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CHAPTER XI.

EDUCATION.

§ 1. Introduction.

1. **General.**—The development of Australian educational systems was last dealt with in some detail in the Year Book in issue No. 22, 1929. Changes have occurred since that year, however, and in the following pages is presented a reasonably complete account of these changes and of the systems as they exist at the present time. This information has been obtained, in the main, from the Commonwealth Office of Education, but it has been found necessary, for publication in the Year Book, to abridge the material originally supplied. This regretted but unavoidable condensing does not, it is hoped, seriously impair the very comprehensive account supplied by the Commonwealth Office of Education.

2. **Evolution of Educational Systems in Australia.**—(i) *General.* An account of the development of the Australian schools up to 1929 is to be found in Year Books Nos. 1, 2, 17 and 22. Since that date there have been marked changes in the educational programme although the general pattern has not altered in any fundamental way. By 1929 free, compulsory and secular primary education had long been established in every State. Secondary schools had been set up and the foundations of technical education had been laid. Correspondence schools for outback children had been recently formed, and some special schools existed for physically and mentally handicapped children. School medical and dental services were in operation, and guidance and psychological services were in the process of being developed in three States.

One of the major features of Australian education during the past twenty years has been the extension of facilities to provide for an increasing number of pupils in an increasing variety of ways. This has brought about many changes in policy and practice, such as the preparation of suitable courses of study adapted to the needs of certain groups of children, the institution of the most efficient administrative structure to carry out the policy decided upon, and the evolution of adequate selection and examination techniques to ensure that the individual pupil is guided appropriately to that form of education most suitable for him. In fact, practically no child in Australia is beyond the reach of the education system.

(ii) *From 1929 to 1939.* The early years of this decade were marked by an acute economic crisis. During the most severe period the effect on education was that building programmes were restricted severely, teacher training was restricted, the numbers of teachers (and their salaries) were reduced, but the numbers of pupils increased.

During the last half of the decade school buses began to be used extensively to transport pupils to schools, thus making possible the closure of a number of small schools. Often the curriculum offered in the "consolidated" school took into account the needs of the particular locality, and courses with an agricultural bias made their appearance.

The crisis in primary production led to a policy of industrial expansion, which stimulated the training of technicians and skilled tradesmen. A technical vocational bias was developed in some post-primary schools, and senior technical education began a rapid and continued expansion. Senior technical class enrolments rose from 58,456 in 1931 to 67,377 in 1935 and to 90,401 in 1939.

(iii) *The War Years.* The immediate effect of the 1939-45 War on education programmes was very similar to the experience of the early 1930's. School building programmes were necessarily reduced because of the diversion of manpower and materials to defence needs and the number of teachers in training fell. In addition many teachers enlisted or undertook other work associated with the war effort.

To cope with the resulting shortage, many teachers deferred their retirement until after the war; others returned from retirement to active work; married women remained in the service or were re-engaged; some small schools were closed and the children were transported to nearby towns. As war factories expanded, the demand for technical training continued to grow, despite the absence of many young men at the war.

(iv) *The Post-war Years.* With the return of ex-servicemen teachers and allocation of large sums of money for educational activities, the post-war years have seen marked developments in Australian education. New curricula have appeared, aimed at increasing development of social skills, with emphasis on oral language, self-direction, health education and those activities generally included among the social studies. The time devoted to some of the more formal aspects of the curriculum has generally been reduced, and the age at which fundamental skills are formally taught has been raised.

A feature of the educational scene in the post-war period has been the steady rise in enrolments due to the rising birth-rate and heavy immigration. The greater number of children at school has demanded more teachers and more schools at a time when manpower and materials have been scarce.

§ 2. Government Schools.

1. *Administration.*—Education is the responsibility of the State Governments. The Commonwealth is, however, empowered to provide financial assistance to students and meets the full cost of education in Commonwealth territories, although this is largely provided by State education authorities.

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

Examination Boards, representative of the Universities, the Education Departments and non-government 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, to discuss matters of common interest, and Directors of Education meet annually as a Standing Committee of this Council.

2. *The School System.*—(i) *Compulsion.* In all States, there is legislation for compulsory school attendance. The original Victorian Education Act was passed in 1872, followed by similar Acts in Queensland (1875), South Australia (1878), New South Wales (1880), and Tasmania and Western Australia (1893).

In 1952 the ages between which children were legally required 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 reached the age of 14 years); Western Australia, 6 to 14 years; and Tasmania, 6 to 16 years.

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 implemented.

Schooling may be given in government schools (including correspondence and special schools) or non-government schools and in a small minority of cases by private tuition.

The employment of children of school age is prohibited by law.

(ii) *Beyond Compulsion.* Since 1929 especially, the development of large-scale industry and scientific farming has demanded a diversity of skills, and a general raising of the educational level of the population. The raising of the school leaving age in two

States and the tendency everywhere for children to stay longer at school have been expressions of public realization of this. In 1951 less than half of all children left school when they reached the age limit for compulsory attendance. Indeed almost half 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 under compulsion 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 long before 1929.

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. In some cases the first two grades of primary education, together with any "Preparatory" or "Kindergarten" classes, are to be found in separate infants' schools or departments. But whether in a separate establishment or as a part of a primary school, there is a gradual move towards formal instruction. 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 8 or 9 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, as it always did, on the tool subjects (reading, writing and arithmetic) and, in more recent years, oral language. Since 1929, however, 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, it is true to say that in 1951 there was less emphasis on results, and that 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 of 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 (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 even 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. English grammar and literature, 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.

The academic course for matriculation has undergone some change since 1929. Greater emphasis has been placed on oral language and written expression in the English course; Latin has waned in popularity and modern languages other than French and German are being taught in a few schools. A general science course has been introduced in some States, and social studies, a synthesis of history, geography and civics, is a subject to third-year level. More emphasis has been placed on art, music and physical education. Since 1929 the provision of a secondary type education for all has gained ground rapidly, although the entrance requirements of tertiary institutions are still provided for.

Consequently, 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. The academic schools and multi-lateral country schools 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-age 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. Less time is generally devoted to mathematics and the formal sciences, 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 is given in the following paragraphs:—

(a) *New South Wales.* As in other States, a child commences school at the age of about five, spending the first seven years in the primary school and then passing on to some form of secondary education.

The trend in secondary education has been to provide particular types of courses in separate schools such as Academic High Schools, Home Science High Schools, Technical High Schools, Commercial Schools, Junior Technical Schools, Home Science Schools and Agricultural High Schools.

(b) *Victoria.* In Victoria, after six years of primary education, the child passes at the age of about twelve to secondary education. On the basis of head teachers' recommendations and the children's preferences special selection committees allot the children to High Schools, Girls' Secondary Schools or Technical Schools or the corresponding courses of multi-purpose country schools. Changes in secondary curricula in the last fifteen years have been in the direction of broader, less specialized courses.

