under 5 5 6 7 8 9 10 11 12 13 14 15 16 17 18 and over	70,083 73,625 73,752 73,019 73,407 71,507 72,483 76,827 62,661 33,769 15,476 6,446	55,329 57,592 55,345 55,277 55,067 53,367 57,692 39,460 27,286 14,306	230 17,713 30,695 30,895 30,817 30,222 30,069 29,475 20,427 15,563 7,266 3,031 2,522	19,310 20,321 19,423 19,212 19,702	20,011	13,475 7,531 7,612 7,404 7,362 7,087 6,956 7,669 6,075 4,143 1,797 558 331	{ 399 511 474 467 437 401 371 338 306 209 128 70 21 6	{ 40 1,307 1,298 1,231 1,192 1,259 1,214 1,109 1,157 1,146 823 508 308 125 22	378,567 209,808 204,705 202,598 202,493 196,954 197,226 210,580 153,950 97,594
Total	779,020	582,970	308,998	202,084	156,989	78,000	4,138	12,739	2,124,938

§ 4. Other Aspects of Education in Schools.

- 1. Health Services to Schools.—Information relating to school medical and dental services is given in Chapter XVII.—Public Health.
- 2. Guidance.—Each Australian State now has a comprehensive system of educational guidance administered by trained and experienced educational psychologists and backed by a system of school record cards. In general, the functions of these services are:—selection and differentiation for secondary education, diagnosis and guidance of atypical children, preliminary vocational guidance and, in some States, research. The weight given to each of these functions varies considerably from State to State, but the aim is to provide thorough educational guidance for all children.

Throughout Australia, branches of the Commonwealth Employment Service cooperate with State Education Departments by giving post-school vocational guidance, using the data obtained and made available by the Education Departments during the school career of the children. In New South Wales, a similar service is also provided by the Youth Welfare Section of the Department of Labour and Industry.

- 3. Research.—(i) State Education Departments. All State Education Departments have set up research branches which function as integral parts of head offices. In several States, the officer who directs research is also responsible for the guidance service offered by his department. The research undertaken is directed towards departmental activities and the findings are examined carefully in the determination of policy and procedures; in addition, many problems of immediate importance are handled. In the majority of States, too, the Research Branch supervises the collation of statistics and also plays an important part in curriculum revision and modification of examinations.
- (ii) Australian Council for Educational Research. The Australian Council for Educational Research, a non-governmental body, is also 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 standardizes and distributes educational and psychological tests for use in Australia. Although this council is an autonomous body, the Commonwealth and State Governments contribute some financial support.

- 4. Atypical Children.—Pupils who, for one reason or another, cannot progress to their best advantage in an ordinary school are catered for by special schools or classes. Among groups given special attention are the mentally backward, the gifted, the physically handicapped, the blind, deaf and dumb, the epileptic, the cerebral palsied, the partially sighted, the hard-of-hearing and the socially maladjusted. The provision of special schools and classes has involved the appointment of departmental specialists, special training courses and close liaison with school health services. In some States, special clinics attached to hospitals, or functioning as an independent child-welfare service, handle cases of personality maladjustment and work in co-operation with the psychological services of the Education Departments.
- 5. Education of Native Children in Australia.—The Commonwealth Government is responsible for the education of full-blood native children in the Northern Territory. Each State has responsibility for the welfare and education of native children within its boundaries.

Native children are admitted to government schools in all States except in areas where separate facilities are provided. In those States where natives are more numerous, special schools are located at or near aboriginal reserves, settlements and stations. The schools are for the most part staffed by teachers from the Education Departments, and the curriculum is similar to that in ordinary government schools with a bias towards handicrafts. Numbers of native children also attend the mission schools conducted in several States by the various religious denominations. The standard of education in these schools is generally similar to that in the government schools.

- 6. Provision for Rural Areas.—(i) General. The population of Australia is so scattered that there is a problem in providing primary, and more especially secondary, education for all children. One method of meeting this problem has been the establishment of a wide network of one-teacher primary schools, staffed in the main with trained teachers. The practice of sending itinerant teachers to assist correspondence students in outlying areas has been introduced in the far north of Western Australia. The School of the Air, which is dealt with more fully below, is another method used for dealing with the problem.
- (ii) Subsidized Schools. Where a group of children is too small to warrant the establishment of a one-teacher school, a "subsidized school" may be opened. The Education Department pays part of the cost, and in some States appoints a teacher. Some States also administer "provisional schools", which are completely financed by the Government but which are not large enough, or sufficiently assured of adequate continued attendance of pupils, to warrant classification as permanent schools.
- (iii) Consolidated Schools. In some States, in districts where a number of small centres are scattered around a larger centre or country town, recent policy has been to close the one-teacher schools and transport pupils each day by bus to a "consolidated" school in the larger centre. Consolidated schools provide primary instruction and from two to four years of post-primary instruction. The post-primary curriculum adopted usually has a bias towards practical activities and training in subjects bearing on the primary industries of the locality.
- (iv) Special Assistance. Another way of bringing children to the school has been the provision of financial assistance for children who have to live away from home in order to attend school. Most of these board in private homes, but in the several States there are a few government hostels and over 60 private hostels (excluding private boarding schools), many of which are government-subsidized. Together, these cater for almost 2,000 children of secondary school age and a small number of primary school children also. In all States, some provision is made for financial assistance towards the living and travelling expenses of children who are obliged to live away from home in order to attend school.

- (v) Correspondence. For children who are still unable to attend school, systems of correspondence tuition have been established in every State. The Education Departments provide tuition through primary and secondary school levels and up to matriculation standard if required. In addition, there is a Technical Correspondence School in each State which arranges for correspondence tuition up to matriculation standard for students over the school leaving age. Further reference to the work of the Technical Correspondence Schools is made on page 595 of this chapter.
- 7. School Broadcasting and Television.—Over the years, an extensive school broadcasting system has been developed in Australia by the co-operative efforts of the Australian Broadcasting Commission and education authorities. The A.B.C.'s Education Department is responsible for the broadcasting of the programmes, but it draws freely on the advice and services of teachers and maintains permanent liaison officers with State Education Departments. It was estimated that in 1961 over 90 per cent. of Australian schools were equipped to receive radio lessons.

School broadcasts are presented as part of the regular A.B.C. programmes without separate stations or wave lengths. Special efforts are made, however, to relate the broadcast to school work by the extensive distribution of booklets, giving details of programmes in advance, and subject notes accompanied by picture sheets, work books, and teachers' notes.

Broadcasting has proved to be a most effective way of reaching the outback children of Australia, and radio lessons have been designed to supplement correspondence lessons. The success of the first School of the Air, which has been in operation at Alice Springs in the Northern Territory since 1950 and serves correspondence pupils of the South Australian Education Department, has led to the opening of similar schools based at Ceduna and Port Augusta in South Australia, at Broken Hill in the far west of New South Wales, at Meekatharra, Derby and Kalgoorlie in Western Australia, and at Cloncurry in Queensland. In all, these schools serve a total of a million square miles. By means of special two-way radio equipment, children hundreds of miles apart can participate in the same lesson and teachers and pupils can talk directly with each other.

During 1961, more than 300 schools throughout Australia made use of the telecasts provided for schools by the A.B.C. A working party on school television set up by the A.B.C. and the Directors of Education is at present planning specific tests to establish subjects in which television can best be used.

The "Kindergarten of the Air" and the television programme, "Kindergarten Playtime" are described on page 594 of this chapter.

8. Teacher Training and Recruitment.—(i) General. The training of government school teachers is carried out by the State Education Departments, but in most States persons who wish to train for teaching in private schools may attend government training colleges on payment of a fee. Many non-government school teachers have been drawn from the government teaching services and others have been recruited at the university graduate level. Private training institutions also provide some teachers.

An account of the early growth of teacher training systems is to be found in Official Year Book No. 22, and subsequent developments were reviewed extensively in Official Year Book No. 40. The pupil-teacher system has been abandoned as the chief method of training teachers and, in general, students are recruited for primary school teaching at the Leaving Certificate level, and undergo training at colleges controlled by the Education Departments. Secondary school teachers are usually recruited at the matriculation level and train principally at universities. The raising of standards and lengthening of training have led to a close association between the Education Departments and universities. The trend has been towards placing teacher training on the same basis as other professional training.

The teacher shortage evident in past years is not now quite as serious, some States having no difficulty in obtaining satisfactory students for training as primary teachers. However, the need for increased numbers of graduate secondary teachers is apparent almost everywhere, and most States make special efforts towards recruiting people in this field.

(ii) Training Colleges. Every State maintains at least one teachers' training college. Most students are trained at colleges in the capital cities, although there has been a movement towards the establishment of colleges in the country. At the end of 1961, there were in Australia 26 teachers' colleges conducted by Education Departments and professional training in education was being provided by eight universities.

(iii) Training of Primary Teachers. In most States, teachers for government primary schools are trained in co-educational teachers' training colleges controlled and administered by the State Education Departments. Departmental trainees are given a monetary allowance while in training, and are required to enter into a bond to serve for a specified period on completion of training or to repay all or portion of the cost of training.

The entrance standard is generally at the Leaving Certificate level at about the age of seventeen. In some States, intending teachers can obtain a scholarship at the Intermediate Certificate level to enable them to complete teachers' college entrance requirements. In return, they are required to enter into a bond of service additional to that normally required of departmental teachers' college trainees.

In general, the duration of courses is two years for primary teachers, including infants' teachers. The basic subjects taken in the various courses are principles, history and general methods of teaching, special methods of teaching primary school subjects and educational psychology. In addition, students undertake courses in physical education, art, music, school hygiene and handicrafts as well as lectures designed to widen their own cultural background.

In South Australia, primary teacher trainees attend certain university courses, including education, as part of their training. In Tasmania, while the majority of departmental teacher trainees receive their training at the university, there is also a government teachers' college providing courses in infant, primary and home arts teaching.

In some States, separate courses are provided for teachers in infants' schools and in small one-teacher schools. In Victoria, an extension course of one year following the primary course is designed to train teachers of home-crafts for primary schools.

- (iv) Training of Secondary Teachers. Prospective secondary teachers are required to undertake a university degree course followed by a one-year post-graduate course leading to a degree or diploma in education, a four-year degree course in education, or a two or three year course at a teachers' college. All these forms of training include lectures on subjects associated with educational theory and practice, study of methods and techniques appropriate to secondary school subjects, periods of practice teaching, and the observation of classroom techniques in the teaching of special subjects.
- (v) Training of Specialist Teachers. Teachers of specialist subjects such as music, art, manual arts, domestic science and commercial subjects receive from two to five years' training varying according to the institution concerned and the type of secondary school in which the teacher is to teach. In several States, the shorter courses are provided wholly by the teachers' colleges. Where the specialist course is given at an institution other than the teachers' college—for example, at a university, technical college or conservatorium of music—as is usual for teachers of specialist subjects in high schools, trainees are required to attend teachers' college or university lectures in education, and in some cases the specialist course is followed by a year of professional training.

In four States, teachers of music receive their specialist training at conservatoria of music; in New South Wales and Queensland, the conservatorium is a State institution under the Minister for Education; in Victoria and South Australia, it is attached to the university.

Courses designed to train physical education teachers are offered in five States, in one at a teachers' college and in the others by the universities.

Training for teachers of agricultural subjects in secondary schools is available in five States and consists of either an agricultural college diploma or a university degree course together with professional training. In Victoria, the two-year agricultural college diploma course follows the normal two-year primary teachers' course. In New South Wales, in addition to the three-year university agricultural course followed by one year's professional training, there is a two-year teachers' college agricultural course.

(vi) Training of Technical Teachers. Teachers of general subjects in technical schools and colleges usually receive their training either as primary or as secondary teachers and, after some experience in either or both fields, are transferred to a technical institution.

Teachers of specialist subjects in technical schools are usually recruited from the ranks of qualified tradesmen engaged in either industry or commerce. Upon appointment, teachers of technical subjects usually receive instruction in classroom teaching techniques and procedures. In Victoria, there is a separate Technical Teachers' College.

(vii) In-service Training. As almost all teachers now enter the profession by way or teachers' colleges, where they receive basic professional training, in-service training in Australia is directed chiefly towards keeping teachers abreast of developments and adding to their basic training.

Such training usually takes the form of short courses held sometimes during vacations, sometimes during school-time or in the evenings. Courses consist of discussions and lectures given by senior staff members of Education Departments and university and teachers' college lecturers, on such subjects as classroom techniques and supervision, librarianship, visual aids, music, arts and crafts and physical education. In some States, there are also in-service courses for special groups of teachers, such as headmasters or teachers of one-teacher schools. In addition, district inspectors are responsible for organizing 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.

The official publications of the Education Departments contain articles dealing with educational theory and practice. In most States, the magazines of the teachers' organizations, which reach the majority of government teachers, also contain articles of this type.

- (viii) State Details. The details of teacher training in the States are given on pages 442-3 of Official Year Book No. 40.
- (ix) Sex and Status of Teachers. Although about half of the teachers in government schools in Australia are men, the ratio varies from State to State. In the infants' schools and generally in girls' departments, women teachers only are employed. Men, however, predominate in the senior positions, both because of their greater numbers amongst those with long service and because, except in infants' schools and girls' schools, the higher promotion positions are generally reserved for men.
- 9. School Buildings and Grounds.—In 1930, school building programmes were seriously cut because of the financial difficulties of the depression. The 1939-45 War intervened before school building could be resumed on a large scale. After the War, the building of schools was given a high priority, but the rapid post-war increases in school population have imposed a severe strain on available school accommodation, and such emergency measures as the use of halls, cloakrooms and weather-sheds for class instruction have been adopted in some areas.

In more recent years, there has been great activity in the field of school building. The temporary and emergency structures of the immediate post-war period are giving way to more permanent buildings. As well as the increased expenditure on school buildings, there has been greater attention given to their appearance and to their functional design. In most new plans for schools, assembly halls, which may also serve as gymnasia, are a feature and, in many instances, these facilities have been provided for existing schools.

10. School Equipment.—(i) Text Books and Materials. The State Education Departments supply government schools with essential equipment free of charge, including scientific apparatus and equipment, maps, blackboards, chalk and cleaning materials, and non-consumable equipment for commercial, home science and manual training. Garden tools and physical training equipment are supplied free in most States.

Primers and writing equipment for individual pupils are usually supplied free in primary schools, and Departments, with one exception, produce monthly school magazines which are supplied free or at a small cost. Textbooks, however, are supplied to primary pupils free of charge in one State only. In other primary schools and in all secondary schools, textbooks must be purchased by students, although in several States schools own stocks of textbooks which are hired to students, and in one State secondary textbooks are sold at reduced rates.

Other equipment is supplied free by the Departments on a limited basis only. Equipment such as radios, film and filmstrip projectors, pianos, duplicators and library books are ordinarily purchased for individual schools by the parent and citizen organizations associated with them, with the assistance of subsidies from the Departments.

- (ii) Furniture. There has been considerable development in this field. Originally most schools were equipped with long desks and benches, seating six to eight pupils, but these were later replaced by the standard dual desk with tip-up seat, and in infant classes by individual chairs and small tables. After the war, considerable research was undertaken on posture and the physical measurement of children. The dual desk is now being replaced in some States by the individual table and chair, provided in a range of sizes suitable to each class. In some States, tubular steel furniture is used. The new type of furniture is more suitable for flexible arrangements of the class in line with modern educational practice.
- (iii) Visual Aids. Visual aids are widely used in Australian education. Projection equipment in government schools is subsidized by Education Departments, the initial funds usually being raised by parent and citizen bodies.

Each of the State Education Departments has a visual education branch to handle the production and distribution of its visual aids. Film strips are the main item of production, but posters and films are also produced in some cases. Film strips and posters are distributed free or at low cost. Films are held in central libraries and are requisitioned by schools several months in advance of their being required for teaching purposes.

Non-government schools can usually obtain aids produced by education departments at a low cost and can borrow films from either State film centres or from Education Department libraries.

11. Parent and Citizen Organizations.—In Australia, where all government schools are administered by central departments, there is little opportunity for local administration of education. Public interest is expressed through parents' committees or organizations 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 the interest of the school by bringing parents, pupils and teaching staff together, to help provide teaching aids and recreation materials not supplied by the departments, to assist in 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.

A notable achievement of the parent groups has been the establishment of school children's insurance schemes, operated through State government insurance offices or private insurance companies. These schemes cover accidents to children which occur between the time of leaving home for school and returning home by the usual direct route.

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

12. School Banking.—Particulars of School Savings Banks are included in Chapter XX.—Private Finance.

§ 5. Pre-School Education.

- 1. Types of Pre-School Centres.—Free kindergartens were originally established in congested industrial areas and financed mainly by voluntary effort, but over the years the Commonwealth Government, the State Governments and some municipal councils have provided an increasing amount of financial assistance, and in addition themselves maintain pre-school centres in certain areas.
- In 1938, the six Kindergarten Unions, the voluntary organizations which pioneered pre-school education in Australia, met to form a federal organization. Its title "Australian Association for Pre-school Child Development" was changed in 1954 to "Australian Pre-school Association". Its membership is now open to all organizations whose main objective is the care of the pre-school child, and includes bodies in the Australian Capital Territory, the Northern Territory, and the Territory of Papua and New Guinea.

The aim of the association is to promote the continuous advancement of pre-school movements throughout Australia. It sets out standards which act as a guide throughout Australia to those sponsoring pre-school centres, and is responsible for the administration of the six Lady Gowrie Child Centres. These centres are demonstration nursery schools which the Commonwealth Government established in each of the capital cities in 1940 and which are maintained by Commonwealth grants.