(c) *Queensland.* In 1930 and 1952 the syllabus was substantially revised and changes were made in the school system. Pupils now complete their primary education (a preparatory grade and eight primary grades) at the age of about 14 and pass on to four years of secondary education. In country areas the secondary classes, known as secondary "tops", are attached to the primary school. Intermediate schools are composed of the two highest primary grades.

(d) *South Australia.* There has been a continuous development towards more liberty for teachers to experiment, both in the seven years' primary schooling and in secondary education. Secondary education is provided in High Schools, Technical Schools, and Area Schools, which, in country districts, provide education with an agricultural bias as well as academic courses leading to matriculation.

(e) *Western Australia.* Children enter primary school at the beginning of the year in which they turn six, and after one year's infants' class and six primary classes pass on to secondary education at the age of about twelve. This is provided through three-year

and five-year High Schools, which provide professional, commercial and technical courses. In country areas without High Schools large primary schools with post-primary classes, called Junior High Schools, provide similar education.

(f) *Tasmania*. Children at the age of six commence six years' primary education and at twelve are selected, on the result of ability and attainment tests, teachers' recommendations and school record, for four years' compulsory education in a High, Technical or Modern School. A fifth year is necessary for matriculation.

Curriculum committees aim to keep the curriculum abreast of modern developments. Modern classes are designed to foster the special aptitudes of children in the 12 to 16 age group who are unsuited to high or technical school education.

4. **Examinations and Accrediting.**—(i) *Examinations*. Before 1929 most States had three examinations for school children. The first came at the end of primary school and was variously known as the "Qualifying Certificate" or "Scholarship". These examinations were regarded as a qualification for secondary education. The third came at the end of the secondary course, at the age of sixteen to seventeen, and was known as the "Leaving" or "Senior Public" Examination, which qualified students for university matriculation. Between these came the "Intermediate Certificate" or "Junior Public Certificate", usually one or two years before the end of the full course of secondary schooling. A pass in this examination was a useful entrance qualification for clerical occupations, nursing, some Public Service positions, and other callings requiring academic training.

The entrance examination for secondary schools, as administered by the Education Departments, although students from private schools also sat for it. The two higher examinations were generally under the control of a board, on which universities, Education Departments and non-government schools were represented.

By 1950 the external examination for secondary school entrance had been abolished in every State except Queensland, where the age of transition is fourteen and the "Scholarship" Examination must be passed to entitle the student to free secondary education and, if necessary, boarding allowances. The external Intermediate Examination had declined in importance, some States substituting internal examinations in some, or all, schools, other States providing a variety of internal certificates from different types of schools. The Leaving Certificate in most States had not been supplanted, but had been modified to provide a greater variety of subjects and, as for example in mathematics, the opportunity of choosing several specialized courses or a broad course.

The length of the secondary course has been increased in two States from two to three years for the Intermediate Certificate and from a further one to a further two for the Leaving. South Australia has a further year beyond the Leaving Certificate for a separate examination known as "Leaving Honours". Only the "Leaving Certificate" is necessary for matriculation, but good results—credits as distinct from passes—in the Leaving Honours Examination may carry exemption from some subjects of the first year university course. In Victoria a similar system had operated, but the optional Leaving Honours year has been replaced by adding a further year after the Leaving Examination for a course leading to a special matriculation examination. Separate matriculation examinations also exist in New South Wales, Western Australia and Tasmania, but successful Leaving candidates are not required to sit.

(ii) *Accrediting*. The system of granting certificates, or credit for subjects passed, without external examination is a major development and now operates in four States. Credit is assessed mainly on the student's record of work for the year, although some internal examinations are generally given. Syllabuses can be less rigidly controlled and can be more freely adapted to local conditions, although standards are maintained by the supervision of the central authority.

(iii) *State Details*. (a) *New South Wales*. The trend in New South Wales over the past twenty years has been for the steady elimination of external competitive examinations. Experiments with the use of intelligence tests as the means of selection for high school entry gradually led to the adoption of this method for all country schools in 1938.

This was replaced in 1943 by small committees, which now make the selection for all schools, giving weight to teachers' estimates of achievement, intelligence test scores and parental wishes.

The Intermediate Certificate used to be an external examination taken after three years' secondary education. Since 1949, however, the Certificate has been awarded on the results of internal examinations in all government and most non-government schools. Children have now to reach a satisfactory standard in at least four subjects.

At the Leaving Certificate level examination is external, although there have been various modifications in the requirements for matriculation. The number of acceptable subjects has been extended, and matriculation is now allowed on four (instead of the usual five) subjects if three of these are at a higher level.

(b) *Victoria*. All public examinations have now been abolished at the primary level. At the secondary level there are now four examinations—the Proficiency, the Intermediate, the Leaving and the Matriculation.

The Proficiency is awarded on the basis of the child's school record during the third year of secondary education. The Intermediate and Leaving Certificates are public examinations conducted by the Schools Board of the University of Melbourne, and are taken after four and five years' secondary education respectively. Matriculation, for which the Leaving is a prerequisite, requires a further year and provides the normal channel of entry into the University.

(c) *Queensland*. The Scholarship Examination, which takes place at the end of primary schooling, has been changed from a competitive examination to a qualifying examination, in which all students are required to obtain 50 per cent. of total marks in English, arithmetic and social studies.

The Junior Public Examination is taken after two years' secondary schooling. Since 1951 each candidate has received a statement showing the subjects passed and the grade of pass in each instead of a Junior Certificate. The Senior Public Examination two years later is accepted by the University for matriculation.

A Board of Post-primary Studies and Examinations was set up in 1941 to advise the Government in these matters.

(d) *South Australia*. Progress Certificates are awarded at the end of primary schooling on the recommendation of the teacher and District Inspector, and this entitles pupils to special allowances for books, board and travelling.

The Intermediate, Leaving and Leaving Honours Certificates are obtained by external examination. Intermediate Technical, Leaving Technical, Area School Intermediate and Area School Leaving Certificates are awarded on school recommendation.

(e) *Western Australia*. The only external examination at the end of primary schooling is the scholarship examination for students wishing to proceed to a five-year high school. A preliminary qualifying examination is held three months earlier to eliminate candidates who have little chance of success.

At the secondary level the Junior Certificate examination (after three years) and Leaving Certificate examination (after five years) are conducted for the University by a Public Examinations Board which includes representatives from the University, the Education Department and non-departmental schools.

(f) *Tasmania*. Accrediting, based on ability and attainment tests, pupils' records and teachers' recommendations, is used to determine the most appropriate secondary education for pupils.

After four years' secondary education a certificate is granted either by accrediting or public examination. A fifth year is required to sit for the University's Matriculation Examination.

5. **Health Services to Schools.**—During the period under review, health services to schools have extended far beyond the routine medical and dental inspections which were the rule in 1929. Information relating to medical and dental school services is given in Chapter XIII.—Public Health and Related Institutions.

6. **Guidance.**—Each of the Australian States has now 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 since the early 1930's there has been a steady and continuous progress towards thorough educational guidance services for all children.

Before 1930 psychologists had been appointed in South Australia and Tasmania but their work was chiefly concerned with atypical children. In the early 1930's the beginnings of comprehensive record card systems arose in two or three other States, there were some attempts to administer psychological tests of ability and achievement with large groups of children, and in New South Wales segregation of the gifted at the primary level was commenced. This general movement progressed fairly slowly in the middle and late thirties, although by the beginning of the war New South Wales and Tasmania had developed the beginnings of comprehensive guidance services with school counsellors, record cards and systematic and regular testing of all children in certain age groups.

During the war the increased opportunities for the training of psychologists in the fighting services provided each State with a pool of trained and experienced guidance workers. Creation of new professorships of psychology and the expansion of existing schools in the universities has maintained a steady flow of new recruits. Mention should also be made here of the supplementary vocational guidance service provided by the Vocational Guidance Division of the Commonwealth Employment Service. This division co-operates 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.

7. **Research.**—(i) *State Education Departments.* Since 1929 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 of research 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 ; it also plays an important part in curriculum revision and modification of examinations.

The first full-time research officers were appointed in New South Wales in 1935, in Victoria in 1938, in South Australia in 1945, in Queensland in 1948, and in Western Australia in 1951. In Tasmania in 1934 the position of psychologist was changed to Psychologist and Supervisor of Research and in 1936 a Curriculum Officer was appointed. There was, of course, a good deal of research undertaken prior to the advent of these officers.

(ii) *Australian Council for Educational Research.* Research in education is also carried out by a non-governmental body called the Australian Council for Educational Research. It is engaged on educational research in a wide variety of fields, ranging from tertiary to pre-school education. It conducts surveys and enquiries, makes grants to approved educational investigators, serves as a centre to disseminate 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 to it.

8. **Atypical Children.**—Since 1929 there has been a marked increase both in the range of special provision and in the number of schools or classes for pupils who, for one reason or another, cannot progress to their best advantage in an ordinary school. 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 delinquent. The number of pupils with certain of these handicaps in some States is so small or spread over so wide an area that special provision does not exist for all of these types of handicapped children in all States. However, the great majority of those listed above are catered for in every State. 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; they work in co-operation with the psychological services of the Education Departments.

9. *Education of Migrant Children.*—From 1945 to 1951, the net increase in children at Australian schools through migration was about 75,000, or 6 per cent. of the total school age population, more than half being alien and non-English speaking on arrival. During this period the impact of the increased birth-rate of the Australian population in the mid 1940's also contributed to the heavy burden placed on State education resources.

It was generally considered desirable for migrant children to attend schools with Australian children, although some purely migrant schools were built, with Commonwealth assistance, in hostels, etc., and in some States, schools or classes exclusively for alien migrant children assisted the children until they could take their place in their age group classes in the normal schools. As was to be expected, alien children found little difficulty in learning the English language, which is the language of instruction in all schools in Australia. Non-government schools absorbed a significant proportion of migrant children.

The major problems were those of staffing and accommodation. The Commonwealth assisted by providing school buildings in migrant centres and in some residential hostels. Some States relieved the staffing position by employing suitably qualified English-speaking migrants as teachers in schools exclusively used by migrant children, although the policy of teaching migrant children in schools with Australian children was adhered to wherever possible. Where it was not possible, particularly in large migrant centres, parents were encouraged to move into Australian communities. In almost all cases children of secondary school age were accommodated in existing Australian secondary schools.

10. *Education of Native Children in Australia.*—(i) *General.* 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.

In June, 1951, the Prime Minister invited all State Premiers to a Conference on Native Welfare in Canberra, and the Minister in charge of Native Affairs in New South Wales, Queensland, and Western Australia, together with representatives of the Commonwealth and South Australia attended the inaugural meeting of the Council for Native Welfare in September, 1951. The Council was established on a permanent basis and will meet annually, to consider national policy with respect to the welfare of Australian aborigines.

(ii) *New South Wales.* Native children, excluding those living on stations and reserves, for whom separate facilities are provided, may be admitted to Government schools. In addition, there are 26 special schools on or near aboriginal reserves, nineteen of which are staffed by trained teachers employed by the Department of Education.

There are also eighteen aboriginal stations in New South Wales, maintained by the Aboriginal Welfare Board, which is responsible to the Chief Secretary's Department. Each station has a school, where the educational standard is below that reached by the normal white child in a Government school, and the emphasis is placed on handicrafts. The "teacher-managers", who give instruction and manage the affairs of the station also, are not necessarily trained teachers.

The Board wholly maintains two homes and subsidizes another which provides for the education and training of children admitted to its control.

(iii) *Victoria*. The laws of this State make no differentiation between the aborigines and the other members of the community so far as education is concerned. Aborigines and half-castes who wish to do so may avail themselves of the educational facilities provided at the Lake Tyers Aboriginal Station, where there is a government school staffed and conducted by the Education Department. The curriculum is similar to that in ordinary white schools, with a bias towards handicrafts.

(iv) *Queensland*. In 1939 the Aborigines' Preservation and Protection Act was passed to provide for the welfare of the native population, including education and manual training. To this end the Department of Health and Home Affairs established three aboriginal settlements, each of which has a school staffed by teachers on loan from the Department of Public Instruction. The syllabus comprises English, civics and morals, arithmetic, geography, nature knowledge, drawing, needlework, music and drill. On attaining school leaving age, children are given a constructive course in domestic science or manual training. At the eleven mission schools conducted by various denominations, and subsidized by the Government, the standard of education is similar to that of the government settlements.

(v) *South Australia*. The Aborigines' Protection Board maintains a school on each of its stations at Point McLeay and Point Pearce, staffed by teachers from the Education Department.

Numbers of native children also attend the six schools controlled by the United Aborigines' Mission, the schools at Koonibba Lutheran Mission, Umecwarra Mission and the Ernabella Presbyterian Mission School.

The curriculum at all these schools is similar to that in ordinary government schools, with the emphasis on manual training and handicrafts, such as sewing, dressmaking, basketmaking and woodturning.

(vi) *Western Australia*. Prior to 1936 the authority vested in the Department of Native Affairs for the custody, education and maintenance of the natives was exercised by a Chief Protector of Aborigines, and later by a Commissioner of Native Affairs.