To-day, pre-school centres are found not only in inner city areas but also in suburban and country districts. Programmes are adapted to suit the areas in which the centres are situated. Types of pre-school centres include nursery kindergartens, crèches with full-day care for children of working mothers, play groups and play centres, occasional care centres and residential holiday homes.

There are only a limited number of State-subsidized pre-school centres and kindergartens conducted by public authorities and voluntary bodies such as the Kindergarten Unions. However, many children of pre-school age attend private non-subsidized nursery schools or kindergartens. No comprehensive statistics are available concerning the operations of pre-school centres and kindergartens.

2. The Training of Teachers.—Although the principle is that all types of pre-school work should be under the guidance of trained pre-school teachers, this cannot always be put into practice, owing to the shortage of teachers.

The Kindergarten Unions in all States except Tasmania have established teacher training colleges providing three-year courses. The minimum entrance age is 17 years, and the Leaving Certificate is usually required before admission. In addition, in New South Wales, the Sydney Day Nursery and Nursery Schools' Association maintains a training college, and a two-year course for nursery teachers is available at the Sydney Teachers' College.

In Tasmania, prospective teachers complete a two-year course of training at one of the Education Department's pre-school centres. Those wishing to gain a Kindergarten Training College diploma must attend a college on the mainland.

Many students-in-training receive government scholarships, and others are sponsored by government departments or voluntary organizations.

- 3. Kindergarten of the Air and Kindergarten Playtime.—The "Kindergarten of the Air", which has been run by the Australian Broadcasting Commission since 1942, consists of a programme of 25 minutes every weekday, based on the interests of children from three to five years of age.
- "Kindergarten Playtime" was first telecast in December, 1956, only a month after the Australian Broadcasting Commission had commenced televising programmes. It consists of a programme of 15 minutes every weekday, and is now shown in all State capital cities.

§ 6. Technical Education.

1. General.—In this section, technical education refers to that branch of education which is concerned with the preparation for entry to skilled occupations, including trades and professions. In the main, this education is vocational and is chiefly part-time, being carried out by the student while he is engaged in his occupation. The work of technical high schools, junior technical schools and other schools of this nature, which provide courses with a bias towards technical handwork, has been excluded, as these schools provide a form of education which is more properly regarded as secondary education.

The chief institutions for higher education other than the universities are the technical colleges, which are administered in five States by a division of the Education Department. In New South Wales, there is a separate Department of Technical Education, and in Victoria a number of the foremost technical colleges are controlled by independent councils which, although responsible to the Minister of Education, have a large measure of autonomy.

The technical colleges offer training not only in all the major industrial skills, but also in a variety of commercial, artistic and domestic occupations. Their courses may be divided into three main types, as follows.

- Diploma courses giving advanced training in the technical professions and other fields such as accountancy and art.
- (ii) Vocational courses, usually leading to the award of a certificate, for skilled technical and semi-professional workers. Many of these courses are in fields not covered by an apprenticeship award.
- (iii) Craftsman or artisan training in the apprenticeship trades.

A brief description of the expansion in technical training since the 1939-45 War appears in Official Year Book No. 43, page 449. The following table gives some indication of the growth of technical education in the years 1956 to 1960.

Year.				No. of Colleges.	No. of Students.	No. of Teachers.(a)	Total Expenditure.
							£'000.
1956			• • •	164	(b)	8,364	8,775
1957			•••	169	205,225	8,967	9,592
1958				171	220,500	9,765	10,344
1959	• •			181	(b)	10,601	11,238
1960		• •	•• [187	239,427	11,044	13,327

TECHNICAL EDUCATION: AUSTRALIA.

(b) Not available.

Training in certain technical aspects of agriculture such as farm mechanics and wool classing, and in related fields such as food technology is also provided by the technical colleges, while the seven State agricultural colleges (see also Chapter XXII), located in all States except Tasmania, provide comprehensive agricultural courses of two to three years' duration which lead to diplomas in agriculture. At some colleges, other diploma courses are offered in addition, including horticulture, dairying and dairy manufactures, food technology and oenology. The Queensland Agricultural High School and College is administered by the Department of Education; in other States, the Departments of Agriculture are responsible for administration of the colleges.

2. Correspondence Training.—Technical correspondence courses were first offered in Australia about 1910. During the period 1940 to 1944, technical correspondence schools were founded in each State in conjunction with the Commonwealth and these have become an important part of the system of technical education in the Australian States.

These schools not only offer a wide variety of correspondence courses, including trade and apprenticeship, rural, commercial and art courses, but, in addition, provide secondary courses up to matriculation or diploma entrance standard. Students who, because of distance or working hours, cannot attend technical college classes may enrol for these courses. In New South Wales, mobile instructional units, consisting of rail cars equipped as self-contained workshops, are used to provide practical experience for correspondence students, as well as for the instruction of apprentices and tradesmen at smaller country centres.

In 1955, the Royal Melbourne Technical College established a shortwave broadcasting station to provide further tuition for its correspondence students.

An interesting recent development in technical correspondence education, in which the Australian technical colleges are co-operating with the Commonwealth Government, is the correspondence scholarship scheme operating under the Colombo Plan. Through this scheme, south and south-east Asian students may take correspondence courses conducted by the technical colleges and by the University of Queensland, which has a highly

⁽a) Includes both full-time and part-time teachers.

organized system of external tuition. Courses include commercial, rural, teacher-training, engineering and other technical courses. Where practical training is required as part of the course, it is taken by the student in his own country.

- 3. Teacher Training.—Prior to the 1939-45 War, technical colleges were staffed chiefly by men drawn from two sources. They were either trained teachers in the employment of the Education Department or technicians drawn from industry. Although some of the latter were highly qualified, the great majority had not been trained as teachers. In order to remedy this, technical schemes have been developed to train college teachers without breaking the important link provided by recruiting specialist tradesmen to teach in the colleges. In Victoria, the Technical Teacher's College provides training for students with the appropriate diploma or trade qualifications and suitable industrial experience. In New South Wales, technical college lecturers and tradesmen-instructors receive an inservice course of teacher training in both general educational theory and teaching method, and correspondence courses and visiting lecturers care for the newly appointed teacher-instructor in country colleges. Modifications of this scheme are in operation in other States. Many technical teachers, principally of academic, commercial and domestic science subjects, hold trained teachers' certificates from teachers' colleges.
- 4. Colleges, Teachers and Students.—The number of colleges, teachers and enrolments of individual students during the years 1956 to 1960 is given in the following table.

TECHNICAL EDUCATION: COLLEGES, TEACHERS AND ENROLMENTS.

		<u> </u>	1					
_		ļ	[Teachers.	• •	Individua	al Students	Enrolled.
Stat		Colleges.	Full- time.	Part- time.	Total.	Males.	Females.	Persons.
New South Wal 1956 1957 1958 1959 1950 Victoria— 1956 1958 1959 1950 1956 1956 1957		45 45 48 48 51 47 50 54 63 70	1,197 1,240 1,259 1,299 1,286 2,026 2,209 2,382 2,644 3,905	1,265 1,291 1,337 1,691 1,682 1,484 1,558 1,488 1,678 657 402 410 568	2,462 2,531 2,596 2,990 2,968 3,510 3,767 3,870 4,322 4,562	(c) 51,244 54,104 (c) 62,523 39,796 42,224 45,653 48,089 51,328 12,478 12,728	(c) 27,386 28,361 (c) 34,195 14,784 16,082 17,215 16,845 16,388 4,461 4,469	(c) 78,630 82,465 (c) 96,718 54,580 58,306 62,868 64,934 67,716
1959 1960 South Australia	:: :: :: :: (a)—	13 13 14	166 176 174	517 647	734 693 821	13,422 13,500 13,556	4,792 4,970 4,893	18,214 18,470 18,449
1956 1957 1958 1959 1960 Western Austra!	:: :: :: :: :: :: ia(a)—	28 30 25 25 25 25	267 274 280 294 323	583 663 770 779 737	850 937 1,050 1,073 1,060	13,478 15,123 16,991 18,130 15,728	7,841 8,300 8,570 8,570 7,722	21,319 23,423 25,561 26,700 23,450
1956 1957 1958 1959 1960 Tasmanja—		24 24 23 24 19	237 257 (d) 278 (d) 282 307	339 430 (d) 735 (d) 739 802	576 687 (d) 1,013 (d) 1,021 1,109	12,100 13,519 15,977 15,604 17,017	6,703 7,512 8,436 8,888 8,739	18,803 21,031 24,413 24,492 25,756
1956 1957 1958 1959 1960 Total—		7 7 8 8 8	79 85 98 104 111	320 383 404 398 413	399 468 502 502 524	3,583 4,423 (e)4,625 4,837 5,253	2,153 2,215 (e)2,354 2,463 2,085	5,736 6,638 6,979 7,300 7,338
1956 1957 1958 1959 1960		164 169 171 181 187	3,971 4,232 4,463 4,799 6,106	4,393 4,735 5,302 5,802 4,938	8,364 8,967 9,765 10,601 11,044	(c) 139,261 150,772 (c) 165,405	(c) 65,964 69,728 (c) 74,022	(c) 205,225 220,500 (c) 239,427

⁽a) Excludes correspondence (d) Number of teaching positions.

students. (b) Includes A.C.T. (e) Estimated.

⁽c) Not available.

§ 7. Expenditure on Schools and Technical Colleges.

1. Government Schools Expenditure.—(i) Total Net Expenditure. The figures shown in this section for expenditure on Government schools are on a more uniform basis than those published in previous issues of the Official Year Book.

The following table shows particulars of the total net expenditure (i.e., gross expenditure less receipts for services rendered) from certain funds on government schools and education departments. The data have been compiled on the same basis as far as differences in organization and accounting methods between States and Territories will permit.

The table includes only expenditure from the consolidated revenue funds and certain trust or special funds. It excludes loan fund expenditure; expenditure on debt charges, payroll tax and superannuation payments, in so far as it is possible to identify these items; and some items for which information cannot be obtained from the public accounts of all States.

The figures relate throughout to years ended 30th June. Net expenditure per pupil relates the total net expenditure to the mean of the numbers of pupils enrolled at the beginning and end of the year. Net expenditure per head of population relates the total net expenditure to the mean population.

GOVERNMENT SCHOOLS AND EDUCATION DEPARTMENTS.

· •	GOV.	ERNME	NT SCI	HOOLS	AND E	DUCATI	ON DE	PARTM	ENTS.	_
Year.		N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
				TOTAL N	Vет Ехр (£'000.)	ENDITURE				
1955-56 1956-57 1957-58 1958-59 1959-60	:: :: ::	28,736 30,345 33,132 36,544 40,445	17,645 19,978 22,222 24,563 27,323	8,762 9,120 9,953 11,347 12,130	5,649 6,197 6,853 7,963 9,232	6,027 6,571 7,274 7,541 8,246	2,799 3,304 3,380 3,662 4,327	149 155 197 217 278	322 392 408 504 587	70,089 76,062 83,419 92,341 102,568
			Тотаі	L NET E	XPENDITI (£ s. d.)	URE PER	Pupil.			
1955–56 1956–57 1957–58 1958–59 1959–60	::		59 13 11 62 7 0	43 14 1 45 7 10 49 12 5	44 10 0 46 11 4 51 6 3	63 13 11 67 2 8 66 8 11	56 0 3 58 13 3	69 0 10 75 18 4 74 1 3	71 19 4 66 12 3 73 7 2	52 12 54 14 57 2 1 60 9 10 64 13 1
		Тотаг	. Net E	XPENDITT	JRE PER (£ s. d.)	Head of	POPUL	ATION.		
1955-56 1956-57 1957-58 1958-59 1959-60	::	8 3 1 8 9 1 9 10 0 9 16 0 10 13 1	6 18 1 7 12 2 8 5 5 8 18 8 9 13 9	5 19 11 6 10 10 7 0 0 7 16 5 8 4 2	8 15 4	10 9 8 10 13 8	10 3 8 12 15 3	9 7 7 9 17 3	10 11 11 10 9 3	9 5 8

- (ii) Classification of Expenditure. The following table shows, for the six States, the net expenditure on government schools and education departments classified into the following headings:—(i) Primary Education, (ii) Secondary Education, (iii) Administration, (iv) Training of Teachers, and (v) Transportation of School Children and Students. Expenditure on technical and agricultural education is excluded from the tables.
- It has been necessary to estimate some items of expenditure, largely because the meanings of "primary" and "secondary" differ between States, and because elementary and higher education are sometimes given in the same school by the same teachers.

The table showing total net expenditure includes expenditure on government schools in the Northern Territory and Australian Capital Territory, but in the following table this expenditure has been excluded, because the detail is not available.

GOVERNMENT SCHOOLS AND EDUCATION DEPARTMENTS: CLASSIFICATION OF EXPENDITURE. (£'000.)

			(2 000.)				
Yea	r. N.S	.W. Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	otal.(a)
		Primai	RY EDUCAT	TON.			
1955-56 .	16,	947 11,195	6,000	3,808	3,345	1,289	42,584
1956-57 .	18,			4,065	3,557	1,517	45,338
1957-58	1 40			4,409	4,044	1,625	48,839
1958-59	20,	562 13,953	7,980	4,905	4,095	1,751	53,246
1959–60 .	1 22		8,325	5,527	4,464	1,858	57,338
		SECONDA	ARY EDUCA	ATION.			
1955–56 .	1 7,	433 2,742	1,640	1,019	1,060	689	14,583
1956–57 .		973 4,177		1,179	1,224	823	16,726
1957–58		241 4,870	1,532	1,362	1,480	814	19,299
1958-59	'مه ا		1,830	1,800	1,631	997	22,325
1959–60 .	120		2,148	2,237	1,894	1,261	26,051
		ADM	IINISTRATIO	N.			
1955–56	1 1,2	200] 502	352	149	147	310	2,660
1956–57	1,3	212 554	396	174	292	366	2,994
1957–58	1.	323 584	419	198	281	328	3,133
1958-59	1,4	479 651	465	199	314	230	3,338
1959–60 .	1,	703 760	518	246	274	419	3,920
	Transport	ATION OF SC	ноог Сиг	DREN AND	STUDENT	S.	
1955–56	1,	725 1,585	277	329	981	360	5,257
1956–57		455 1,749		388	1,021	420	5,392
1957-58		616 1,913	423	404	930	443	5,729
1958-59	1,	613 2,002	502	467	910	458	5,952
1959–60 .	1,	813 2,120	601	486	957	516	6,493
		TRAININ	G OF TEAC	CHERS.			
1955-56	1,4	431 1,621	493	344	494: 477	151	4,534
1956-57	1,0	662 1,945	412	391	477	178	5,065
1957-58 .	1,	915 2,196	514	480	539	170	5,814
1958-59 .	2,	229 2,551		592	591	226	6,759
1959-60 .	2,	518 3,179	538	736	657	273	7,901

⁽a) Excludes Northern Territory and Australian Capital Territory.

2. Non-Government Schools Finance.—Most Roman Catholic parochial schools do not charge fees, but families make a contribution if they can afford to do so. At the majority of non-government secondary schools, privately endowed scholarships are available in varying numbers, and reductions in fees are normally made for children of clergy or for two or more members of one family attending the same school. With these exceptions, pupils of non-government schools must pay fees.

Certain State scholarships and bursaries are tenable at approved non-government secondary schools. Since the establishment of educational systems by the State Governments, official policy has been largely against the provision of direct financial assistance to non-government schools. The eight undenominational grammar schools in Queensland, however, receive a State subsidy under the Grammar Schools Acts 1860–1900. In 1956, the Commonwealth Government undertook to contribute to the interest payments on loans raised in order to build non-government secondary school accommodation in the Australian Capital Territory. This contribution is now available for both primary and secondary school buildings extensions and additions.

3. Technical Colleges Expenditure.—The following table shows the net expenditure on technical education from the State consolidated revenue funds, together with expenditure on technical education in the Australian Capital Territory.

TECHNICAL	EDUCATION:	NET	EXPENDITURE.
	(£'000.])	

Year.	 N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aust.
1955–56	 2,671	3,350	864	928	575	344	43	8,775
1956-57	 2,788	3,797	911	1,044	607	401	44	9,592
1957-58	 2,981	4,110	964	1,144	691	407	47	10,344
1958-59	 3,163	4,287	1,120	1,429	735	450	54	11,238
1959-60	 3,763	5,435	1,237	1,645	789	397	61	13,327

§ 8. Commonwealth Activities.

Although the primary responsibility for education rests with the States, the Commonwealth Government is committed to a number of educational activities related to its other functions. For example, it maintains officer training colleges and education services for each of its defence services, a School of Pacific Administration for the training of administrative and other officers for service in Commonwealth Territories, and a School of Forestry. In each of the Australian Territories, the educational programme provides for both the native and European children who live there. References to these programmes appear in Chapter V.—The Territories of Australia.

The Australian Broadcasting Commission features school broadcasts and other educational broadcasts as part of its daily programmes. The Commonwealth Scientific and Industrial Research Organization undertakes research, the results of which are made available to educational institutions. Under the Commonwealth Reconstruction Training Scheme, many ex-servicemen and women have received training which has enabled them to enter a variety of trades and professions.

The Commonwealth Office of Education, established under the Education Act 1945, acts as the Commonwealth's educational adviser, undertakes research work as Commonwealth activities require, and is the channel for liaison between Commonwealth and State educational authorities. Some of its major commitments are those related to international relations in education, including the association of Australia with the aims and activities of the United Nations Educational, Scientific and Cultural Organization (UNESCO), the teaching of English as a second language and the provision of scholarships and fellowships for selected students under the Technical Co-operation Scheme (Colombo Plan) and under the scheme known as Australian International Awards. The office also acts as a co-ordinating body in the administration of the British Commonwealth Scholarship and Fellowship Plan.

The activities of the Commonwealth Scholarships Board, which was formerly known as the Universities Commission, are described on page 602 of this chapter.

The Commonwealth assists a number of other bodies concerned with education. Besides grants to organizations such as the Australian Council for Educational Research, grants are made to the States, on the recommendation of the Australian Universities Commission, for payment to universities.

Further details of Commonwealth assistance to students (including the Commonwealth Scholarship Scheme) and of grants for universities are given on page 602 of this chapter.

§ 9. Australia and International Relations in Education.

Australia has always been responsive to educational developments in oversea countries, particularly those in the United Kingdom, but it is only recently that it has begun to make any considerable impact on educational thought overseas.

In this connexion, there have been important developments since the 1939-45 War. For instance, there has been a remarkable increase in the volume of information on educational matters exchanged between Australia and south-east Asia, and Australia participates in the Technical Co-operation Scheme (Colombo Plan), the Korean Training Scheme, the United Nations Technical Assistance programme, the cultural programme of SEATO, and the scheme of Australian International Awards, under which a limited number of scholarships are given annually. Australia also participates in the British Commonwealth Scholarship and Fellowship Plan. In 1960, there were 5,441 oversea students, most of them Asian, attending institutions of higher learning in Australia; of these, 2,871 were in universities and 1,710 in technical colleges.

Perhaps the most important single factor behind the quickening of Australian interest in international cultural affairs has been membership of UNESCO. Australia has been a member since 1946. Twelve expert committees in Australia are responsible for a wide and varied programme of activities on behalf of UNESCO. Their advice has helped to make Australia's contribution to international conferences and seminars highly effective. Other work undertaken by these committees has included the provision of technical material and advice to the countries of south and south-east Asia, the conducting of seminars in Australia, arranging for exhibitions and displays in Australia and overseas, and the publication of handbooks and brochures to assist teachers and other persons in meeting the problems involved in educating for international understanding.

The Australian National Advisory Committee for UNESCO, on which all the other committees are represented, advises the Commonwealth Government and co-ordinates the work of the specialist committees.

§ 10. Universities.

1. General.—There are ten universities in Australia. The following list shows the date of foundation and the faculties existing at each.

University of Sydney, established in 1850, located in Sydney, New South Wales. Agriculture, Architecture, Arts, Dentistry, Economics, Engineering, Law, Medicine, Science, Veterinary Science.

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

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

University of Tasmania, established in 1890, located in Hobart, Tasmania. Arts, Commerce, Education, Engineering, Law, Science.

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

Engineering, Law, Medicine, Science, Veterinary Science.
University of Western Australia, established in 1912, located in Perth, Western Australia. Agriculture, Arts, Dental Science, Economics, Education, Engineering, Law, Medicine, Science.

Australian National University, established in 1946, located in Canberra, A.C.T. Institute of Advanced Studies: John Curtin School of Medical Research, the Research School of Physical Sciences, the Research School of Social Sciences, the Research School of Pacific Studies. School of General Studies (consisting substantially of the former Canberra University College): Arts, Economics, Law, Science.

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

University of New South Wales, established in 1958 (established in 1948 as New South Wales University of Technology), located in Sydney, New South Wales. Architecture, Arts, Commerce, Engineering, Medicine, Science, Applied Science. The University also provides part-time instruction in science and engineering at technical colleges in country towns in New South Wales.

Monash University, established in 1958, located in Melbourne, Victoria. Arts, Economics and Politics, Engineering, Medicine, Science.

There are also three university colleges in Australia. Newcastle University College, founded in 1951, located in Newcastle, New South Wales, is affiliated with the University of New South Wales and has degree courses in the faculties of Applied Science, Architecture, Arts, Commerce, Engineering and Science. Townsville University College, founded in 1961, located in Townsville, Queensland, is a constituent part of the University of Queensland. It offers first-year degree, diploma and certificate courses in the faculties of Arts, Science, Engineering, Commerce and Economics, Agriculture, Law, Veterinary Science, Dentistry, Medicine and Education, and second-year courses in Arts, Science and Engineering. Commencing in 1962, Wollongong University College, affiliated with the University of New South Wales, will offer some courses in the faculties of Engineering and Applied Science.

2. Expansion within the Universities.—Within the past 20 years, the appearance of some of the universities has altered to a striking extent. Many new permanent buildings and some temporary ones have been erected and new wings have been added. The universities are expanding their accommodation greatly to meet the increasing enrolments.

There was a continuing increase in university enrolments from 1929 (approximately 9,000) to 1940, followed by a slight recession. In the closing year of the 1939-45 War, however, the number of students had risen beyond any previous figure, and rapid post-war expansion was responsible for a peak enrolment of 32,453 students in 1948. After 1948, the numbers decreased each year until 1953 as ex-service personnel completed their training under the Commonwealth Reconstruction Training Scheme. Thereafter, enrolments increased again and it is expected that they will continue to increase rapidly. Enrolments in 1960 were 53,633.

3. Courses.—A brief survey of developments in university courses since the war and up to 1954 was given in Official Year Book No. 42 (p. 476). Outlines of some developments from 1954 to 1960 have appeared in successive Year Books. Developments since 1960 have included the establishment of a number of courses offered for the first time in Australia, as follows.

At the University of New South Wales, Ceramic Engineering was offered as a course for the Bachelor of Applied Science degree in 1961. At the University of Melbourne, a post-graduate Diploma in Criminology was offered in 1961, and at The University of New England a post-graduate Bachelor of Letters degree was introduced for external students in 1961.

Other developments in 1961 included the establishment of a Faculty of Applied Science and a School of Oriental Studies at the University of Melbourne, and the establishment of a Faculty of Medicine at the University of New South Wales.

A major development in 1962 was the establishment of a Faculty of Oriental Studies in the School of General Studies at the Australian National University. At the University of Queensland, a Department of Anthropology began in 1962.

For the majority of university courses, full-time attendance is required. At most universities, however, certain courses, such as arts, commerce and economics, may also be undertaken by part-time or evening study. At the University of New South Wales, a variety of degree courses are available to evening students.

Several universities have limited systems of external tuition whereby students in country areas may take a restricted number of courses by correspondence. The University of Queensland has developed a system of correspondence tuition which now caters not only for students within the State but for those in the Northern Territory, Papua and New Guinea and adjacent Pacific islands. External students within Queensland receive tutorial assistance at university centres in the principal country towns. In addition, the university co-operates in the Colombo Plan Correspondence Scholarship Scheme (see p. 595).

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

4. Research.—A wide range of research work is carried out by the universities as part of their normal functions. The research activities of the universities have been greatly stimulated over recent years by the interest and assistance of the Commonwealth and State Governments, government instrumentalities such as the Commonwealth Bank, the Rural Bank of New South Wales, and the C.S.I.R.O., private foundations, both oversea and Australian, such as the Nuffield Foundation, the Carnegie Corporation and the Water Research Foundation of Australia, and industrial undertakings. Details of research work carried out at each university can be obtained from its calendar or research report.

Grants are made by the Commonwealth Government to bodies such as the Post-Graduate Committee in Medicine at the University of Sydney to facilitate arrangements for medical specialists from overseas to lecture and demonstrate advanced techniques in Australia.

Grants have been made by the Commonwealth Government, through the Australian Atomic Energy Commission, to a number of Australian universities for nuclear research.

The further expansion of teaching and research in various agricultural and veterinary fields was assisted by the annual and special grants of the Commonwealth Bank's Rural Credits Development Fund to several Australian universities. The C.S.I.R.O. also contributed to research in these and other fields.

- 5. The Commonwealth and the Universities—(i) General. The Commonwealth has given support to the Australian universities for many years. Prior to 1939, Commonwealth assistance was almost entirely concerned with research projects carried out by or in collaboration with the universities. During and since the 1939–45 War, the Commonwealth extended assistance to university students, at first to increase the number of highly trained people required for the war effort, then with the object of rehabilitating ex-servicemen, and finally as a social service benefit to the community. For the purpose of reconstruction training, the Commonwealth Government made available to the universities approximately £1 million for buildings and £500,000 for equipment. Since 1951, the Commonwealth has made special grants to the States for their universities and during the same time has continued to support the university institutions for which it is responsible.
- (ii) Assistance to Students. Up to 1945, the Universities Commission, now the Commonwealth Scholarships Board, functioned under National Security Regulations, but in that year it was established on a permanent basis under the Commonwealth Education Act 1945. After the 1939–45 War, the Commission continued to provide financial assistance to students under an interim scheme until 1951, when the interim scheme was superseded by the Commonwealth Scholarships Scheme.

From January, 1961, the number of Commonwealth scholarships granted annually was increased from a maximum of 3,000 to a maximum of 4,000. These are allocated to the States on a population basis and are tenable at universities and other approved institutions. Awards are made on merit and all successful applicants have their fees paid. In addition, scholarship holders may be paid a living allowance subject to a means test. As from 1st January, 1961, the maximum rates of allowance have been £364 per annum for a scholar living away from home and £234 per annum in the case where he lives at home.

At 30th September, 1961, 16,555 scholars had completed courses of training under the Scheme. At the same date, there were 12,688 scholars in training, of whom 11,936 were at universities and 752 at other institutions.

As from 1st January, 1959, post-graduate awards for training at Australian Universities were made available under the Scheme. One hundred awards were granted in each of the years 1959, 1960 and 1961. From 1962, an additional 25 awards will be available each year if the quality of candidates is sufficiently high. The benefits comprise a living allowance without a means test and payment to universities for tuition and facilities.

The Commonwealth Scholarships Board also provides for the training, at universities and similar institutions, of ex-service personnel and war widows under the Reconstruction Training Scheme, the Korea and Malaya Training Scheme and the Disabled Members' and Widows' Training Scheme. A detailed description of the Reconstruction Training Scheme was given on page 240 of Official Year Book No. 39. At 30th September, 1961, 21,503 students had completed courses under these schemes and at the same date there were 66 in training.

(iii) Commonwealth Grants to the States for University Purposes. Following a report submitted by a committee of inquiry appointed to report on university finances and requirements, the Commonwealth, since 1951, has made grants to the States for recurrent expenditure on university purposes. The payments have been made under the various States Grants (Universities) Acts.*

In 1957, the Prime Minister appointed a committee to investigate the problems of Australian universities. The Committee was given wide terms of reference. Among other things, it was asked to consider the role of the university in the Australian community, the extension and co-ordination of university facilities, technological education at university level, the financial needs of universities and appropriate means of providing for those needs, and the Commonwealth Scholarship Scheme.

In accepting the principal recommendations of the Committee (Murray Report)†, the Commonwealth agreed to continue grants for recurrent expenditure in 1958, 1959 and 1960, to make additional unmatched recurrent grants, and to assist with the capital needs of the universities for building projects and for equipment. The Commonwealth was also to provide grants between 1958 and 1960 for the building programmes of residential colleges affiliated with universities.

No. 81 of 1951; No. 75 of 1953; No. 28 of 1955; No. 37 of 1956; No. 7 of 1957; No. 27 of 1958; and No. 106 of 1960.
 † Report of the Committee on Australian Universities (Canberra, Commonwealth Government Printer, 1957).

The States Grants (Universities) Act No. 27 of 1958 operated from 1st January, 1958, and gave effect to these recommendations. This Act amended those parts of the States Grants (Universities) Act No. 7 of 1957 which referred to 1958 and provided for payments for 1957 to the South Australian School of Mines and Industries (now the South Australian Institute of Technology).

In 1959, following the Report of the Committee on Australian Universities, the Commonwealth Government established the Australian Universities Commission under the Australian Universities Commission Act No. 30 of 1959. The Commission's principal functions are to advise the Prime Minister on financial assistance to Commonwealth Universities and to States in relation to their Universities and also on the balanced development of Australian Universities. The Commission commenced its work in July, 1959. The first report of the Commission, covering the period 1961–63, was presented in October, 1960. The Commission recommended that Commonwealth grants in the period should be £93,300,000, approximately twice as great as grants available in the period 1958–60. The States Grants (Universities) Act No. 106 of 1960 which operated from 1st January, 1961, gave effect to these recommendations. This Act (No. 106 of 1960) amended those parts of the States Grants (Universities) Act 1958, which referred to recurrent grants to all universities for 1960.

The general grant for recurrent expenditure is a continuation of matched grants provided since 1951, and the maximum amount available in 1961 is shown in the following table.

RECURRENT COMMONWEALTH GRANTS TO UNIVERSITIES, 1961.

University.									
						£			
New South Wales—									
The University of Sydney					• •	1,562,000			
The University of New South Wa	ies					1,350,000			
The University of New England						458,000			
Victoria—						[
The University of Melbourne						1,374,000			
Monash University						233,000			
Oueensland-						,			
The University of Queensland						929,000			
South Australia—						1			
The University of Adelaide						832,000			
The South Australian Institute of	Techno	ology				63,000			
Western Australia-		67	* -			,			
The University of Western Austra	lia					577,000			
Tasmania—		• • •	••	• •		,			
The University of Tasmania						273,000			
The Shirt State of Table of the Shirt Shir	••	••	••	••					
Total					••	7,651,000			

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

From 1961, there has been a change in the method of calculating the unmatched Commonwealth grants for the teaching and administrative costs of residential colleges administered by or affiliated with a university. The grant consists of payments each year of £2,000 to each college, plus £15 for each resident student, and, a further £5 for each non-resident student receiving tutorial assistance. The Commonwealth total grant paid in 1961 was £154,190.

Commonwealth grants for selected building projects, for the period 1961-63, are shown in detail in the Second Schedule to the 1960 Act. Payments are made up to a given maximum for each project, on the basis of £1 from the Commonwealth for every £1 of State grants. The total Commonwealth grant for each University is shown in the following table.

COMMONWEALTH GRANTS FOR UNIVERSITY BUILDING PROJECTS, ETC. 1961-63.

1		Commonwealth Contribution.				
New South Wales—	· ·					£
The University of Sydney		• •	• •	• •	• •	1,450,000
The University of New South W	ales		• •	• •		2,880,000
The University of New England				• •		670,000
Victoria						ļ
The University of Melbourne						1,056,000
Monash University						3,890,000
Oueensland—						, ,
The University of Queensland						1,100,000
South Australia-						1,100,000
The University of Adelaide						1,060,000
The South Australian Institute o	f Techno	alogy.		• • •	• • •	10,000
Western Australia—	1 I CCIIII	Jiogy	• •	• •	• •	10,000
	1?					1 200 000
The University of Western Austr	ana	• •	• •	• •	• •	1,200,000
Tasmania—						
The University of Tasmania	••	••	• •		• •	900,000
Total						14,216,000

The States Grants (Universities) Act No. 106 of 1960 amended those parts of the States Grants (Universities) Act No. 27 of 1958, which referred to grants for University building projects at Monash University. In addition, a grant of 5 per cent. of the cost of each project is made for equipping and furnishing buildings. This grant is also matched £1 for £1 by the States. In the period 1958-60, the Universities received an unmatched Commonwealth grant for equipment equal to 16 per cent. of the cost to the Commonwealth of each project.

The Commonwealth also makes available, at the request of the State, grants for buildings for residential colleges affiliated with a university. Commonwealth grants are up to one half of the cost for the purchase, erection or alteration of a building at an affiliated residential college. The maximum amount available for distribution in each State in the period 1961-63 is shown in the following table.

MAXIMUM COMMONWEALTH GRANTS FOR RESIDENTIAL COLLEGE BUILDINGS, 1961-63.

University.									
New South Wales—					i	£			
The University of Sydney					•	142,000			
	•	• •	••	• •	• • •				
The University of New South Wales		••	••	• •	•••	150,000			
Victoria—					i	222.000			
The University of Melbourne	•	••	• •	• •		223,000			
Queensland—					1	40.5.000			
The University of Queensland	•	• •	• •	• •	• • [195,000			
South Australia—					1				
The University of Adelaide		• •	• •			101,000			
Western Australia—					1				
The University of Western Australia						120,000			
Гasmania—					1				
The University of Tasmania	,					69,000			
Total		••	••			1,000,000			

For the first time, for the three years covered by the 1960 Act, a grant is made for the purchase of items of equipment specially approved by the Australian Universities Commission on the basis of £1 from the Commonwealth for every £1 of State grants. This grant is made available in two parts.

The allocation to Universities of one-half of this grant is shown in the Third Schedule to the 1960 Act. The maximum amount available to each University is shown in the following table.

COMMONWEALTH GRANTS FOR EQUIPMENT, 1961-63.

	Universi	ty.				Commonwealth Contribution.
Name Canala Walan						£
New South Wales—						
The University of Sydney		• •	• •	• •	• •	45,000
The University of New South Wa	ales					40,000
The University of New England						15,000
Victoria—			•		-	,
The University of Melbourne						45,000
Monash University						15,000
Queensland—						
The University of Queensland						25,000
South Australia—]
The University of Adelaide						25,000
Western Australia—						
The University of Western Austra	alia					25,000
Tasmania—						į į
The University of Tasmania		• •	• •			15,000
Total						250,000

The remaining half of the grant (totalling £250,000 from the Commonwealth) is to be distributed among the Universities listed in the table above on the basis of grants for individual items specially approved by the Commission.

The grants for capital building projects at universities and residential colleges and capital equipment grants for universities are payable at any time within the period 1961-63.

6. Teaching and Research Staff.—The following table shows particulars of the teaching and research staff of Australian universities during 1960.

UNIVERSITIES: TEACHING AND RESEARCH STAFF, 1960.