In 1948, the Director of Education advised head teachers of State schools that they must admit native children, unless they could be excluded on hygienic grounds. Three years later the Education Department accepted responsibility for the education of natives and the Department of Native Affairs now acts in close co-operation with the Education Department in all matters relating to native children.

Some mission schools are staffed by teachers from the Education Department, and all may be inspected by officers of the Department to ensure that the standard of education provided is adequate. Missions are graded into Classes A, B and C and are subsidized by the Department of Native Affairs accordingly.

In the South-western Division of the State, native children study the ordinary State curriculum. The question of special curricula for half-castes, and full-bloods who live mainly in pastoral and marginal areas, is being considered.

(vii) *Tasmania*. The few native children in this State are educated at schools for white children.

(viii) *Northern Territory*. There have long been mission schools for aboriginal children operating under the general supervision of the Administration and some provision was made from time to time in several government schools. However, since 1950 a more systematic attempt has been made to provide for coloured children.

In December, 1951, 230 children were enrolled in Commonwealth schools staffed by fully trained teachers operating on aboriginal settlements and catering for children between the ages of five and fifteen years. Plans are under consideration to establish further schools. The education being provided for aboriginal children is designed to equip them to support themselves and their families in the European economic structure of the Northern Territory, to encourage the improvement of their environmental conditions, both domestic and communal, and to provide for the development of their talents and creative abilities. Dressmaking, woodwork and craftwork help to fulfil this aim and to stimulate the constructive use of leisure time.

To meet the special needs of native children, a provisional syllabus has been drawn up and a series of reading primers entitled "The Bush Books", featuring topics and situations familiar to the children, has been compiled.

In March, 1951 a Senior Education Officer was appointed to the Darwin Office of the Commonwealth Office of Education to act as liaison officer between the Administrator of the Northern Territory and the Director of the Office of Education on matters connected with the education of aboriginal children. His supervision of the work being done in native schools will be extended in 1952 to include that of the eighteen mission schools in the Northern Territory. The enrolment figures for the mission schools are as follows :—Roman Catholic Schools, 1,030; Church Missionary Society Schools, 158; Methodist Mission Schools, 271; Lutheran Mission School, 90; Others, 65;—Total, 1,614.

11. 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 eligible pupils.

One method of meeting this problem was 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 outlying areas is still in force in the far north of Western Australia, and mobile railway cars are used for technical and agricultural education in New South Wales and domestic science in Queensland. However, in general, it has been the practice to bring the child to the educational facilities rather than vice versa.

(ii) *Subsidized Schools.* Where there is a group of children too few in number 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) *Consolidation.* As early as 1904, the policy of transporting pupils to larger and more central schools began to come into operation. Trains, bicycles and horses were first employed, but the use of buses has led to a very great development of school transport systems, particularly since 1935. This policy, known as "consolidation", has been responsible for a substantial reduction in the number of small schools, and is one of the most striking developments of the past twenty years. Organized transport services for children attending country primary and secondary schools is extensive. In 1950 New South Wales had 426 services, Victoria 608 in 1951–52, Queensland 224 in 1949, South Australia 313 in 1951, Western Australia 388 in 1951 and Tasmania 267 in 1951.

The cost of transporting children to school for the last period available was as follows :—New South Wales, £528,121 in 1951; Victoria, £741,393 in 1951–52; Queensland, £122,649 in 1951–52; South Australia, £182,212 in 1951; Western Australia, £374,133 in 1950–51; Tasmania, £180,351 in 1951; and Australian Capital Territory, £26,831 in 1951–52.

The consolidated school is usually not merely a larger primary or secondary school; it generally provides a curriculum specially adapted to the needs of the rural area it serves.

The best known type of consolidated school is the area school, found in Tasmania and South Australia. The idea grew from a need to provide more than a primary education for country children as had been attempted in the British Village Area Schools. In 1936 an Experimental Area School was established in Tasmania. The success of the experiment led to the establishment of other area schools and by 1951 there were 27 such schools, providing for 7,366 pupils.

In South Australia, a "pilot" school established in 1938 proved successful and was followed by a similar development.

The small schools of the area are closed and the pupils are transported to the area school by bus or bicycle. Here, they undertake study based on the needs and interests of rural life. The curriculum, though still including the usual academic subjects, has a practical bias and introduces elements based on the activities of the area in which the school is situated, e.g., dairying, fruitgrowing. Education officers, teachers and parents co-operate in planning courses to fit the locality.

Other States have schools of a somewhat similar type such as Consolidated Schools, Group Schools and Rural Schools. Rural Schools in Queensland are located in country towns. Pupils from surrounding "one-teacher" schools come to the Rural School one day each week to avail themselves of the specialized facilities and specialist teachers at the school in such fields as manual training and domestic science.

The adaptation of courses to rural needs is not, however, confined to "consolidated" schools.

(iv) *Special Assistance.* Another way of bringing children and schools together 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 there are six government hostels and 56 private ones (excluding private boarding schools) which cater for more than 1,500 children of secondary school age and a small number of primary school children also. Special scholarships for country children, giving allowances for living away from home, and substantial fare concessions for vacation travel are provided by all States.

(v) *Correspondence.* For those who were still unable to attend school, correspondence tuition had been established in every State by 1929. These schools have grown in size and extended in scope since then, and Technical Correspondence Schools, which grew out of the Commonwealth scheme of technical training, were established in each State by 1942, and have grown under State administration since. An interesting development in 1947 was the appointment of a Liaison Officer for Correspondence School pupils in Tasmania. The activities have been made more effective by his personal contact with pupils and parents and his practical aid in supervision.

The number of correspondence pupils attached to correspondence schools in 1951 in each State was as follows:—New South Wales, 5,780; Victoria, 1,465; Queensland, (1950), 4,994; South Australia, 1,322; Western Australia, 1,882; and Tasmania, 239.

12. *School Broadcasting in Australia.*—As early as 1933, teachers were experimenting with the use of radio in the classroom. These experiments were encouraged by Education Departments and eventually led to an arrangement with the Australian Broadcasting Commission for the establishment of a series of broadcasts to children in the classroom, from which has sprung the present extensive school broadcasting system.

The organization of school broadcasting programmes remains a co-operative effort on the part of the A.B.C. and education authorities. Although the School and Youth Education Department of the A.B.C. is responsible for the broadcasting of the programmes, it draws freely on the advice and services of teachers and maintains permanent liaison officers with the Education Departments. The purchase of receivers for schools has been encouraged by Education Department subsidies to parents' organizations and in 1948 the Commonwealth Government waived its claim to listeners' licence fees from schools. More than two-thirds of Australian schools were equipped with radio receivers in 1951.

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 broadcasts to the actual work in the schools. Booklets are published giving in advance the yearly programme in all subjects; in subjects such as geography, nature study and art, the booklets are accompanied by picture sheets, work books and teacher's notes. In 1951, 300,000 radio booklets were distributed to schools embracing the following subjects:—Health and Hygiene, the World We Live In, French for Schools, Music through Movement, Singing, Literature, Social Studies and/or History/Geography, Nature Study, Music Appreciation.

Broadcasting has proved to be a most effective way of reaching the outback children of Australia. The "Kindergarten of the Air", begun in 1942 as a service to children unable to attend kindergarten, has proved popular in both town and country. Children are encouraged to take part in the programme in response to suggestions made by the broadcaster. Radio lessons have been designed to supplement those being done by means of correspondence. At Alice Springs the efficacy of a "School of the Air" for correspondence pupils in the Northern Territory is being further investigated. Pupils make use of the "pedal-wireless" equipment, installed on outlying stations for the Flying

Doctor Service, to make contact with their teachers. The present range of these broadcasts is 385,000 square miles. It is planned to extend these lessons from 3 to 5 half-hour sessions each week.

13. **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; others have been recruited at the university graduate level. Private training institutions also provide some teachers.

An account of the early development of teacher training systems is to be found in Year Book No. 22. By 1929, the pupil-teacher system was universal except in one State. The student spent one or two years, or even longer, teaching in school under supervision, studying and receiving instruction from the headmaster in the art of teaching. In some States, at the end of that period he passed into a teachers' college. After emerging as a trained teacher, he often continued his studies to obtain a series of graded certificates which were necessary for promotion. The pupil-teacher system has been abandoned as the chief method of training teachers. Teacher students are now recruited at matriculation level and given a professional course of training at colleges controlled by Education Departments or by University Departments of Education. The raising of entrance standards and prolongation of training has 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 reduction in the teaching force due to economy measures in the depression years did not give rise to any shortage of staff; indeed classes were generally somewhat reduced in size during this period.

However, in 1942, due to the diversion of thousands of teachers into the Armed Services, a grave shortage had to be met by the re-employment of married women and retired ex-teachers. It was soon apparent that even with the return of servicemen from the war there would still be a shortage of teachers.

Measures were taken to meet this shortage. Training courses were made more attractive by increasing allowances for students. The amount of these allowances has been increased by as much as four times and now exceeds £200 per annum in some States. The co-operation of teachers and their organizations was sought to obtain more teachers and publicity drives were launched to attract recruits. Special recruiting officers were appointed in some States. Salaries of teachers too were increased substantially in each State and promotion systems were made more liberal.

In addition to the normal channels of recruitment and training, various methods of obtaining additional teachers were tried. Many more thousands of married trained women teachers and retired men and women teachers were re-employed, and in some cases the conditions of their re-employment were liberalized. Over 2,000 trainees also entered the profession through the Commonwealth Reconstruction Training Scheme. Several States set up emergency training schemes, although these were on a comparatively small scale. Some teachers were recruited in England and their passages to Australia paid, but these schemes have been discontinued. Departments accept suitable young alien migrants for training. In Victoria bursaries are awarded to pupils who undertake to enter the Government teaching service.

Despite increased training facilities and higher teachers' college enrolments in the post-war period, the supply of teachers throughout Australia has done little more than replace wastage, and has not kept pace with the rising enrolments. Difficulty is being experienced in staffing small schools in remote areas, while the shortage of secondary scientific and mathematics teachers is reported to be acute in some States.

(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. In 1951 there were in Australia fifteen Teachers' Colleges conducted by Departments of Education and professional training for teachers was provided by five universities.

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 a bond of service additional to that normally required of teachers' college trainees.

(iii) *Training of Primary Teachers.* In all States, except Tasmania, where teacher training is conducted by the university, teachers for government primary schools are trained in teachers' training colleges controlled and administered by the State Education Departments.

Colleges are conducted on a co-educational basis, and departmental trainees are given a monetary allowance while in training and are required to enter into a bond to serve for a specified period or to repay all or portion of the cost of training.

In South Australia, the academic side of teacher training courses, except the short course for those preparing for "one-teacher" schools, is provided at the university; students attend lectures in normal degree courses. In addition, they may attend lectures in some subjects of the course for the Diploma in Education. In this way during their full course they obtain credits towards the recently introduced Associateship in Arts and Education in South Australia, which may be completed by part-time study after taking up teaching. In New South Wales, Victoria, Queensland and Western Australia, on the other hand, the course of training for primary teachers does not require attendance at the University. In Tasmania the Education Department co-operates closely with the University in the training of teachers and departmental teachers and schools are used for demonstration work and practice teaching.

In general, the duration of courses is two years for primary teachers, including infants' teachers. Specialization for nursery and for infants' teaching normally occurs in the second year of training. Students are required to attend college for a period varying from 32 to 40 weeks annually. The time allocated for practical work and lectures varies from State to State, but, on the average, from one-quarter to one-third of the student's time is devoted to practice teaching, attendance at demonstration lessons and observation of normal classroom teaching. There is a variety of subject detail in training courses in the different States. 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.

(iv) *Training of Secondary Teachers.* Prospective secondary teachers are generally required to undertake a degree course, and then are required to undertake a course of professional training of one year's duration. This normally qualifies trainees for a Diploma in Education.

The year's professional training in education includes lectures and seminars 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, physical education and domestic science receive from two to five years' training. Physical education courses are generally conducted at teachers' colleges or at a university; use is made of technical colleges and conservatoria of music for other specialist training. Teacher trainees attending the institutions, however, are regarded as being in attendance at a teachers' training college and are normally required to spend a portion of each week at the teachers' college.

(vi) *Training of Technical Teachers.* Teachers of general subjects in technical schools and colleges generally 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 in the main 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. A Technical Teachers' Training Centre has been established in Victoria.

(vii) *In-service Training.* As almost all teachers now enter the profession by way of Teachers' Training 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. Education Departments have always encouraged practising teachers to pursue university courses, which are free to approved applicants in some States, and facilities have been made available for teachers to obtain the academic qualifications for higher certificates where such exist.

Efforts are also made to keep teachers informed of new ways of meeting classroom problems. District Inspectors are usually responsible for the conduct of meetings where professional topics are discussed and for the arrangement of visits to other schools where special work is being done. Official publications of the Education Departments contain articles dealing with both educational theory and practice. In most States, the teachers' organizations publish magazines containing, among other material, articles dealing with educational theory. These reach the great majority of government teachers.

(viii) *State Details.* (a) *New South Wales.* The tendency in teacher training over the last twenty years has been to increase the number of specialized courses for teachers of various types of subjects, and to provide more teachers' colleges in country areas. In 1932 provision was made for teachers in manual arts to be chosen from Junior Technical School students who passed the Intermediate Certificate, and in 1935 special two-year courses for teachers of agriculture were introduced. Other developments were the provision of graduate courses at Armidale and special courses for prospective teachers of physical education.