University or College.	Pro- fessors.	Readers.	ł	rers.(b)	Tutor Rese	strators, es and earch tants.	Honor- ary Lec- turers and	Total.
			Full- time.	Part- time.	Full- time.	Part time.(c)	Demon- strators.	
Australian National University	24 68 38 19 51 6 37 40 33 20	20 47 26 13 68 37 42 24 7	(d) 106 486 435 111 305 2 221 206 130 65	246 239 34 107 121 65 53 25	26 157 (e) 129 48 151 107 40 23 16	8 104 20 16 190 5 112 36 8	(f) 51 (f) 4 (f) 80 	184 1,159 889 245 872 9 608 505 337 141
Canberra University College	19	8	54	35	11	17		144
Total	355	292	2,121	925	709	516	175	5,093

⁽a) Includes associate professors, assistant professors and lecturers-in-charge. (b) Includes senior lecturers and assistant lecturers. (c) Excludes part-time demonstrators. (d) Senior fellows, fellows and research fellows. (e) Includes technical officers. (f) Department of External Studies.

The following table gives details of the teaching and research staff of Australian universities for each year from 1956 to 1960.

UNIVERSITIES: TEACHING AND RESEARCH STAFF, SUMMARY, AUSTRALIA.

Year.	Pro- fessors.			Lecturers.(b)		Demonstrators, Tutors and Research Assistants.		External Studies Staff.	Total
			Full- time.	Part- time.	Full- time. (c)	Part- time.(d)			
1956 1957 1958 1959	265 274 292 320 355	196 229 256 286 292	1,383 1,494 1,733 1,947 2,121	1,052 958 982 955 925	400 410 490 604 709	409 406 462 503 516	50 51 51 123 89	29 30 37 64 86	3,784 3,852 4,303 4,802 5,093

⁽a) Includes associate professors, assistant professors and lecturers-in-charge. (b) Includes senior lecturers, assistant lecturers, senior fellows, fellows and research fellows. (c) Includes technical officers of the University of New South Wales. (d) Excludes part-time demonstrators.

7. Students.—(i) Total. The number of students enrolled for courses at the universities for the year 1960 is shown in the following table.

UNIVERSITIES: STUDENTS ENROLLED, 1960.

			_	Diploma	Courses.		Miscel-	
University or	Degree Courses.	Post- graduate.	Sub- graduate.	Certificate Courses.	laneous Subjects.	Adjusted Total.(a)		
Australian National	Universi	ty	141				6	147
Sydney		·	10,437	291	966	l l	256	11,869
New South Wales			3,809	63	3,713	9	291	7,881
New England			1,993	194			52	2,234
Melbourne			9,842	374	439	177	587	11,157
Queensland			6,185	76	674	1,403	411	8,700
Adelaide			4,270	131	1,022	12	753	6,110
Western Australia			3,276	108			124	3,501
Tasmania			970	72	76	183	94	1,332
Canberra University	College		728		8	2	114	849
Total	••		41,651	1,309	6,898	1,786	2,688	53,780

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

Of the students enrolled in 1960, 41,385 were males and 12,395 females. Included in those enrolled for degrees were 141 enrolled for higher degree courses at the Australian National University, 725 in Sydney, 495 at the University of New South Wales, 111 at the University of New England, 440 in Melbourne, 251 in Queensland, 256 in Adelaide, 241 in Western Australia, 64 in Tasmania, and 47 at the Canberra University College.

The following table shows the number of students enrolled at Australian universities for each of the years from 1956 to 1960.

UNIVERSITIES: STUDENTS ENROLLED, SUMMARY, AUSTRALIA.

			Degree	Courses.	Diploma	Courses.				
	Year.		Higher Degrees.	Bachelor Degrees.	Post- graduate. Sub- graduate.		Certificate Courses.	Miscel- laneous Subjects.	Adjusted Total.(a)	
1956			1,188	23,686	550	5,977	1,025	2,206	34,480	
1957			1,357	26,153	735	5,834	1,135	2,006	36,903	
1958	• •		1,672	29,920	846	6,168	1,427	2,431	41,865	
1959			2,226	34,061	1,007	6,405	1,575	2,781	47,565	
1960	<u></u>	,.]	2,771	38,880	1,309	6,898	1,786	2,688	53,780	

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

(ii) New Students Enrolled. The number of new students enrolled for courses at the universities during the year 1960 is shown in the following table.

UNIVERSITIES: NEW STUDENTS ENROLLED, 1960.

				Diploma	Courses.		Miscel-	
University or C	Degree Courses.	Post- graduate.	Sub- graduate.	Certificate Courses.	laneous Subjects.	Adjusted Total.(a)		
Australian National	Universi	ty	45		.,		4	49
Sydney		·	3,023	54	353		106	3,536
New South Wales			1,194	35	881		175	2,285
New England			866	99	٠.		36	1,000
Melbourne			2,422	38	157	5	298	2,883
Queensland			1,735	8	188	442	215	2,586
Adelaide			1,058	3	389	4	242	1,682
Western Australia			937	3	۱		51	991
Tasmania			273	2	17	75	36	392
Canberra University	College		351	1			78	429
Total	••-		11,904	242	1,985	526	1,241	15,833

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

Of the new students enrolled in 1960, 11,364 were males and 4,469 females. Included in those enrolled for degrees were 279 enrolled for higher degree courses—Australian National University 45, Sydney 26, University of New South Wales 82, New England 21, Melbourne 25, Queensland 20, Adelaide 18, Western Australia 14, Tasmania 4 and Canberra University College 24.

The following table shows the number of new students enrolled at Australian universities during each of the years from 1956 to 1960.

UNIVERSITIES: NEW STUDENTS ENROLLED, SUMMARY, AUSTRALIA.

			Degree	Courses.	Diploma	Courses,		Missal	· 	
	Year.		Higher Degrees.	Bachelor Degrees.	Post- graduate. Sub- graduate.		Certificate Courses.	Miscel- laneous Subjects.	Adjusted Total.(a)	
							<u> </u>			
1956 1957	::		134 119	6,881 7,401	112 121	2,184 1,601	317 333	976 874	10,590 10,418	
1958 1959	••	••	211 252	8,936 10,087	92 198	1,657 1,712	457 483	1,194 1,321	12,387 13,985	
1960	::	••	279	11,625	242	1,985	526	1,241	15,833	

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

- 8. Principal University Benefactions.—Issues of the Official Year Book up to No. 40 included details of the principal private benefactions to universities. (See Year Book No. 40, pp. 467-8.)
- 9. University Income for General Activities.—The income of the universities is derived principally from State and Commonwealth Government grants, students' fees, and income from private foundations. From all sources other than new bequests, the income during 1960 for general university functions was as shown in the table below. In South Australia, Government grants and income from private foundations include amounts in respect of the Waite Agricultural Research Institute.

UNIVERSITIES: INCOME FOR GENERAL ACTIVITIES, 1960. (£.)

University or College.	Government Grants.	Students' Fees.	Interest, Rent, Dividends and Donations.	Other.	Total.
Australian National University	2,366,616	1,352	66,708	93,964	2,528,640
Sydney	2,537,247	893,140	81,786	54,230	3,566,403
New South Wales	4,185,897	339,154		55,434	4,580,485
New England	981,384	70,148	2,121	130,740	1,184,393
Melbourne	2,352,338	901,219	63,357	59,652	3,376,566
Monash	1,445,250			342	1,445,592
Oueensland	1,572,600	462,346	91,171	39.786	2,165,903
Adelaide	1,978,751	203,712	55,773	23,023	2,261,259
Western Australia	1,214,337	66,827	54,674	61,753	1,397,591
Tasmania	652,523	62,462	2,053	30,376	747,414
Canberra University College	441,830	31,603		2,059	475,492
Total	19,728,773	3,031,963	417,643	551,359	23,729,738

10. University Expenditure for General Activities.—The principal item of disbursements on general university activities is the maintenance of the teaching and research staff, accounting for 59.0 per cent. of the total in 1960 compared with 62.0 per cent. in 1959.

The following table shows the expenditure including capital expenditure during the year 1960.

UNIVERSITIES: EXPENDITURE FOR GENERAL ACTIVITIES, 1960. (£.)

				Mai	ntenance o	f—		
University or Co	Adminis- tration.	Teaching and Research Depart- ments.	Premises and Grounds.	Libraries.	Other (including Buildings).	Total.		
Australian National	Univers	ity	179,479	1,390,058	168,896	68,920	531,231	2,338,584
Sydney		• •		2,358,154		196,082	507,253	3,883,094
New South Wales .		٠.		2,297,825	301,829	151,054	1,422,899	4,489,193
New England .		٠.	172,394		102,187	58,835	261,679	1,196,411
Melbourne .		٠.	267.344			136,535	297,141	3,387,178
Monash			43,955	53,548	20,243	26,720	872,292	1,016,758
Queensland .		• •	167,872			101,788	76,631	2,143,096
Adelaide		٠.	167,566	1,410,078	178,840	96,140	584,357	2,436,981
Western Australia .		• •	113,298	961,489	111,235	70,002	159,660	1,415,684
Tasmania	•	٠.	74,893	499,897	46,542	49,676	76,648	747,656
Canberra University	College	. .	60,477	332,353	15,850	39,670	27,803	476,153
Total .	•	••	2,012,531	13,923,479	1,781,762	995,422	4,817,594	23,530,788

- 11. Funds for Special Purposes.—(i) General. The tables shown in paras. 9 and 10 above relate to general university activities, while the two which follow show the financial position of the special purpose funds which are, in the main, for special research purposes.
- (ii) Income for Special Purposes. The following table shows the main items of income for the year 1960.

UNIVERSITIES: INCOME FOR SPECIAL PURPOSES, 1960.

(£.)

University or C	College.		Govern- ment Grants.	Interest, Rent, Dividends and Dona- tions.	Public Examina- tion Fees.	Special Research Grants.	Other.	Total.	
Australian Nationa	Unive	rsity		18,011		47,888		65,899	
Sydney			1,381,000			924,866		2,430,579	
New South Wales			.,	443,606		109,042			
New England			406,000			42,436		508,452	
Melbourne			1.258,856	,				2,358,521	
Monash			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
Queensland			4,550	193,469					
Adelaide			18,200						
Western Australia			646,812	86,129		96,463			
Tasmania			15,099	2,656					
Canberra University	College	••	13,400	694		2,473			
Total	••		3,743,917	1,308,851	303,234	1,891,176	399,875	7,647,053	

(iii) Expenditure for Special Purposes. The following table shows the main items of expenditure for the year 1960.

UNIVERSITIES: EXPENDITURE FOR SPECIAL PURPOSES, 1960.

(£.)

University or C	College.		Special Purpose Funds (Research)	Other Special Purposes.	Public Examina- tion Expenses.	Scholar- ships, Bursaries, etc.	Other (including Buildings).	Total.	
Australian Nationa	Unive	rsity	1,949			17,671	38,309	57,929	
Sydney			551,871	648,584	٠. ا	29,229	612,350	1,842,034	
New South Wales			103,541	306,447		22,946	!	432,934	
New England			49,497	5,231		6,522	718,440	779,690	
Melbourne .,			347,353	227,286	125,649	8,348	1,062,859	1,771,495	
Monash			1 '						
Queensland			86,051	106,205	49,284	20,275	19,500	281,315	
Adelaide			192,259	72,356	49,719	6,313		320,647	
Western Australia			84,398	14,406	47,333	50,031	423,581	619,749	
Tasmania			23,813		6,149	4,401		34,363	
Canberra University	College		1,628			13,546		15,174	
Total			1,442,360	1,380,515	278,134	179,282	2,875,039	6,155,330	

^{12.} Degrees Conferred, etc.—The following table shows the number of degrees conferred and diplomas and certificates granted for males and females separately at each university during the year 1960.

UNIVERSITIES:	DEGREES	CONFERRED,	AND	DIPLOMAS	AND	CERTIFICATES
		GRANTEI). 196	0.		

Course.	Aust. National Univ.		Sydney.		New South Wales.		New England.		Mel- bourne. (a)		Queens- land.		Ade- laide,		Western Aus- tralia.		Tas- mania.		Australia.	
	M.	F.	M.	F.	М.	F.	M.	F.	М.	F.	M.	F.	М.	F.	М.	F.	М.	F.	М.	F.
Agriculture . Agriculture . Architecture Arts . Dentistry . Divinity Economics . Education . Engineering Law Medicine(b) Music Science . Technology .	 11 3		47 17 201 48 55 8 91 78 165	5 3 208 5 2 3 5 29 2 62	16 122		9 81	1 40 	40 27 193 22 126 49 105 100 122 7 182	6 5 167 1 23 10 13 14 23 49	16 7 84 36 46 8 78 9 58	55 4 2 1 20	37 1	1 37 4 9 1 28	12 85 11 3 222 33 12 3	1 .45 .5 	36 14 9 10 	 29 	146 65 741 118 288 87 502 218 394 9 899 57	16 9 597 10 28 19 24 72 26 194
Veterinary Science Total	20	:=	33 917	2 326	 324	 21	 110	 49	973	311	23 487	118	391	-:- 80	249	<u></u> 57	109	35	56 3,580	997
Post-graduate Diplomas Education Medicine Other Total Sub-graduate Diplomas Certificates	 		56 30 1 87 16	90 90 12	9 9	5	28 	46 .: .: 46	43 15 6 64 13	20 2 		21 	21	10 	31		22 :: 22 :: 22 11	9 .: 9	242 45 12 299	212 2 214 183 47

⁽a) Includes degrees conferred on students of the Canberra University College. of B.S. degrees conferred.

§ 11. Other Aspects of Education.

- 1. General.—Beyond the schools, colleges and universities, there are agencies engaged in less direct educational work which cannot be readily assessed and described. Among these are such things as press, film, radio and television, which are powerful educational forces—whether they are used specifically to disseminate information such as new agricultural techniques or preventive health measures, or, on the other hand, in a much more general way to exert an influence on the cultural level of the population. There are also bodies and institutions such as the adult education authorities, libraries, art galleries and museums which aim at catering for the educational and cultural needs of the general public.
- 2. Adult Education.—(i) General. The term "adult education" is used in Australia to refer in the main to non-vocational educational and cultural activities for adults provided by some of the universities and by various adult education authorities, which vary in form from State to State. In 1960, an Australian Association for Adult Education was formed, and its first Annual Conference was held in Adelaide in 1961. It handles matters pertaining to adult education at a national level and arranges liaison with similar bodies in other countries.

The Workers' Educational Association movement, which has for its object the bringing of the universities into closer relationship with the community in general and providing for higher education in civic and cultural subjects, has been active in Australia. In 1913, associations were formed in all the Australian States. In four States, the 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.

⁽b) Excludes the number

While the choice of courses offered by these bodies is naturally more limited in the smaller States, a variety of topics, including social studies and current affairs, language and literature, drama, music, arts and crafts, are available in all States.

- (ii) New South Wales. (a) Adult Education Advisory Board. State Government grants for adult education are allocated by the Adult Education Advisory Board. Grants are made to the University of Sydney (Department of Tutorial Classes), the Workers' Educational Association, the University of New England (Department of Adult Education), the Public Library of N.S.W. (Adult Education Section), and the Arts Council of Australia (N.S.W. Division).
- (b) University of Sydney. The Extension Board of the University of Sydney provides lectures and short courses in city and country.

In 1914, the Department of Tutorial Classes was established to provide classes and study groups along the lines of similar work in England. Its activities include the provision of tutorial classes in a wide variety of subjects, discussion groups and "kits" to serve the needs of country districts and people who cannot be catered for by tutorial classes, and publication of the fortnightly Current Affairs Bulletin. This publication, begun in 1942 and produced for four years by the Australian Army Education Service, was recommenced in 1947 as a civilian and service publication by the Commonwealth Office of Education. At the beginning of 1952, the Department of Tutorial Classes took over full responsibility for the Bulletin. It receives an annual grant from the Commonwealth Government for this purpose.

In 1960, there were 167 tutorial classes with a total enrolment of 4,845 and 145 discussion groups with a total enrolment of 2,217.

The Department works in conjunction with the Workers' Educational Association through the Joint Committee of Tutorial Classes, appointed by the university senate.

- (c) Workers Educational Association. In addition to co-operating with the Department of Tutorial Classes in organizing certain classes and groups, the Association itself provides classes in a wide variety of fields. It publishes Highway, a bi-monthly journal of adult education, and maintains a property near Sydney where short residential schools are held throughout the year.
 - In 1960, the Association ran 82 classes, for which there were 4,454 enrolments.
- (d) University of New England. When the New England University College became an autonomous university in 1954, its Department of Adult Education took over full responsibility for the activities formerly undertaken by it on behalf of the Department of Tutorial Classes of the University of Sydney. It brings university extension activities to the people of northern New South Wales and conducts classes in arts and social sciences in towns throughout this region. Short residential courses are held on topics of interest to primary producers in the area.
- (e) Public Library of New South Wales. The Public Library's adult education section provides an adult education library service for all classes and groups conducted by the Department of Tutorial Classes of the University of Sydney, the Workers' Educational Association, and the Department of Adult Education of the University of New England.
- (f) Arts Council. The New South Wales Division of the Arts Council of Australia provides a mobile theatre unit and organizes touring companies in ballet, opera and drama to country towns. Musicians provide some short lecture courses in the city.
- (g) Education Department. The New South Wales Education Department provides evening colleges, housed in its schools and staffed by trained teachers, which provide non-vocational courses in a wide variety of crafts and dramatic and musical activities. Adults may prepare for the Intermediate and Matriculation examinations at certain of these colleges.
- (iii) Victoria. The Council of Adult Education is a government instrumentality established by the Adult Education Act 1946. Its aims are to stimulate adult education in Victoria and to encourage voluntary organizations and associations by giving them advice and assistance. Its activities include a variety of classes on topics ranging from social studies, psychology, language and literature, to crafts, music, drama, etc., and usually lasting from 10 to 20 weeks. An annual 10-day summer school is another important activity. The Council publishes a bi-monthly bulletin, C.A.E. Newsletter and a quarterly journal, Adult Education. Its group service assists and provides programme material for the discussion groups formed by organizations and individuals throughout the State. In 1959-60, there were 6,365 enrolments for classes and 2,880 individual enrolments in 261 discussion groups.