In the post-war years several new colleges have been opened to accommodate the large number of new recruits. Country colleges concentrate on primary and lower primary training, and Sydney Teachers' College has become more and more an institution for the training as specialists, such as graduate teachers and teachers of art, music, physical education, etc.

Administration of teacher training is controlled by a board consisting of the principals of teachers' colleges, which, in conjunction with the Director-General or his deputy, co-ordinates all teacher training activities.

(b) *Victoria.* Up to 1951, recruits for primary teaching first served as junior teachers in schools and then received one year's training in a teachers' college. Five teachers' colleges were operating in 1950, and two have been opened since. In 1951 provision was made for direct recruitment of students into colleges at the age of seventeen, and the course was extended to two years.

A Secondary Teachers' Training Centre was set up in 1950 by the Education Department at the University to provide professional and scholastic guidance for students being trained for secondary school work.

(c) *Queensland.* The pupil-teacher recruitment method has now been abolished, and students who have passed the Senior Leaving Examination are selected for a two-year professional course in primary teaching at the Senior Teachers' College. Secondary school teachers are recruited either from graduates teaching in primary schools or from graduate students trained by the Senior Teachers' College in close co-operation with the Faculty of Education at the University.

Junior Teachers' Colleges, attached to high schools, offer preliminary training to intending teachers who have passed the Junior Public Examination.

(d) *South Australia.* Most teachers undergo a two-year course, which may be general or specialized in infant, commercial, art or manual training work. An additional year is provided for highly successful students, and a course leading to university graduation for intending secondary teachers. The Associateship of the University of Adelaide is a further qualification for teachers, involving less academic attainment than a degree and biased towards Education.

Teacher shortage is combated by such measures as increasing teacher training, and salaries, employment of married women, higher retiring ages, and encouragement to the immigration of British teachers.

(e) *Western Australia.* The Teachers' Training College offers a standard two-year course for non-graduates and a one-year course for graduates. Monitorship is no longer a prerequisite of training. There has been no special training course for secondary teachers although four and five year courses are now in operation.

Training is administered by a College Advisory Board comprising the Director of Education as Chairman, the Professor of Education, a Senior Inspector, the Principal of the College and a representative of the Teachers' Union.

(f) *Tasmania.* Since 1948, teacher training has been undertaken by the University, where matriculants undertake a four-year course including a degree and professional training. Holders of a Schools' Board Certificate undertake a three-year course of selected university subjects plus professional training.

A Student Teachers' College, administered by the Education Department, was set up at Launceston in 1948 as an emergency measure to train additional teachers and now provides two-year courses.

(ix) *Sex and Status of Teachers.* Although about one half of the teachers in State schools in Australia are men, the ratio varies considerably from State to State. There has been a continuous increase in the proportion of men since 1929, at first because of a government policy of male preference during the period of severe unemployment, and since then, the difficulty of recruiting females at a rate rapid enough to replace their greater "wastage" rate. Only women teachers are employed in the infant schools and generally in girls' departments. However, men predominate in the senior positions, both because of their greater preponderance amongst those with long service and because the higher promotion positions are generally reserved for men, except for some in infants' schools and girls' schools which are reserved for women.

Most teachers are permanent public servants. This status gives them security of tenure, compulsory contributory superannuation rights, and the right of appeal against being passed over for promotion. On the other hand, they are generally subject to transfer to any part of the State which they serve and are debarred from holding or seeking election to public offices. Female permanent teachers must resign if they wish to marry, although this is no longer the case in New South Wales and Tasmania.

14. *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. During the post-war period the building of schools was given a high official priority in order to obtain labour and materials. Most schools are therefore either quite new or more than 20 years old.

The large school in 1929 was normally of one or two stories, constructed of brick or stone, composed almost entirely of class rooms. Verandahs were usually provided for wet weather play and for cloak accommodation. "Portable" wooden rooms were used extensively as one-teacher country schools and to provide additional accommodation in large schools. Many of the older one-teacher schools were permanent brick or stone buildings. Secondary schools, until the post-war period, were often housed in former primary schools to which laboratory and workshop accommodation had sometimes been added. The shortage of buildings has been such that very few of the pre-1929 schools have been replaced, although many have been altered.

The post-war buildings also fall into two big groups, portable and permanent. In primary schools, in particular, some Education Departments favour a mixture of both kinds of classrooms, thus enabling them to cope with the changing age-composition of different areas. Prefabricated classrooms have been imported or locally produced in very large numbers—the Bristol aluminium dual units being especially popular. Generally, these have been used to extend existing schools, although in a few cases entire schools have been composed of them. To meet the very acute shortage all kinds of emergency

measures have been taken, including the hiring of halls, and the use of cloak-rooms, weather sheds and verandahs for class instruction. However, a considerable number of modern and imposing new secondary schools has been built and equipped with special facilities for the varied activities of the pupils.

The construction and maintenance of school buildings is not generally the direct responsibility of the Education Department. The work is usually done by the State Department responsible for all public buildings, the Education Department maintaining close liaison with the body responsible.

School grounds vary from small asphalted yards in some congested city areas to acres of playing fields and agricultural plots in the best country schools. In some States many country schools have forest plantations attached, while planting of ornamental trees and gardens is everywhere encouraged, a special day being set aside for tree planting.

Some application has been made of the "school base" concept, primary and secondary schools sharing the use of public recreation areas in some places, although the tendency has been to locate schools centrally for the child population rather than to locate them for access to green areas.

15. **Equipment.**—(i) *Text Books and Materials.* All equipment regarded as essential by the Education Department in each State is provided free of charge, except for text books for pupils. The cost of text books in the secondary schools, however, is frequently met by government assistance to some students. Some schools purchase sets of text books, which are paid for by charging the pupils a small fee annually. Text books have been extensively revised since 1929 in accordance with changes in the curriculum. The more widespread application in recent years of activity and play-way methods in the infant schools has been stimulated by the provision of a greater volume of free materials such as blocks, counters, peg-boards and modelling clay.

Equipment for manual training and home arts has long been provided free by the Education Departments. Sometimes a centre has been created to serve a number of schools and children are transported to it free. Other schools, especially the "consolidated" schools in the country, have their own workshops. Generally, manual training for boys consists of woodwork and sheetmetal work and the girls take sewing and home science. Secondary schools are almost always provided with laboratories, but these are not found in primary schools, with the exception of the larger all-age schools in the country.

Many schools still lack physical education equipment beyond common sports material, although this position is gradually being remedied.

(ii) *Furniture.* There has been considerable development since 1929 in this field. Originally most schools were equipped with long desks and benches, seating six to eight pupils. By 1929 nearly all of these had been replaced by the standard dual desk with tip-up seat, and in infant classes by individual chairs and small tables. No important change in furniture took place then until the post-war period, when 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 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.* The period since 1929 has seen a remarkable growth in the use of the visual aids in education. There have been two distinct phases in this growth, the first being characterized by the importation of all films and equipment and the second by the efforts made by local producers to meet the requirements of Australian education.

During the first phase the acquirement and use of equipment were left to individuals, and some resourceful pioneering work was done in schools with film-strip projectors. The obvious advantages of this teaching aid were soon apparent to Departments of Education and between 1936 and 1939 they began the appointment of special committees and teacher demonstrators to guide the development of the new educational medium.

With the appointment of these specialists, the second phase of growth began, for they recognized immediately the need to produce film strips suitable for use in their own schools. Consequently five States set up film-strip production units for this purpose and these are now by far the largest producers in Australia. An Australian-produced film-strip projector has also been manufactured.

Since the 1939-45 War, the emphasis has moved from the strip projector to the 16mm. sound machine. In May 1945 the Commonwealth Government set up the National Film Board to promote the use of educational films, and the Government Film Production Unit attached to the Board rapidly became the main producer of educational films. Several film companies also began operations and their most recent interest has been the designing of films primarily for classroom use. Several manufacturers have produced 16mm. sound projectors.

The National Library is the main distributing centre for non-technical films in Australia and it has Advisory Committees to act as its agency in each State. The main borrowers are schools, film societies and parent and citizen organizations. Education Departments have set up their own film libraries to distribute films to schools under their control, while schools are encouraged to purchase projectors through subsidy schemes, and in some States mobile units are organized to cover schools where there is no equipment.

The present extent of the use of films is indicated by the following details:—In June, 1951, the Education Department libraries had 15,412 sound and 4,656 silent 16mm. films covering 5,258 and 1,695 separate titles respectively. There were 2,939 35mm. strip projectors, 509 16mm. silent projectors and 1,346 16mm. sound projectors in the Department's schools, whilst an additional 252 schools were served either fortnightly or monthly by mobile sound projectors. Most schools have their own libraries of film strips. Most Education Departments produce film strips and some also produce their own films. To June, 1951 their production totalled 1,083 film strips, 29 silent films and 66 sound films.

16. **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 Parent and Citizen Organizations. Although the names of these bodies differ in the various States they have similar aims which are:—to promote the interests of the school by bringing parents, pupils and teaching staff together; to help provide teaching aids not supplied by the Department; to provide recreational materials; to assist in the regular attendance of children at school; to help find accommodation for teachers.

In all States the Parent and Citizen Organizations have affiliated to become State-wide bodies. These, in turn, are the members of the Australia-wide body, the Australian Council of School Organizations.

17. **Statistics of Government Schools.**—(i) *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 § 5 following.

(ii) *Returns for Year 1951.* (a) *General.* The following table shows for 1951 the number of Government Schools, together with the teachers employed, teachers in training and the number of individual children enrolled.

GOVERNMENT SCHOOLS(a), 1951.

State or Territory.	Schools open at end of year.	Teachers Employed (excluding Teachers in Training).	Teachers in Training.	Net Enrolment.
New South Wales(b)	2,525	13,602	2,623	432,747
Victoria	2,035	9,424	1,498	259,644
Queensland	1,565	5,976	566	171,107
South Australia	694	3,524	352	95,523
Western Australia	507	2,568	478	(c) 72,646
Tasmania	316	1,604	235	45,230
Northern Territory(d)	6	42	..	1,250
Australia—1951	7,648	36,740	5,752	1,078,147
1950	7,790	36,085	5,530	1,027,459

(a) Excludes Senior Technical Colleges. (b) Includes Australian Capital Territory. (c) Average weekly enrolment. (d) Year ended 30th June, 1952.

(b) *Average Enrolment and Attendance.* The methods of calculating enrolment are not identical throughout the States. The unit in South Australia is the daily enrolment, while New South Wales, Victoria, Western Australia and Tasmania employ the weekly enrolment. In Queensland no average enrolment is compiled, and the August census enrolment figure has been taken.

As with enrolments, there is not complete uniformity in arriving at the average attendance, but most of the States aggregate the attendances for the year and divide by the number of school sessions. New South Wales and Western Australia, however, employ averages of term averages. The matter of securing uniformity in these respects has been under consideration for some time, and was discussed at a meeting of Directors of Education at a conference held in Sydney in July, 1947. The average enrolment and attendance in each State and Territory during 1951 are shown below :—

GOVERNMENT SCHOOLS(a) : AVERAGE ENROLMENT AND ATTENDANCE, 1951.

State or Territory.	Average Weekly Enrolment.	Average Daily Attendance.	Percentage of Attendance to Enrolment.
New South Wales(b)	398,899	349,766	87.64
Victoria	247,361	219,135	88.60
Queensland	(c) 159,767	142,705	89.30
South Australia	90,747	82,588	91.06
Western Australia	72,646	66,865	92.00
Tasmania	42,224	37,363	88.49
Northern Territory (d)	1,230	1,092	88.78
Australia—1951	1,012,874	899,514	88.80
1950	958,112	844,123	88.10

(a) Excludes Senior Technical Colleges. (b) Includes Australian Capital Territory. (c) Census enrolment at 1st August, 1951. (d) Year ended 30th June, 1952.

Recurring epidemics of contagious diseases, minor illnesses and bad weather are all serious factors which affect the full attendance of pupils at school.

The average attendance at Government Schools in Australia is shown below for the year 1891 and at varying intervals to 1951.

GOVERNMENT SCHOOLS(a) : AVERAGE ATTENDANCE, AUSTRALIA.

Year.	Total Population. (b)	Average Attendance.	Year.	Total Population. (b)	Average Attendance.
	'000.			'000.	
1891	3,421	350,773	1941	7,144	732,116
1901	3,825	450,246	1947	7,639	754,799
1911	4,574	463,799	1948	7,795	770,554
1921	5,511	666,498	1949	8,051	810,800
1931	6,553	817,262	1950	8,316	844,123
1933	6,657	805,334	1951	8,539	899,514
1939	7,005	744,095			

(a) Excludes Senior Technical Colleges.

(b) At 31st December.

(c) *Schools in the Australian Capital Territory.* During 1951 nine Government Schools were in operation in the Australian Capital Territory; enrolment numbered 2,811; and average attendance was 2,434. By arrangement with the Commonwealth Government these schools are conducted by the New South Wales Education Department with provision for primary and secondary education, the Department being recouped for expenditure. The cost of the teaching staff in 1951-52 was £101,080, while the cost of general maintenance amounted to £57,319. The figures quoted exclude enrolment, etc., at the Canberra Technical College and the Evening Continuation School. For further particulars of education facilities in the Australian Capital Territory see Chapter VII.—The Territories of Australia, Australian Capital Territory, para. 8.