A recent development of importance is the extension of the council's activities, including classes and discussion groups, to the prisons, as part of a general plan for penal reform in Victoria.

Through its community arts service, the Council organizes tours, by musicians and by theatrical and other companies, in country towns which otherwise would have no opportunity of seeing such performances. It provides an advisory service to musical societies and cooperates with the National Gallery of Victoria in the organization of travelling art exhibitions.

The council's income is derived mainly from a government grant, but also from student fees and Community Arts Service performances.

(iv) Queensland. The Queensland Board of Adult Education was constituted in 1944 and is responsible under the Minister for Education for the provision of adult education facilities throughout the State. Under the executive officer of the Board, the Supervisor, are six district officers, one based in Brisbane and five in large country towns, who are responsible for organizing activities in country areas.

The cost of the programme is borne by the State Government and admission to all courses is free. Activities include lectures, group meetings on a variety of topics, generally short-term but some of which extend over a full year, and film screenings. Library and film services are provided.

In 1960, enrolments for lectures totalled 3,176. Some form of adult education activity was available in almost 300 centres.

- (v) South Australia. Since 1917, the University of Adelaide, through the Joint Committee for Tutorial Classes, has provided year by year in the metropolitan area a series of tutorial classes, lecture classes and study circles on a wide range of subjects of cultural and current interest, in co-operation with the Workers' Educational Association of South Australia.
- In 1957, a Department of Adult Education was established and a full-time Director of Adult Education appointed. A wide range of University extension courses and educational conferences, summer schools and seminars, including a number dealing with subjects at post-graduate level, are organized directly by the University. In 1960, enrolments for tutorial and extension classes totalled 2,974.

The Workers' Educational Association of South Australia, in addition, carries on an independent educational programme of classes, schools, and exhibitions or film festivals.

The State Education Department also arranges an extensive programme of educational activities.

(vi) Western Australia. Adult education in Western Australia is organized by the Adult Education Board, established in 1928 under the terms of the statutes of the University of Western Australia. The board has a considerable degree of autonomy. Its executive officer is the Director of Adult Education.

The Board conducts, in the metropolitan areas, classes, refresher courses and short schools, conferences, seminars and public lectures, and maintains a library. Classes were held in 1960 with a total enrolment of 1,785. The Board's country work is mainly operated through a box library scheme for discussion groups, of which there were 72 in 1960. Lecture tours and week-end schools are held, and local adult education is encouraged through semi-autonomous local committees. Metropolitan work and country work are drawn together in an annual summer school.

The Board also operates a community arts service in city and country and arranges screenings of foreign films. Regional drama festivals and music festivals are arranged culminating in the annual Festival of Perth, inaugurated and administered by the Board.

(vii) Tasmania. Some form of adult education has existed since the formation in 1913 of a Workers' Educational Association, which worked in conjunction with the University of Tasmania for a number of years, receiving a grant through the university, which had a Director of Tutorial Classes. Later the grant was paid direct to the Association by the Government and the university's tutorial department ceased to exist. In 1948, the Adult Education Act was passed, providing for the formation of an Adult Education Board whose functions are to plan and develop adult education in Tasmania and to assist other bodies actively engaged in adult education.

The executive officer of the board, located at Hobart, is the Director of Adult Education. Activities are organized on a regional basis by organizers based in Hobart, Launceston and three large country centres.

The board organizes classes of ten weeks' duration on a wide range of subjects. In 1960, 452 courses were held with a total enrolment of 4,500. It sponsors special lectures, film screenings and art exhibitions, recitals of music and dramatic performances, in both city and country areas. Its income is derived from a State government grant and from students' fees.

- 3. The New Education Fellowship.—The New Education Fellowship is a world organization 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 quarterly. A major conference of the New Education Fellowship is to be held in Australia in 1962, during which prominent educationists from Australia and overseas will visit all States.
- 4. Australian College of Education.—An Australian College of Education was formed in 1959. Its aim is to bring together leading members of every field of education for their mutual benefit and the furtherance of education in the Commonwealth.
- 5. Migrant Education.—The Commonwealth government's post-war immigration policy has brought to Australia over 750,000 immigrants with little or no knowledge of English. To assist their assimilation into the Australian community, a system of migrant education has been developed to teach them English and to give them information about Australia.

Before arriving in Australia, migrants who do not speak English are given some instruction in English by shipboard education officers.

In Australia, free evening classes are arranged by State Education Departments wherever a group of nine or more migrants in country areas, or twelve or more migrants in city areas, wish to learn English. Should migrants find it impossible to attend classes, they may apply, through State Education Departments, for a free correspondence course in English. In addition, English lessons are broadcast regularly by the Australian Broadcasting Commission. The Commonwealth Office of Education provides technical advice on all aspects of migrant education and is responsible for the preparation of teaching materials.

In October, 1961, 19,395 migrants were enrolled in classes and 10,770 were taking correspondence lessons. At the same time, 15,776 were receiving the monthly booklet accompanying the radio lessons.

B. CULTURAL ACTIVITIES.

§ 1. Libraries.

- 1. General.—The Munn-Pitt report of 1935 greatly stimulated interest in libraries and librarianship throughout Australia. This is seen in the rapid development of libraries, the passing of legislation in all States to increase library services, and in 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 its functions now include the promotion and improvement of libraries and library services. The Association conducts annual examinations for which students are prepared by courses of instruction in all States. Formal library schools exist in the Commonwealth National Library, Canberra, and the Public Libraries at Sydney and Melbourne. In 1960, the first library school to be attached to an Australian University was opened. This is in the University of New South Wales.
- 2. Commonwealth.—(i) National Library of Australia. This Library grew directly from the Library of the Commonwealth Parliament established in Melbourne in 1901, the Committee of which soon afterwards announced its intention to develop a library patterned on the Library of Congress at Washington, U.S.A., capable of serving purposes beyond those essential to the Parliament itself, appropriate to a national library and on

a national scale. This policy was steadily pursued, so that, in addition to its primary function of serving Parliament, it gradually became a central source of information for the government and its departments and other agencies, and assumed increasing reference and bibliographical responsibilities in relation to scholarship and research in Australia and abroad. It was also influenced by the basic elements of the national library concept of the older countries of Europe: namely, that a national library is the proper place to collect the national literature systematically and to make it known and available for use, and that it is a place to which scholars may turn for what is most significant in the literature of other countries. For these growing extra-Parliamentary activities, the Parliamentary Library Committee, in 1923, adopted the title of Commonwealth National Library.

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

Effect was given to these recommendations by the National Library Act, No. 69 of 1960, which created the National Library of Australia as a body corporate under the control of a Council of nine members, of whom one is a Senator elected by the Senate, one a member of the House of Representatives elected by that House, and seven appointed by the Governor-General, and with the following functions:—

on behalf of the Commonwealth-

- (a) to maintain and develop a national collection of library material, including a comprehensive collection relating to Australia and the Australian people;
- (b) to make the national collection available to such persons and institutions in such manner and subject to such conditions as the Council determines with a view to its most advantageous use in the national interest;
- (c) to make available such other services in relation to library matters and material, including bibliographical services, as the Council thinks fit, and in particular for the purposes of—
 - (i) the library of the Parliament;
 - (ii) the Departments and authorities of the Commonwealth; and
 - (iii) the Territories of the Commonwealth; and
- (d) to co-operate in library matters (including the advancement of library science) with authorities or persons, whether in Australia or elsewhere.

The National Library comprehensively collects and preserves Australian books, periodicals, newspapers, government publications, pictures, prints, manuscripts, maps, moving picture films and sound recordings. In this, it has been assisted by the deposit provisions of the Copyright Act 1912–1950, and has also been enriched by the acquisition of such notable collections as the Petherick collection of 16,500 items in 1911, the Cook manuscripts in 1923, the Cumpston collection on Public Health in Australia in 1936, the Mathews Ornithological collection in 1940, the Nan Kivell collection of 16,000 items of Australian and Pacific interest including original paintings, prints, manuscripts and printed material in 1959, and the Ferguson Sociological collection which is still under transfer. A feature of the Library's Australian work is the copying on microfilm, in association with the Public Library of New South Wales, of all important unique material overseas relating to Australia, including over three million pages in the Public Record Office in London.

The Library publicizes Australian publications, both at home and abroad, through select lists which include Australian Books (annual), and Australian Public Affairs Information Services (a monthly subject index with an annual cumulation), and by collections of Australian books maintained by it at all posts at which Australia is officially represented abroad. In London and New York, the National Library maintains and staffs Australian Reference Libraries supervised by its own Liaison Officers in those centres.

[•] National Library Inquiry Committee. Report with appendices. (Canberra, Commonwealth Government Printer, 1957.)

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In the discharge of its wider bibliographical responsibilities, the Library publishes the Australian National Bibliography (monthly with an annual cumulation), which lists books, pamphlets, maps, prints, sheet music, government publications, the first issue of each new periodical or newspaper, and moving picture films produced in or relating to Australia. Commonwealth and State official documents, both monographic and serial, are listed in Australian Government Publications (annual). The Library has also compiled a union catalogue of serials in the social sciences and humanities in Australian libraries, and in 1961 began publication of the National Union Catalogue of Current Monographic Accessions. Preliminary steps have also been taken for a retrospective union catalogue of monographic holdings of Australian libraries.

In 1956, the Australian Bibliographical Centre was established within the National Library to serve as the secretariat of the Australian Advisory Council on Bibliographical Services. The Council, made up of representatives of the National Library, State libraries and library boards, the Commonwealth Scientific and Industrial Research Organization, each of the universities, and the Library Association of Australia, plans the further development and co-ordination of bibliographical services and co-operates with UNESCO and the International Advisory Committee of Bibliography. The Centre organizes bibliographical projects recommended by the Council, and operates as a centre for bibliographical information in Australia and overseas. It has published a Union List of Newspapers in Australian Libraries; Part 1: Newspapers published outside Australia (1959); and Part 2: Newspapers published in Australia (1960).

The Library acts as a central library of documentary and educational films, its film collection containing over 6,000 titles, together with Australian historical films and a great number of film strips. It published Australian Films: a Catalogue of Scientific, Educational and Cultural Films, 1940-58 in 1959 and a first supplement in 1960. A revised edition of the Catalogue of 16-mm. Films, which lists all films available for loan, was also published in 1960. Special efforts are being made to discover and preserve samples of early Australian film production.

Through its Extension Division, the Library conducts the Canberra Public Library Service for residents of the Australian Capital Territory, to whom 435,000 books were loaned during 1960-61. It also assists in the provision of similar services in the Northern Territory, the Territory of Papua-New Guinea, and Norfolk Island.

The National Library's collections contain approximately 675,000 volumes, 32,000 pictures, prints, drawings and other graphic materials, one million feet of microfilm, 65,000 maps, and nine million feet of moving picture films. Special features of the book collection are its strong holdings of Australiana, of materials relating to the Pacific area and to east and south-east Asia, the publications of foreign governments and international organizations, and works in the social sciences, particularly in political theory and economics.

- (ii) Patent Office Library. The Library of the Commonwealth Patent Office, Canberra, contains approximately 9,000 books and a wide variety of periodicals and other literature relating to pure and applied science, industrial technology and the industrial property (patent, trade mark, design and copyright) laws and practice of most countries. Patent specifications of inventions are received from the principal countries of the world; present holdings are more than 7,000,000. 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.
- (iii) Commonwealth Scientific and Industrial Research Organization. The library holdings of the Organization cover the pure and applied sciences. In addition to the Head Office Library in East Melbourne, each of the Divisions and Sections has a specialized collection covering such subjects as food preservation, forest products, chemistry, physics, animal health and fisheries. The collections are particularly strong in the publications of oversea scientific and technical research institutions, with many of which extensive exchange arrangements have been made.

The Head Office library maintains a union catalogue of the holdings of all C.S.I.R.O. libraries, and is responsible for the following publications.

- (a) Scientific Serials in Australian Libraries.
- (b) Australian Science Index. Index of articles published in Australian scientific and technical periodicals.

(c) C.S.I.R.O. Abstracts, which includes abstracts of papers published by C.S.I.R.O. officers, C.S.I.R.O. translations, translations available from other Australian organizations and additions to the British Commonwealth Index of Scientific Translations.

The larger libraries in the Organization have photocopying facilities which, while normally for internal use, will provide a service for the public when a publication is not held elsewhere in Australia.

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

The printed records section contains approximately 65,000 volumes, a large collection of military maps, newscuttings and newspapers, sound recordings of war leaders, personalities and events, war posters and postage stamps. Many personal collections by distinguished soldiers and historical documents relating to the wars have also been placed in the Memorial's custody for preservation.

Written records comprise correspondence files of headquarters and units of both World Wars, and the original war diaries compiled from day to day by each unit during its service.

The collection of official war photographs covering the 1914-18, 1939-45 and Korean Wars numbers over 250,000, and a collection of official motion picture film depicts Australia at war.

Facilities for public research are not yet fully developed, but all requests for information are met where practicable.

- (v) Other Commonwealth Government Libraries. Most Commonwealth authorities have specialized collections in their own fields, and in addition draw largely on the National Library.
- 3. States. (Other than University Libraries, for which see p. 620).—(i) State Public Libraries. In each of the capital cities there is a well-equipped public library, the libraries in Melbourne and Sydney, especially, comparing very favourably with similar institutions elsewhere in the world. The following statement gives the number of volumes in the public library of each capital city at 30th June, 1960.

STATE PUBLIC LIBRARIES, 30th JUNE, 1960.

				Num				
City.				Reference Branch.	Ordinary Lending Branch.	Country Lending Branch.	Total.	
Canberra(a)			•••	675,000		(b)	675,000	
Sydney				(c) 582,752		(d) 152,381	735,133	
Melbourne				668,267	117,433	46,013	831,713	
Brisbane				139,530	'	63,746	203,276	
Adelaide				194,933	(e) 72,086	99,742	366,761	
Perth				187,057	(f) 174,146		361,203	
Hobart				78,110	(g) 148,418	122,712	349,240	
Darwin(h)				l'	37,854	'	37,854	

(a) National Library of Australia, including Parliamentary Section. (b) Books are lent to libraries or students throughout Australia wherever necessary for research work. (c) Includes 168,791 volumes in the Mitchell Library and 12,322 volumes in the Dixson Library. (d) Includes 1,943 volumes in the Model School Library. (e) Includes 24,693 volumes in the Children's Branch. (f) Public libraries and circulation stock. (g) Includes 120,986 volumes in the Children's Branch. (h) Northern Territory Library Service. Includes the Country Lending Branch and the Children's Branch.

(ii) New South Wales. The Free Library movement in New South Wales, founded for the establishment of a system of public libraries on the basis suggested in the Munn-Pitt Report of 1935, helped to pave the way for the Library Act 1939, which was fully proclaimed as from 1st January, 1944. Of the 167 councils which have adopted the Library Act, 150 have put their adoption into effect. During 1960-61, they spent on their libraries £1,303,669, including £399,465 received in subsidy. There are 190 libraries, of which 49 are in the metropolitan area and 141 in the country. There are also 15 bookmobiles, of which two are in Sydney, six in the suburbs of Sydney and seven in country municipalities and shires. These libraries contain 2,205,385 volumes.

New South Wales departmental libraries are staffed by officers attached for duty from the State Library, which also provides a central cataloguing service for municipal and shire libraries constituted under the 1939-1959 Act. The State Library maintains an adult education section servicing adult education activities for the universities of Sydney and New England and the Workers' Educational Association.

The Country Circulation Department forwards books on loan to State schools, to municipal and shire libraries and to individual students. During 1960-61, 97,782 books were lent to small State schools, and 1,843 to country libraries, while 44,007 reference works were lent to individual country students and to libraries to satisfy special requests.

The State Library, known as the Public Library of New South Wales, includes a general reference department of 412,150 volumes, together with the Shakespeare Tercentenary Memorial Library, and the Mitchell and Dixson Libraries and Galleries which are mainly devoted to Australian and Pacific material. The Mitchell Library, of more than 60,000 volumes and pamphlets and 300 paintings, was bequeathed to the trustees of the Public Library in 1907 by Mr. D. S. Mitchell, together with an endowment of £70,000. There are now 172,820 volumes in the library, in addition to valuable manuscripts, maps and other material. In 1929, Sir William Dixson gave a collection of historical pictures then valued at £25,000. These were subsequently added to, and at his death in 1952 Sir William bequeathed the whole of his collection of books, manuscripts, pictures and other material, together with an endowment of more than £113,000, mainly for the printing or reprinting of historical documents relating to Australia and the Pacific.

The total number of volumes in the State Library now exceeds 730,000, apart from manuscripts, historical pictures, and other material.

The maintenance and control of the ordinary lending branch of the Public Library were transferred in 1908 to the Sydney Municipal Council to become the City of Sydney Public Library.

The State Library, which had previously been the repository for State archives, transferred this responsibility to an Archives Authority in June, 1961. The Authority consists of nine members, one of whom the Trustees of the Public Library have a right to nominate.

Other important libraries in New South Wales are the Sydney Public Library, 201,717 volumes; Teachers' Colleges, 197,177; Railways Institute, 163,500; Technical Education Branch, 87,146; Government Transport Institute, 35,905; Australian Museum, 33,081; New South Wales Public School Teachers' Federation Library, 20,500; Workers' Educational Association, 14,500; and the Library at the National Herbarium, 10,120 volumes. At 30th June, 1961, the Parliamentary Library contained 137,602 volumes.

(iii) Victoria. Until the establishment of the Free Library Service Board in 1947, the only public library facilities available in Victoria (apart from those of the State Public Library and one or two Metropolitan Municipal Libraries) were those offered by about 200 Mechanics' Institute Libraries situated in country areas all over the State. The Board's policy has been to replace these services with modern public libraries controlled by local Municipal Councils and subsidized by the Board. Since the Board's inception, 91 municipalities have established libraries. Of these, 20 are in the city and 71 in the country. An amount of £309,000 was paid to the Councils in library subsidy for the year 1960-61 and £615,000 was expended in municipal library service for the same year. More than 1,500,000 books are available to the communities in which libraries are established.

A feature of the services provided in the country is the number of co-operative or regional library groups now being developed. These services, of which there are seventeen, comprising a total of 57 Councils, consist of groups of Councils which pool their financial resources, book-stocks and trained staff, in order to provide more comprehensive, efficient library facilities.

Approximately 140 Mechanics' Institute Libraries are still in existence in country areas. In 1960-61, 52 of them shared a grant of £2,000.

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

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

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

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

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

The holdings of the Public Library of Queensland and its extension services in 1960-61 were:—Main Reference Collection, 124,061 volumes and 6,598 maps and pamphlets; Country Extension Service, 68,971 volumes; Oxley Memorial Library, 20,381 volumes and 8,901 maps, pamphlets and miscellaneous items.

Local authorities are empowered by the Libraries Act to establish and conduct library services as a function of local government. The Board encourages local authorities to use these powers. In 1960-61, 67 local authorities were conducting 93 library services and 10 others indicated that they would do so in the near future. The Brisbane City Council has established 12 of these libraries. There were 73 libraries in Queensland free to adults.

To help overcome the problems of large area and sparse population, various local authorities provide library services on a regional basis. By 30th June, 1961, four regional library services had been established:—the South Western (six shires), the Central Western (seven shires), the North Western (six shires), and the Central Highlands (five shires), with head-quarters at Charleville, Barcaldine, Mt. Isa and Emerald respectively. Other regional services are being planned.

During 1960-61, the Board received a grant of £182,829 from consolidated revenue to finance the activities of the Public Library and to pay subsidies to local bodies of fifty per cent. on the purchase of books and the acquisition or improvement of library buildings and equipment. Subsidies were paid to four regional library service boards, 47 local authorities, 44 schools of arts and seven other bodies.

The library of the Parliament of Queensland was established in 1860. At 30th June, 1961, the library held 89,121 books and pamphlets, consisting of official publications and books devoted largely to history, the social sciences, biography and literature.

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

(v) South Australia. In the reference department of the Public Library of South Australia, there are about 199,000 volumes, most of which may be borrowed. Over 3,000 periodicals are filed, and the collection of newspapers includes every newspaper printed in South Australia. There are 39,000 volumes in the lending department available to persons living in the metropolitan area, and the country lending service has 125,000 volumes, of which more than half are suitable for children.

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

The library of the Parliament of South Australia held approximately 65,000 volumes at 31st December, 1960.

There are eleven local public libraries in South Australia provided by eight local government authorities. The libraries are subsidized on a £1 for £1 basis by the State Government. The Library Board of South Australia, through the Public Library of South Australia, provides various central services. Book-stocks are pooled in the Public Library of South Australia and are interchanged between the libraries.

At the end of June, 1961, these local public libraries contained 43,000 books. There were 25,000 registered borrowers. In the year 1960-61, 351,000 books were lent.

(vi) Western Australia. In 1955, the Library Board of Western Australia was made responsible for all public library services throughout the State to which the State Government contributes funds.

The Board has the following major functions:-

- (a) To encourage local authorities throughout the State to establish public libraries, and to provide as a State subsidy all books and bibliographical services necessary for such libraries when established;
- (b) to administer the State Library;
- (c) to advise the Government on all matters relating to libraries;
- (d) to provide for the training of librarians.

Local public libraries are subsidized on a £1 for £1 basis, the local authority providing accommodation and staffing, and the Board all books and related services. The Board provides at least one volume per head of the population. All non-fiction books may be made available at any public library throughout the State on request to the Board. All cataloguing is done by the Board. The first library under this scheme was opened in August, 1954. By 30th June, 1961, 47 libraries had been established.

The State Library, established in 1887, is the reference division of the Library Service of Western Australia. In addition to providing the normal facilities of a reference library for the metropolitan area, it extends its service throughout the State through local public libraries. It is divided into four subject departments as follows:—

J. S. Battye Library of West Australian History;

Library of Business, Science and Technology;

Library of Social Sciences, Philosophy and Religion;

Library of Literature and the Arts.

The State bibliographical centre is housed at the State Library and there is also a commercial information centre. The State archives are maintained by the State Library and managed by the staff of the Battye Library. The State Library is fully equipped with microfilm and photocopy apparatus.

The book-stock of the Board at 30th June, 1961, was approximately:—

Lending library services (including books in public libraries), 222,000 volumes; State Library, 191,000 bound volumes.

The University of Western Australia, through its Adult Education Board, manages the Adult Education Library of some 18,000 volumes of general reading and fiction. Books are sent to country readers each month.

There are some 100 special libraries in government departments and industrial firms.

Union catalogues of periodicals and books received in the libraries of all types in the State are maintained by the Library Board of Western Australia in the bibliographical centre of the State Library.

(vii) Tasmania. The Tasmanian Library Board, constituted in 1944, is responsible for administering the State library head-quarters in Hobart, for the extension of library services throughout the State and for the control of State aid for libraries. State aid to municipalities is provided in the form of books of a value equal to the amount of library rates collected. The total cost of library services to the State during 1960-61 amounted to £128,644.

The Tasmanian Library Board provides lending and reference services for the people of Hobart, and operates a reference service for people throughout the State. In addition, it conducts screenings of documentary films, recitals of recorded music, lectures, library weeks in country centres, puppetry demonstrations, etc.

The Parliamentary Library works in close collaboration with the State Library, which provides a reference officer to serve members during session. It catalogues all new books added to the library and supplies recreational reading.

4. University Libraries.—(i) General. These libraries provide material not only for the education of graduates and undergraduates, but also for research workers and practical investigators all over the continent. Much of the material they contain is not available elsewhere, for although in most cases smaller, they are in many directions more highly specialized than the public libraries. They lend to one another and to State and private institutions as well as to individual investigators. Each of them is governed by a librarian, who is responsible as a rule to an executive sub-committee and a committee which is practically co-extensive with the professional staff. In size, the library of the University of Sydney is the fourth library in Australia, and the libraries of the Universities of Melbourne and Adelaide are respectively eighth and ninth. The following table shows the sizes, accessions during the year, and expenditure of the Australian university libraries; borrowing statistics are not shown, as they differ too widely to be comparable without considerable explanation.

UNIVERSITY LIBRARIES, 1960.

Universi	ity or College	•	1	Volumes.	Accessions during year.	£ 68,920 39,670 196,082		
			-			£		
Australian National	University		}	157,864	10,989	68,920		
Canberra University	College(a)			71,184	8,814	39,670		
Sydney(a)				647,130	79,729	196,082		
New South Wales				151,970	30,756	151,054		
New England(a)				107,823	15,150	58,835		
Melbourne(a)				292,243	22,972	136,535		
Monash(a)			1	10,000	10,000	26,720		
Queensland				221,998	24,823	101,788		
Adelaide				255,829	12,217	96,140		
Western Australia				184,790	12,591	70,002		
Tasmania(a)	• •	• •		125,000	8,173	49,676		
Total				2,225,831	236,214	995,422		

(a) Includes pamphlets.

- (ii) Australian National University. This library consists of two main collections; the former Australian National University Library, founded in 1948, serves primarily the Institute of Advanced Studies, and the former Canberra University College library, founded in 1938, serves primarily the School of General Studies. At the end of 1961, the stock comprised about 255,000 volumes including some 50,000 volumes in oriental languages. The collection serving the Institute of Advanced Studies specializes in the fields of the physical and medical sciences, excluding clinical works, and in the social sciences it aims to provide a good working collection while giving consideration to the holdings of the Commonwealth National Library. It possesses significant collections in anthropology, linguistics, mathematics and mathematical statistics. The collection serving the School of General Studies has been built up to meet the needs primarily of undergraduates in the Faculties of Arts, Economics, Law and Science, and will develop strength as a research collection in the humanities.
- (iii) University of Sydney. This library consists of the central collection which is known as the Fisher Library, the Law Library, the Medical Branch Library, the Burkitt Library for preclinical medicine, and some fifty-two departmental libraries. The University Library together with departmental libraries, held 718,707 volumes in December, 1961. Associated libraries in the University grounds bring the grand total to 963,872 volumes.

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The first books were acquired in 1851, and shortly afterwards the library of Sydney College was added. The notable collection of Nichol D. Stenhouse was acquired in 1878 as the gift of Thomas Walker. In 1885, Thomas Fisher bequeathed the sum of £30,000, the income from which is used as a book fund. The Fisher Fund was matched in 1961 by establishment of the W. H. and Elizabeth M. Deane Library Fund. Perhaps the finest collection in extent and importance which has been given to the University is that of Sir Charles Nicholson. There have been numerous other benefactions, among which may be mentioned the library of Sir Francis Anderson, the W. H. Deane collection of books and manuscripts and the Dalley-Scarlett music library. In 1961, the University acquired the notable English literature collection of the late Hugh Macdonald. Sydney University Library has an extensive collection of mediaeval manuscripts and early printed books.

- (iv) University of New South Wales. The libraries of this University consist of the Central Library at Kensington, a Medical Library at present at Prince Henry Hospital, and the Newcastle University College Library. The Broadway campus is serviced by the Sydney Technical College Library, where 37,167 books from the University's library are placed. Service to University divisions at other centres is also provided by the Technical Education Department. In December, 1961, the university had 193,841 volumes in its libraries or located in Technical Education Department libraries.
- (v) University of New England. The Dixson Library was founded in 1938, when the New England University College was established. Sir William Dixson was its first benefactor. The library is now housed in a three-storied building, air-conditioned and containing all facilities. The library has approximately 100,000 volumes and receives 2,150 current periodical titles annually. The library is able to accommodate 200 readers and 278,000 volumes. A fourth floor is to be built later to house a further 120,000 volumes. The building also houses a bindery, photographic and archives division. The library has its own training officer and conducts formal courses in librarianship.
- (vi) University of Melbourne. Early in 1854, the first allocation for books was made, but the library was housed in temporary quarters until 1959. The W. L. Baillieu Trust made available the first instalments of a £100,000 gift for building purposes, which have been followed by subsequent gifts and substantial grants from the Commonwealth and State governments, and a new building costing £700,000 was occupied at the beginning of 1959, the first in the University to be designed specifically for library purposes. It provides space for 1,300 readers and 300,000 books. During the academic year, admissions of readers to the building average nearly 8,000 a day and the library's services to the University have practically quadrupled since the occupation of the new building. Most of the books are accessible on open shelves, and though the library is intended primarily for reference purposes, borrowing, except of textbooks and certain valuable volumes, is made as easy as possible. The resources of the library are also used extensively on inter-library loan by industries and other organizations throughout Australia. The University Library, including 13 branch libraries in various departments, is administered from the centrally situated Baillieu Library, and at the end of 1961 it contained approximately 311,000 books and pamphlets. The large medical branch library is specially rich in periodicals.
- (vii) University of Queensland. This library was founded in 1911. The main library is in its own building in the University at St. Lucia, and there are a considerable number of departmental libraries. All books are in open access and most are available for borrowing. At 30th November, 1961, the library contained more than 251,000 volumes. The main library includes a special collection of material relating to the history, development and culture of the countries surrounding the Pacific Ocean.
- (viii) Adelaide University. This library bears the title of its original benefactor, Robert Barr Smith, who, with members of his family in and after 1892, gave the university over £50,000 for the library. Although readers have access to all parts of the library, the book collection is in two divisions, a collection of some 25,000 of the most frequently used books being kept in the main reading room, and the remainder, consisting of older or more specialized books, being shelved on the four levels of the extensions. Bound periodicals are shelved in steel stacks under the main reading room. Borrowing facilities are available to all matriculated students, to country students and to graduates. There are branch libraries for medicine, law and music. The British Medical Association (S.A. Branch) and the Australian Physiotherapy Association (S.A. Branch) make annual contributions towards the maintenance of the medical library in return for borrowing privileges for their members. The Waite Agricultural Research Institute has a separately administered library of publications in agriculture.

- (ix) University of Western Australia. The first permanent library staff was not appointed until 1927. Provision for a permanent library was not possible when the university moved to its present site, and space and facilities have consequently been inadequate. In 1960, a temporary annexe capable of holding some 200 readers and 30,000 volumes was provided. The first stage of the new library building is included in the buildings approved by the Australian Universities Commission for completion in the 1961-63 triennium. The University Library developed very slowly in the early years, but recently has been adding about 12,000 volumes a year to its stock and making good earlier deficiencies. In addition to the Central Library, there are a number of departmental libraries of which the more important are engineering, agriculture, pre-clinical and law. There is also a medical library, in accommodation provided by the Royal Perth Hospital, for the use of the medical school.
- (x) University of Tasmania. Although this library was founded in 1893, a full-time librarian was appointed for the first time at the end of 1945. Since 1954, a Hobart Union List of Serials has been housed in and kept up to date by the University Library, thus providing a major reference tool for all bibliographic inquiries in the State. At the end of 1961, the library contained approximately 132,000 volumes, and receives 2,500 periodicals currently. The University Library also collects private and business archives and it has some important classical manuscripts as well as a collection of early printed books.
- 5. Children's Libraries and School Libraries.—(i) 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 have trained teacher librarians.
- (ii) Victoria. Under the auspices of the Free Library Service Board, 91 municipal children's libraries have been, or are being, established as part of the library services provided by the councils concerned. All these libraries provide comprehensive modern children's book collections which are constantly being augmented. An annual grant of £5,000, which is additional to the ordinary annual municipal library grant, is provided to assist these libraries. In addition, seven independently controlled children's libraries shared in this grant in 1960.

The Education Department is making provision for the building of library rooms in new schools. Where accommodation is available in existing schools, library furniture is provided free of cost to the schools and the government subsidises the purchase of books. In June, 1960, 350 schools had central libraries.

A scheme of circulating libraries for small schools, particularly in remote areas, has been operating for some years. Two hundred and ninety schools benefited from this scheme in 1960.

The Department has a Library Service Officer with a small staff to advise and assist schools in the establishment and organization of libraries. A one-year course for the training of teacher-librarians was established at Melbourne Teachers' College in 1955. Approximately 20 teachers are trained each year.

- (iii) Queensland. The Library Board of Queensland stresses to local bodies the importance of providing adequate library services for children. There are in Queensland 90 libraries free to children, of which 10 are conducted by the Brisbane City Council. The children's libraries at Rockhampton, Toowoomba, and Townsville are particularly active. Country children who are not catered for locally may borrow from the Country Extension Service which possesses a separate children's collection. The purchase of books in State school libraries in Queensland is financed by school committees and parents' associations, with a subsidy from the Department of Education on a £1 for £1 basis. Trainees at the Teachers' College are instructed in school library organization and management.
- (iv) South Australia. A children's library of 27,000 volumes is used by school classes and individual children living in the metropolitan area. Except for works of reference, all books are available for loan. In August, 1957, a youth lending service was opened for young people from 13 to 18 years of age. It has a stock of 10,000 volumes.
- (v) Western Australia. The State Education Department makes library subsidies and grants to schools.

All high schools are provided with a library room and furniture, and trained teacherlibrarians are appointed to them. Building plans do not provide for primary school libraries, but a number of the schools have set up central libraries when rooms have become available.

One-teacher and two-teacher schools are served by the Charles Hadley travelling library and the small schools fixed library services. Under the fixed library scheme, permanent libraries of reference books and encyclopaedias were placed in each such school. Books to the value of £15 were added to each of these libraries annually from 1948 to 1954. Since then, the grant for these books is made at three-year intervals. The Hadley library provides recreational reading and operates 348 boxes which are exchanged every three months. The government grants £500 per annum for this service, and the participating schools contribute the commission received from the Commonwealth Sayings Bank—about £140.

Children in isolated areas who are unable to attend school are catered for by books sent out by the State Correspondence School's library. The children are kept in touch with the library by means of radio talks and leaflets issued periodically.

(vi) Tasmania. The Lady Clark Memorial Children's Libraries, at the State Library, Hobart, aim to serve all children in Tasmania with books. At 30th June, 1961, 202 children's libraries and depots had been established.

Practically all State secondary schools in Tasmania have libraries, with full-time librarians in six of them. A school's library service gives a book service to schools and assists schools wishing to set up their own libraries. In 1961, the number of schools receiving service was 96 and the number of books issued was 12,734.

- 6. Special Libraries.—Before the 1939-45 War, the number of special libraries, apart from those maintained by government departments, was small, but during recent years many manufacturing, commercial, research and other firms, as well as statutory bodies, have found it necessary to establish special libraries to serve their staff. These libraries, which are most numerous in Sydney and Melbourne, are being administered increasingly by trained librarians.
- 7. Microfilms.—The following libraries supply microfilm or photostat copies of material usually at a small charge (the letter "P" signifies photostat supplied and "M" microfilm supplied):—Australian Capital Territory—Australian War Memorial (P), National Library of Australia (PM), C.S.I.R.O. (M), Australian National University (M), Patent Office (P); New South Wales—Metropolitan Water, Sewerage and Drainage Board (P), Public Library of New South Wales (M), Standards Association of Australia (P), School of Public Health and Tropical Medicine (M), Fisher Library, University of Sydney (PM); Victoria—Commonwealth Serum Laboratories (P), Technical Information Section, Munitions Supply Laboratories (PM), Public Library of Victoria (M), Standards Association of Australia (Melbourne Branch) (P), University of Melbourne (PM), C.S.I.R.O. (M); Queensland—Public Library (P); South Australia—Public Library of South Australia (PM), University of Adelaide (PM), Waite Agricultural Research Institute (P); Western Australia—State Library (PM); Tasmania—University of Tasmania (PM).

§ 2. Public Museums.

1. New South Wales.—The Australian Museum in Sydney, founded in 1836, is the oldest in Australia. In addition to possessing fine collections of Australian fauna, the museum contains valuable anthropological and mineral collections. The number of visitors to the institution during 1959-60 was 318,400 and the average attendance 826 on week-days and 1,217 on Sundays. The expenditure for 1959-60 amounted to £189,415. A valuable library containing 33,000 volumes is attached to the museum. Courses of evening popular lectures are delivered and lecturers also visit distant suburbs and country districts, and afternoon lectures for school children are provided; 10,540 children attended during 1959-60. Representative collections illustrative of the natural wealth of the country are to be found in the Agricultural and Forestry Museum and the Mining and Geological Museum. The latter institution prepares collections of specimens to be used as teaching aids to country schools. The "Nicholson" Museum of Antiquities, the "Macleay" Museum of Natural History and the Museum of Normal and Morbid Anatomy attached to the University of Sydney, and the National Herbarium and Botanical Museum at the Sydney Botanic Gardens, are all accessible to the public.

There is a Museum of Applied Arts and Sciences in Sydney with branches in three country centres. Valuable research work is being performed by the scientific staff in connexion with oil and other products of the eucalyptus and the gums, kinos, tanning materials, and other economic products of native vegetation generally. Expenditure during the year 1959-60 was £70,931.

- 2. Victoria.—The National Museum at Melbourne, devoted to natural history, geology and ethnology, is in the eastern section of the public library building. The Institute of Applied Science, also housed under the same roof, contained at 30th June, 1960, 24,000 exhibits which covered applied and economic aspects of all branches of science. There is a fine Museum of Botany and Plant Products in the Melbourne botanic gardens. In addition to the large collection in the geological museum attached to the Mines Department in Melbourne, well-equipped museums of mining and geological specimens are established in connexion with the School of Mines in the chief mining districts.
- 3. Queensland.—The Queensland Museum, founded in 1855, is the State museum of natural science. It is a Government sub-department and is maintained by the State. The collections comprise extensive exhibited and reference series, mainly in the fields of zoology, geology, and ethnology, and some mechanical and historical material is held with a view to future museum development. Lessons supported by film displays are arranged for the public, and an annual refresher course in natural science is conducted for teachers. The museum is now the recognized State depository for valuable material in natural science, and the collections in general are constantly being increased. In addition, the Museum contains the outstanding library of the State in the fields of zoology, geology and anthropology.
- 4. South Australia.—The South Australian Museum has considerable collections of most branches of natural history. In 1960-61, there were at least 277,000 visitors and expenditure was £73,422.
- 5. Western Australia.—The Western Australian Museum was established in 1895. It is under the statutory management of a board of five members, appointed by the State Government, but operates under its own director and staff. It is primarily a museum of natural history, with active departments of vertebrate and invertebrate zoology, palaeontology, entomology, archaeology and anthropology. Principal research interests are in the fauna of Western Australia and the ethnology of the Western Australian aboriginal.

The Education Department of Western Australia provides a teacher to the Museum who instructs visiting classes and who is in charge of a Children's Centre during school holidays, Members of the Museum staff also take part in the teaching of undergraduates at the University of Western Australia.

6. Tasmania.—There are two museums in Tasmania—the Tasmanian Museum at Hobart, and the Queen Victoria Museum and Art Gallery at Launceston—both of which contain valuable collections of botanical, mineral and miscellaneous products. The museum received aid from the Government during 1960-61 to the extent of £32,500.

§ 3. Public Art Galleries.

- 1. New South Wales.—The Art Gallery of New South Wales originated in the Academy of Art founded in 1871. At the end of 1960, its contents comprised 1,498 oil paintings, 963 water colours, 2,579 prints and drawings, 141 sculptures and casts, and 1.332 ceramics, works in metal and miscellaneous. Since 1895, loan collections of pictures have been exhibited regularly in important country towns. The expenditure for 1960-61 was £73,662.
- 2. Victoria.—The National Gallery at Melbourne at 30th June, 1960, contained 1,266 oil paintings, 7,897 objects of statuary, bronzes, ceramics, etc., and 9,147 water colour drawings, engravings and other prints. The gallery is situated in the same building as the museum and public library. Expenditure by the National Gallery in 1959-60 was £90,868, including £17,559 from both government grants and legacies for purchases of works of art. Several bequests were made to the institution by private citizens. There are provincial art galleries at Ballarat, Bendigo, Castlemaine, Geelong, Hamilton, Mildura, Shepparton, St. Arnaud and Warrnambool, to which, periodically, pictures are sent on loan from the National Gallery.
- 3. Queensland.—The Queensland Art Gallery, maintained by the State Government, was established in 1895.

During 1959, the Government passed a new Queensland Art Gallery Act re-organizing the gallery, appointing a new Board of Trustees and granting a site for the building of a new art gallery.

The collection has been enriched by numerous bequests. In 1959, an anonymous gift of £126,000 was devoted to the purchase of an important collection of modern French paintings. The collection comprises 503 oils, 649 watercolours and drawings, 74 sculptures and 195 art objects.

- 4. South Australia.—The National Gallery at Adelaide originated in an exhibition of pictures in the public library building in 1881. Many bequests made by private citizens have materially assisted its growth. At 30th June, 1961, there were in the gallery 1,919 paintings in oil, water colours and pastels, 108 items of statuary and large collections of drawings, prints, furniture, ceramics and coins. The expenditure during 1960-61 was £46,042.
- 5. Western Australia.—The Western Australian Art Gallery was established in 1895. Although under the statutory management of a board of five members, appointed by the State Government, it functions under its own director and staff. At 30th June, 1961, the collection included 378 oil paintings, 209 water colours, 10 pastels, 795 drawings, 578 prints, 1,067 reproductions, 9 miniatures and 29 pieces of sculpture. International and interstate exhibitions are frequently held, and travelling exhibitions are sent to country centres.
- 6. Tasmania.—In Tasmania, the Art Gallery at Hobart was opened in 1887. In June, 1961, it contained 220 oil paintings, 186 water colours, 127 black and white, 3 statuary and 159 etchings, engravings, etc. Expenditure in 1960-61 was £27,517.

The Art Gallery at Launceston was opened in 1891. In June, 1961, there were on view 241 oil paintings, 360 water colours, 143 black and white, and 251 miscellaneous exhibits. Expenditure in 1960-61 was £18,128.

§ 4. The Commonwealth Literary Fund.

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

In 1939, in an endeavour to encourage the development of Australian literature and to foster appreciation of it, the Commonwealth Government greatly enlarged the scope of the Fund. The Fund now awards a limited number of Fellowships each year, assists in the publication of manuscripts of high literary merit, makes annual grants for lectures in Australian literature, and awards pensions to writers who have achieved a nation-wide reputation for their work in the field of creative literature.

The Fellowships are awarded each year to writers who have proved their capacity to do creative work in the field of literature, but who are prevented from exercising their abilities because of financial circumstances. The Fellowship gives a writer the opportunity to devote all his time to creative writing for a period of up to one year. Since 1956, the Fellowships have had a maximum value of £1,000 per annum. The Fund does not seek out people on whom to bestow Fellowships, but considers only those who submit applications.

The Fund also assists in the publication of manuscripts which have outstanding literary merit, but which would not be commercially attractive propositions. This assistance takes the form of a guarantee of assistance to the publisher. The Fund does not itself enter the field of the publisher.

Since 1940, annual grants for lectures in Australian literature have been made to universities. In 1956, the Fund decided to initiate a scheme of lectures to the general public and to schools in both city and country areas, with the co-operation of State Adult Education authorities. Annual grants are now made to the State Adult Education authorities for this purpose.

The Fund also assists certain literary magazines of long standing and recognized literary value.

The Fund is administered at present by a Committee consisting of the Prime Minister (Chairman), the Leader of the Country Party and the Leader of the Opposition in the House of Representatives, assisted by an Advisory Board of five persons with special literary qualifications.

§ 5. Film Censorship Board.

1. Legislation.—The Commonwealth Government's powers over censorship of films extend only to imported films and imported advertising matter and stem from the Customs Act. Under that Act, the Customs (Cinematograph Films) Regulations provide for the appointment of a Film Censorship Board whose function is to ensure that films and related advertising material coming within certain defined categories are not admitted into Australia. Under those regulations, the Film Censorship Board may pass films in their original form, reject them, or pass them after eliminations have been made. The Commonwealth Regulations give the Board no power to classify films.

Legislation passed by the State Governments of Victoria, Queensland, Western Australia and Tasmania names the Commonwealth Film Censorship Board as the censorship authority and vests in it the power to classify films as suitable for general exhibition or otherwise.

The State Acts give the Commonwealth Board the authority to censor films made in Australia for commercial exhibition and advertising matter made in Australia.

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

2. Import of Films.—(i) 35 mm. Films for Exhibition in Motion Picture Theatres. In 1961, 1,161 films comprising approximately 4½ million feet were censored. This represents approximately 832 hours' screening time. Four hundred of these films originated in the United States of America, 416 in the United Kingdom and 345 in other countries. Of the last-mentioned, U.S.S.R. 68, Italy 37, France 33, Greece 28, Germany 17 and Czechoslovakia 13, were the principal suppliers.

Included above were 450 full-length feature films which constitute the main theatrical attractions. This was an increase of 49 compared with the imports for 1960. Feature films came from:—the United States of America 172, the United Kingdom 135, Italy 29, Russia and Greece 27 each, France 15 and Germany 6.

Nine feature films were rejected and cuts were made from 152. There were eight appeals, five against rejection and three against cuts. Four were allowed and four disallowed.

Feature films classified as suitable for general exhibition numbered 260 and 190 were not suitable for children. Of the latter, 43 carry the special condition that all advertising shall indicate that they are suitable only for adults. These classifications are advisory only and are designed to enable picture-goers and particularly parents to obtain a general idea of the nature of any particular film.

In addition to these imported films, 411 35mm. films of 281,514 feet produced in Australia were cleared. These were mainly newsreels and documentaries and concerned the Board only when intended for commercial exhibition or export. This figure does not represent the total production in Australia.

(ii) 16mm. Films. Apart from television films, these are largely confined to those commercially produced for use in certain country picture theatres, in theatrettes used by business undertakings for advertising and instructional purposes, in churches, schools and universities, and on home movies. These are of all types—dramatic, scenic, topical, medical, advertising, educational, religious, etc.

Excluding those imported for television use, 5,619 16mm. films of approximately four million feet were examined. There were three rejections but no eliminations. 16mm. films imported for television are dealt with below (see (iv)).

- (iii) 8mm. and 9.5mm. Films. The Board's responsibilities in regard to these have been removed to a large extent, following the decision to discontinue the censorship of films brought in by travellers depicting incidents during their travels. Periodical checks are made and only commercially produced films are examined. Of these, approximately 15,000 feet were censored. Eight films, totalling 700 feet, were rejected.
- (iv) Television Films. 9,037 films, predominantly 16mm., of approximately 11 million feet, for use on television, were censored.

The number of films is not a true indication of volume because many of these were of very short duration. The screening time of films censored for television amounted to approximately 4,962 hours.

On a footage basis, the United States of America supplied approximately 83 per cent. of the total imports and the United Kingdom 13 per cent.

Twenty-three television films were rejected outright and an additional nine were classified as unsuitable for televising. Eliminations were made from 1,446. There were five appeals against rejection, of which two were upheld and three disallowed.

(v) Foreign Language Films. Countries other than the United Kingdom and the United States of America supplied 345 of the 35mm. films imported for theatrical exhibition. Of these, 143 were feature films.

Generally, the dialogue is in a foreign language with explanatory English captions. A few have an English commentary, and in isolated cases, English "dubbed" dialogue. The main countries of origin are shown above (see (i)).

Of 5,619 16mm. commercial films censored, 854 originated from non-English-speaking countries. The chief supplying countries were Germany 156, France 134, Malaya 74, Czechoslovakia 65, Holland 63, Japan 58, Switzerland 50, Italy 40 and Sweden 36.

An interpreter attends all censor screenings of films in a foreign language.

3. Export of Films.—The quantity of films exported for the year was approximately 2,000,000 feet. This footage includes, in many cases, several prints of the one film.

§ 6. Australian National Film Board and the Film Division.

1. The Australian National Film Board.—The Australian National Film Board was inaugurated in April, 1945, on the recommendation of a Commonwealth Government inter-departmental committee which considered the suggestions of a conference of interested individuals and Commonwealth and State officials, including Directors of Education, called in November, 1944, by the Ministers for Information and Post-war Reconstruction. It was attached, for administrative purposes, to the Department of Information.

With the abolition of the Department of Information in March, 1950, administration of the Board was transferred to the News and Information Bureau, Department of the Interior.

In November, 1950, the Board was reconstituted as an advisory body to the Minister for the Interior on matters concerned with the production, acquisition and distribution of films required by Commonwealth departments for the following purposes:—

- (a) 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;
- (b) 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 encourage immigration.

The constitution provides for a membership of eleven with the Secretary of the Department of the Interior, Chairman, the Director of the News and Information Bureau, Deputy Chairman, and the remainder representative of Commonwealth departments, State Government instrumentalities, and organizations interested in the production, distribution or utilization of films for national publicity.

2. The Film Division of the News and Information Bureau.—The first Australian Government organization for the production of motion pictures for national publicity purposes was the Cinema and Photographic Branch of the Department of Commerce, set up in Melbourne in 1920. Early in the 1939-45 War, the newly-established Department of Information was made responsible for the operation of the Cinema Branch and for an Official War Photography Unit. Production and distribution of all films required by Commonwealth Departments are now undertaken by the staff of the Film Division, News and Information Bureau, Department of the Interior, or by commercial enterprises under the supervision of officers of the Film Division. Theatrical and television distribution in Australia, and both theatrical and non-theatrical distribution overseas, of all Film Division productions are organized by the News and Information Bureau's home office or its oversea representatives. Non-theatrical distribution in Australia is organized through the National Library, Canberra, in co-operation with State film distribution agencies.

Since 1946, the Film Division has produced 409 films for general exhibition, as well as training and special purpose films. Prints are dispatched to 50 oversea centres, where distribution is arranged by News and Information Bureau officers or other Australian

representatives. In Britain, there is regular distribution through more than a thousand theatres, and a large non-theatrical and educational series of circuits. By arrangement with the British Broadcasting Corporation, items of topical interest photographed by the Film Division are flown to London for television. In the United States of America, there is wide non-theatrical distribution and considerable use of the films by television networks. An exchange arrangement with the National Film Board of Canada secures extensive distribution in Canada. Selected films have been recorded in French, Dutch, German, Italian, Japanese, Malay, Thai, Hindustani, Tamil and other Indian dialects.

In addition to films made on the initiative of the News and Information Bureau, the Film Division produces films under the sponsorship of, or with the co-operation of, Commonwealth Departments and many other bodies such as the Commonwealth Bank of Australia, the Road Safety Council, Overseas Telecommunications Commission, Snowy Mountains Hydro-electric Authority, Australian Wine Board, the Australian National University and the Australian Broadcasting Commission.

The co-operation of the Australian motion picture industry with the Commonwealth, spontaneously offered at the outset of the 1939-45 War, continues. Special films for urgent national appeals are planned, produced and distributed, with the assistance of the National Films Council of the motion picture industry and its Film Production Advisory Committee.

C. SCIENTIFIC RESEARCH.

A number of organizations for scientific research have been set up by the Commonwealth Government. These are the Commonwealth Scientific and Industrial Research Organization, the Commonwealth Observatory (now incorporated in the Australian National University), and the Atomic Energy Commission. Particulars concerning these organizations are contained in the sections which follow, together with details of the various scientific societies in Australia.

Particulars regarding Commonwealth medical research institutions are to be found in Chapter XVII.—Public Health.

§ 1. Commonwealth Scientific and Industrial Research Organization.

- 1. General.—By the Science and Industry Research Act 1949, the previously existing Commonwealth Council for Scientific and Industrial Research was re-organized under the title of the Commonwealth Scientific and Industrial Research Organization. An account of the organization and work of the former Council, and of the earlier Commonwealth Institute of Science and Industry from which the Council was formed, was given in earlier issues of the Official Year Book. (See No. 14, p. 1061 and No. 37, p. 1183.)
 - 2. Science and Industry Research Act 1949-1959.—This Act provides for-
 - (a) an Executive of the Organization consisting of nine members, to be appointed by the Governor-General, at least five of whom shall be persons possessing scientific qualifications; and
 - (b) an Advisory Council of the Organization, consisting of the members of the Executive, the Chairman of each State Committee constituted under the Act, and such other members as the Advisory Council, with the consent of the Minister, co-opts by reason of their scientific knowledge.

The powers and functions of the Organization are as follows:—(a) To initiate and carry out scientific research in connexion with primary or secondary industries in Australia; (b) to train research workers and to establish industrial research studentships and fellowships; (c) to make grants in aid of pure scientific research; (d) to establish and make grants to industrial research associations in any industry; (e) to test and standardize scientific apparatus and instruments; (f) to collect and disseminate scientific and technical information; (g) to publish scientific and technical reports and periodicals; and (h) to act as a means of liaison between Australia and other countries in matters of scientific research.

3. Science and Industry Endowment Act 1926-1949.—Under this Act, the Government established a fund of £100,000, the income from which is used to provide assistance (a) to persons engaged in scientific research; and (b) in the training of students in scientific research. Provision is made for gifts or bequests to the fund which is controlled by a trust consisting of the Executive of the Organization. In accordance with the Act, arrangements have been made to send a number of qualified graduates abroad for training in special fields of work.

4. Work of the Organization.—The activities of the Commonwealth Scientific and Industrial Research Organization have necessitated a widespread and adaptable arrangement of its research laboratories. Centralization has been avoided, in the first place by establishing laboratories in different places in the Commonwealth wherever the necessary facilities, contracts and other suitable conditions could best be found, and secondly by the establishment of a State Committee in each of the six States. These Committees are widely representative of scientific and industrial interests, and advise the Executive or the Advisory Council on general matters and on particular questions of investigation and research.

For about twelve years after its establishment, the work of the previous Council was devoted mainly to the solution of problems affecting the agricultural and pastoral industries. Unlike manufacturing concerns, which often employ their own scientific staffs, the farmers and the pastoralists are dependent on outside help for the solution of their problems which require research. It was a recognition of the greater need of the primary producer which directed the Council's early policy. In 1937, however, the Commonwealth Government decided to extend the activities of the C.S.I.R. so as to provide assistance to secondary industries, and several laboratories were established for work in that field; it was thus able to render to these industries assistance almost immediately after the outbreak of war.

For the purpose of carrying out its research work, there are established within the Organization a number of Divisions and Sections. The Divisions, of which there are now twenty-six, comprise the major establishments for which special laboratory buildings have been erected and equipped; the Sections generally include establishments which have not reached a stage of development, so far as the scope and magnitude of their operations are concerned, to justify their designation as Divisions. As the Organization's investigations extend on a Commonwealth-wide basis, and as many of the investigations which are being conducted—particularly those concerned with problems affecting the agricultural and pastoral industries—necessitate experimental work in the field, a number of field stations are established in various parts of Australia.

The Divisions which have been established are as follows.

Plant Industry, with main laboratories at Canberra and Brisbane and field stations. Entomology, with main laboratories at Canberra and field stations.

Animal Health (main laboratory in Melbourne), Animal Genetics (main laboratory in Sydney) and Animal Physiology (main laboratory in Sydney) which together comprise the Animal Research Laboratories.

Biochemistry and General Nutrition, with main laboratories at Adelaide and field

Soils, with main laboratories at Adelaide and extensive operations in the field. Forest Products, with main laboratories in Melbourne and field experiments. Food preservation, with main laboratories at North Ryde (New South Wales), and a subsidiary laboratory in Brisbane.

Fisheries and Oceanography, with main laboratories at Cronulla (New South Wales), and experimental work in coastal waters of Australia.

Physics and Applied Physics, comprising the National Standards Laboratory at Sydney.

Radiophysics, with main laboratory at Sydney and Observatory at Parkes, New South Wales.

Physical Chemistry, Chemical Physics, Mineral Chemistry and Organic Chemistry, which together with the Sections of Cement and Refractories, and Chemical Engineering, comprise the Chemical Research Laboratories in Melbourne. Tribophysics, with laboratories in Melbourne.

Building Research, with laboratories in Melbourne.

Mathematical Statistics, with main laboratory in Adelaide.

Meteorological Physics, with main laboratory and field station in Melbourne.

Land Research and Regional Survey, with headquarters in Canberra, and field stations at Alice Springs and Katherine (Northern Territory) and Ivanhoe (Kimberley, Western Australia).

Protein Chemistry (Melbourne), Textile Industry (Geelong, Victoria) and Textile Physics (Sydney), which together comprise the Wool Research Laboratories. Coal Research, Sydney.

The following are the Sections.

Commonwealth Research Station, Murray Irrigation Area, Merbein (Victoria). Irrigation Research Station, Griffith (New South Wales).

Upper Atmosphere, with laboratory at Camden (New South Wales).

Dairy Research, Melbourne.

Mineragraphic Investigations, Melbourne.

Ore-dressing Investigations, Melbourne and Kalgoorlie.

Fodder Conservation, Melbourne.

Physical Metallurgy, Melbourne.

Wildlife Survey, with main laboratory in Canberra, subsidiary laboratory at Albury

and field experiments.

Soil Mechanics, Melbourne.

Engineering, Melbourne.

Agricultural Research Liaison, Melbourne. Industrial Research Liaison, Melbourne.

Editorial and Publications, Melbourne.

In addition to its investigational work, the Organization deals with inquiries covering a wide range of scientific and technical subjects and maintains Scientific Liaison Offices in London and Washington.

An Agricultural Research Liaison Section established at the Organization's Head Office assists in making results in agricultural research speedily available to State Departments of Agriculture for use in their extension work.

An Industrial Research Liaison Section has also been established at Head Office to foster liaison in the secondary and manufacturing fields.

The Organization's Head Office, with administrative and executive staff, is in Melbourne, and associated with it are the Organization's Central Library, Agricultural Research Liaison Section, Industrial Research Liaison Section and Editorial and Publications Section. The funds for the Organization are provided from two main sources, namely, from Commonwealth revenue by parliamentary appropriation, and from industry directly or indirectly by way of contributions and special grants.

For details of the investigations in progress throughout the comprehensive and widely distributed activities of C.S.I.R.O., reference should be made to the publications of the Organization.

§ 2. Mount Stromlo Observatory.

Mount Stromlo Observatory—since 1957 incorporated into the Australian National University—is the largest observatory in the southern hemisphere. It is in effect the Department of Astronomy of the Australian National University, and its staff members assist in the training of the future astronomers of Australia. In its instrumental resources, it is second only to some of the great observatories of America. Since it is located south of the Equator, it is placed especially advantageously for the conduct of research into the structure of the Milky Way System and of the Star Clouds of Magellan. The telescopes and auxiliary equipment at the Observatory provide access to parts of the sky that are forever hidden from the view of northern hemisphere astronomers. Mount Stromlo astronomers have therefore a special responsibility to do research on stars and other celestial objects at far southern declinations.

Mount Stromlo itself is a ridge of hills, approximately one mile long, situated at 35° 19′ 16″ South Latitude and 149° 0′ 20″ East Longitude, seven miles west of the city of Canberra. Its highest point is about 2,560 feet above sea level, and telescopes can be situated so as to be well screened from the lights of the city.

The first permanent installation on the site was established in 1911, but, because of the war and other circumstances, the development of the Observatory was delayed. It was not until 1925 that regular astronomical work could be undertaken. Since then, the Observatory has developed steadily, and now, under its third Director, the scientific staff consists of thirteen astronomers. This does not include eight scholars and a number of oversea astronomers visiting Mount Stromlo for periods of a year or so. With technical, clerical and maintenance personnel, the total staff amounts to about 60 persons.

Mount Stromlo Observatory possesses eight mounted telescopes with apertures ranging from five inches to 74 inches. The 74-inch reflector is the largest telescope in the southern hemisphere. There are also special telescopes for the Time Service and two oversea groups have major telescopes on the Observatory grounds. These telescopes are a 26-inch refractor from the Universities of Yale and Columbia, U.S.A., and a 26-inch Schmidt Telescope from the University of Uppsala, Sweden.

The principal fields of research at Mount Stromlo are as follows.

- (i) Studies of the structure and dynamics of the Milky Way system.
- (ii) Investigation of the Large and Small Magellanic Clouds.
- (iii) Studies of the physical properties of the interstellar medium of gas and dust, and its relation to the spiral structure of our galaxy.
- (iv) Studies of the physics of the stars of the southern hemisphere by spectrographic means and by photoelectric techniques.
- (v) Maintenance of the National Time Service leading to studies of the variable rotation of the earth and polar motion.

Published accounts of the researches have a world-wide distribution.

The Observatory is at present engaged in a major expansion of equipment and staff. A search is being made for an area, more cloud-free than Mount Stromlo, where a permanent Field Station may be established. A preliminary installation of a 26-inch reflector has been made at Mount Bingar near Griffith, New South Wales. Other sites are being examined for the future development of astronomy in Australia.

At certain times, Mount Stromlo is open for inspection by members of the public when arrangements can be made so that the scientific work of the Observatory is not interrupted. A more detailed description of the Observatory's work is given in Official Year Book No. 46, pages 1142-1144.

§ 3. Australian Atomic Energy Commission.

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

The functions of the Commission fall under two main headings. Firstly, it is responsible for undertaking and encouraging the search for and mining of uranium, and is empowered to co-operate with the appropriate authorities of the States in connexion with these and related matters. Secondly, it is authorized 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. These powers and functions are set out in detail in Part II. of the 1953 Act. In general, and subject to the Commonwealth's defence powers and particular provisions of the Act, they are exercisable only in or in relation to the Territories of the Commonwealth.

2. Uranium Prospecting and Mining.—Uranium prospecting and mining in the Territories of the Commonwealth are freely open to private enterprise, subject to the Atomic Energy Act 1953 and the Ordinances of the Territories. In the past, the Bureau of Mineral Resources, Geology and Geophysics of the Department of National Development has carried out, on behalf of the Commission, widespread aerial and ground surveys aimed at ascertaining the uranium resources of the Territories and delineating areas in which further search for uranium by private prospectors was considered worthwhile. Although rewards are no longer paid for discoveries of uranium, tax concessions are still allowed in respect of income earned from uranium mining. The Bureau of Mineral Resources provides prospectors and mining companies in the Territories with a wide range of technical and advisory services.

The development of the uranium resources of the States is governed by the legislation and policies of the States. Commonwealth assistance, in the form of aerial, geological and geophysical services, is available to the States, and State Mines Departments inspect uranium prospects and test samples submitted by prospectors.

Interest in the search for deposits of uranium has, however, declined in recent years because of world-wide over-supply.

Uranium oxide is being produced in Australia from ore deposits at Rum Jungle and South Alligator River, in the Northern Territory, and Mary Kathleen in Queensland. The Rum Jungle deposits have been worked under arrangements between the Commonwealth and the Combined Development Agency, a joint procurement organization of the United States and United Kingdom Governments. The mining and treatment operations are conducted for the Commonwealth by an Australian mining company. The treatment plant began operations on the field in September, 1954, and the total production since that date has been sold to the Agency for defence purposes. No mining was carried out between November, 1958, and April, 1961, but mining was recommenced with the discovery of a new ore body. Treatment operations are continuing with ore stockpiled from the previous mining. These stockpiles are more than sufficient to complete the contract with the Combined Development Agency which expires in January, 1963. Exploration is continuing to determine whether or not further ore bodies exist in the area.

Uranium deposits at Radium Hill in South Australia were worked by the State government, which built an ore concentration plant on the field and a plant for the treatment of the concentrates at Port Pirie. Production of uranium oxide began in 1955, the output being sold to the Combined Development Agency. Operations ceased at the end of 1961, when the contract expired.

The Mary Kathleen ore body in the Mt. Isa-Cloncurry district in Queensland has proved to contain Australia's largest reserve of uranium ore. A mine and treatment plant which cost over £10 million has been established in the area by a large mining company. Production from the plant is being sold to the United Kingdom Atonic Energy Authority for the British nuclear power programme under arrangements approved by the Commonwealth Government. Two other companies in the South Alligator region in the Northern Territory also had contracts with the Authority for the British nuclear power programme. These contracts were for relatively small tonnages, and one has now been completed. Both companies began production in 1959.

3. Research.—The Commission's Lucas Heights Establishment is the major Austra'ian centre for atomic energy research and information. It has a programme of research in the development of nuclear power, the utilization of radio-isotopes, and in other associated fields, directed towards the long-term development of the resources of the country.

The main feature of the research programme is the investigation of a high temperature gas cooled (H.T.G.C.) reactor of a type which could suit Australian conditions. By comparison with the nuclear power stations in existence or being planned at the present day, this is an advanced system. It is expected to be capable of competing on a cost basis with new coal-burning power stations in many parts of Australia.

For the time being, research is being concentrated on an extremely precise and careful study of the basic physics and engineering of the system, and of the materials involved in its construction. It is necessary to develop nuclear materials which can be fabricated to the required shape and form and can withstand the severe chemical and nuclear conditions within the proposed reactor. The Research Establishment is now doing considerable research into the properties of beryllium and its oxide, which have valuable nuclear qualities. It is already making significant contributions to the world's knowledge of the chemistry, physics and metallurgy of beryllium.

As the research programme goes forward, the way is being prepared for the introduction of nuclear power in Australia, through the H.T.G.C. reactor and other suitable reactor systems, and for other applications of atomic energy. These activities are building up a body of knowledge and local skill which will be needed when it is decided that nuclear power stations should be built in this country. On present indications, the Commission expects that the first such station may be in operation by about 1970.

The Commission is also seeking to extend the use of radio-isotopes in Australia in scientific research and development, in the treatment of disease, in raising production and lowering costs in agriculture and in manufacturing industry. There is a vast field of fruitful applications, and new ones are being continually devised. In Australia, these new processes

are being used only in a small fraction of the possible fields. The use of isotopes is fostered by providing an advisory service which is a ready source of information on established uses, and by investigation of other projected applications. Isotopes, including short-lived isotopes which cannot be economically imported, are being produced in the high flux research reactor HIFAR, and some are being exported.

Research and development work on technical and scientific applications of radiation is also being carried out. The possibilities of radiation for such purposes as industrial sterilization, food preservation, and the control of insect pests are being investigated. Scientists at Lucas Heights are also studying the biological effects and questions of health and safety involved in the use of radio-active materials.

Lucas Heights is a centre of specialised equipment and information. In addition to the research reactor HIFAR, used for testing materials and producing radio isotopes, there is much other equipment unique in Australia. All these facilities are available to Universities and other institutions under suitable conditions. In these endeavours, the Atomic Energy Commission is working in close co-operation with the United Kingdom Atomic Energy Authority, under arrangements which give Australia access to results of United Kingdom research on peaceful atomic energy uses. Results of research in Australia are in like manner available to the United Kingdom. Work in Australia, though constituting a self-contained programme, is co-ordinated with the United Kingdom programme, to avoid overlapping of research objectives and duplication of investigations. Australia also has bilateral arrangements with the United States and Canada, and is taking part in the promotion of the peaceful uses of atomic energy through the International Atomic Energy Agency.

§ 4. Scientific Societies.

1. Royal Societies.—The following table contains the latest available statistical information regarding the Royal Society in each State, the headquarters of which are in the capital cities.

ROYAL SOCIETIES.

(December, 1961.)

Particulars.	Sydney.	Mel- bourne.	Bris- bane.	Ade- laide.(a)	Perth (b)	Hobart.	Can- berra.
Year of charter	357 95 41,000	1859 394 99 24,500 350	1884 270 71 58,500 288	1880 195 85 20,500 279	1913 197 43 6,220 220	1844 592 95 33,400 316	1930 192

(a) November, 1961.

(b) December, 1960.

2. Australian Academy of Science.—The Australian Academy of Science was founded in 1954 to promote scientific knowledge, to maintain standards of scientific endeavour and achievement in the natural sciences in Australia, and to represent Australian science at national and international level. These objectives it shares with the Royal Society of London and with the national academies of science of most other countries.

Her Majesty Queen Elizabeth II presented her Charter to the provisional Council of the Academy on 16th February, 1954, thus following the precedent of King Charles II who presented his Charter to the Royal Society of London in 1662.

Six Fellows, distinguished for their achievements in the natural sciences, are elected annually. The total Fellowship in 1962 was 101.

The affairs of the Academy are managed by an elected Council consisting of the President, the Treasurer, two Secretaries (one representing the Physical and the other the Biological Sciences) and eight other members. The Assistant Secretary (who must not be a Fellow) is the Academy's salaried administrative officer.

The headquarters of the Academy is situated in Canberra. This building houses the offices of the Academy and provides a conference centre of international standard for scientific and other meetings.

- 3. The Australian and New Zealand Association for the Advancement of Science.— This association was founded in 1887. Its headquarters are at Science House, Gloucester Street, Sydney, and congresses are held at intervals of approximately eighteen months in the various States and in the Dominion of New Zealand. The latest congress was held in Brisbane in May, 1961.
- 4. Other Scientific Societies.—The Linnean Society of New South Wales, with head-quarters in Sydney, was founded in 1874. Sir William Macleay, who died in 1891, during his lifetime and by his will endowed the Society to the amount of £67,000, which has been increased by investment to approximately £100,000. The Society offers annually to graduates of the University of Sydney who are members of the Society and resident in New South Wales research fellowships (Linnean Macleay Fellowships) in various branches of natural history. One fellowship was awarded for 1962. The library comprises some 19,000 volumes. Eighty-six volumes of Proceedings have been issued, and the Society exchanges with about 300 kindred institutions and universities throughout the world. The membership at the end of 1961 was 267.

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

In addition to the societies enumerated above, there are various others in each State devoted to branches of scientific investigation.

D. STATE GOVERNMENT EXPENDITURE ON EDUCATION, SCIENCE AND ART.

The expenditure by each State Government on education, science and art during the year 1959-60 is shown in the following table. Since details are not available in all States, the figures exclude officers' pensions and superannuation, pay-roll tax, and interest and sinking fund on capital expended on buildings. The cost of the medical and dental inspection of school children is also excluded, as this service is more appropriately classified under public health.

STATE EXPENDITURE ON EDUCATION, SCIENCE AND ART, 1959-60. (£'000.)

		Expenditu		Net			
State.	Revenue.	Loan.	Other Funds.	Total.	Receipts.	Expendi- ture.	
New South Wales		51,432	14,953		66,385	1,107	65,278
Victoria		36,234	1,678		37,912	473	37,439
Queensland		15,500	3,610	1,126	20,236	659	19,577
South Australia		13,499	4,019		17,518	1,433	16,085
Western Australia		10,276	2,115	19	12,410	215	12,195
Tasmania	• •	5,433	1,775	28	7,236	462	6,774
Total	••	132,374	28,150	1,173	161,697	4,349	157,348