(iii) *Expenditure.* (a) *Maintenance—All Schools (excepting Senior Technical Colleges).* The net expenditure on maintenance in all grades of schools, excepting senior technical colleges and, in Victoria and (in 1939) Tasmania, junior technical schools, and the cost per head of average attendance for 1939 and the five years ended 1951 are shown in the following table. The figures do not include expenditure on buildings, which is shown separately in a subsequent table. In all expenditure tables the figures for Victoria, Queensland and Western Australia relate to the financial year ended six months later than the calendar year.

GOVERNMENT SCHOOLS(a) : NET EXPENDITURE ON MAINTENANCE.

Year.	N.S.W. (b)	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	Total.
TOTAL (INCLUDING SECONDARY SCHOOLS). (£.)								
1939	4,598,376	2,667,094	1,481,399	854,037	730,500	(c) 320,616	6,802	10,658,824
1947	7,542,623	4,533,365	2,465,221	1,533,470	1,435,885	688,155	15,164	18,213,883
1948	8,065,326	5,226,383	2,898,833	1,703,589	1,488,193	810,342	25,580	20,218,246
1949	9,426,879	6,302,596	3,385,274	1,953,121	1,801,259	928,291	35,322	23,832,742
1950	10,830,086	7,763,962	3,963,736	2,435,007	2,283,666	1,082,758	40,578	28,399,793
1951	13,222,509	9,776,957	4,813,837	3,050,624	3,285,769	1,367,236	57,156	35,574,088

PER HEAD OF AVERAGE ATTENDANCE.

(£ s. d.)

1939	15 12 2	14 1 4	13 0 9	12 18 4	14 5 7	11 7 6	11 3 9	14 6 7
1947	24 2 11	24 11 11	21 1 10	23 0 10	25 13 1	22 11 5	23 5 10	24 2 7
1948	26 10 6	27 16 0	23 18 6	25 6 0	25 16 9	25 12 3	34 16 0	26 4 9
1949	29 9 10	32 4 11	26 6 0	27 2 7	29 15 5	27 14 10	34 13 3	29 7 11
1950	33 0 6	37 11 1	29 17 11	31 14 8	36 0 8	30 6 3	39 14 1	33 12 11
1951	37 16 1	44 12 4	33 14 8	36 18 9	49 2 10	36 11 10	52 6 10	39 11 0

(a) Excludes Senior Technical Colleges.

(b) Gross figures, receipts not being available.

(c) Excludes Junior Technical Schools. See above.

(b) *Maintenance—Secondary Schools.* The figures shown in the preceding table refer to expenditure on maintenance of all Government primary and secondary schools, excluding senior technical colleges. It has been the practice of the State Education Departments to give separate information in regard to the cost of secondary education. The difficulty of making any satisfactory allocation of the kind, however, will be understood, when it is realized that both elementary and higher education are in some instances given in the same school and by the same teacher. Unfortunately, too, the term "secondary" has not the same meaning in all States. It might be mentioned here that similar difficulties arise in connexion with the apportionment amongst the various branches of expenditure on administration, inspection and the training of teachers. The figures quoted hereunder in regard to cost have been mainly extracted from the Reports of the State Education Departments, and are subject to the above qualifications.

GOVERNMENT SECONDARY SCHOOLS(a) : EXPENDITURE ON MAINTENANCE.

State.	1950.		1951.	
	Cost.	Cost per Head of Population.	Cost.	Cost per Head of Population.
	£	£ s. d.	£	£ s. d.
New South Wales	3,275,898	1 0 4	3,975,808	1 4 0
Victoria	1,930,655	0 17 3	2,515,400	1 1 10
Queensland	438,865	0 7 4	513,834	0 8 5
South Australia	583,949	0 16 8	740,728	1 0 7
Western Australia	506,420	0 17 9	636,973	1 0 2
Tasmania(b)	197,054	0 14 0	260,278	0 17 9

(a) Excludes Senior Technical Colleges.

(b) Includes High and Junior Technical Schools.

The figures in all cases exclude the cost of buildings. In Queensland, the figure quoted excludes the cost of the Agricultural High School and College, which amounted in 1950-51 to £126,412, and in 1951-52 to £184,838.

(c) *Buildings.* Expenditure on Government School buildings, excluding senior technical colleges, for the years 1939 and 1947 to 1951 was as follows:—

GOVERNMENT SCHOOLS(a) : EXPENDITURE ON BUILDINGS.

(Including Loan Fund Expenditure.)

(£.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	Total.
1939	411,720	206,481	174,725	85,539	56,994	60,011	539	996,009
1947	747,294	540,036	275,153	231,967	203,926	92,462	2,261	2,093,099
1948	1,069,789	1,017,227	306,776	261,683	303,213	185,286	1,790	3,145,764
1949	1,277,015	2,015,972	442,753	355,494	454,207	288,057	12,522	4,846,020
1950	2,163,917	2,364,674	633,149	544,859	676,742	402,080	13,723	5,799,144
1951	3,531,351	3,118,637	854,761	911,036	916,515	721,740	96,729	10,150,769

(a) Excludes Senior Technical Colleges.

The totals for the various States in 1951 include the following amounts expended from loan and other funds; figures for 1950 are shown in brackets—New South Wales, £2,502,289 (£1,452,607); Victoria, £2,977,015 (£2,200,967); Queensland, £693,522 (£499,282); South Australia, £772,703 (£386,316); Western Australia, £716,858 (£499,521) and Tasmania, £625,888 (£328,061).

(d) *Net Total Cost.* The net total cost of education in Government Schools, including buildings, during the years 1939 and 1947 to 1951 was as follows :—

GOVERNMENT SCHOOLS(a) : NET TOTAL COST.

(£.)

Year.	N.S.W. (b)	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	Total.
1939	5,010,096	2,873,575	1,656,124	939,576	787,494	(c)380,627	7,341	11,654,833
1947	8,289,917	5,073,401	2,740,374	1,765,437	1,639,811	780,617	17,425	20,306,982
1948	9,135,115	6,243,610	3,205,609	1,965,272	1,791,406	995,628	27,370	23,364,010
1949	10,703,894	8,318,568	3,828,027	2,308,615	2,255,466	1,216,348	47,844	28,678,762
1950	12,994,003	10,128,636	4,596,885	2,979,866	2,960,408	1,484,838	54,301	35,198,937
1951	16,753,860	12,895,594	5,668,598	3,961,660	4,202,284	2,088,976	153,885	45,724,857

(a) Excludes Senior Technical Colleges.

(b) Gross figures, receipts not being available.

(c) Excludes Junior Technical Schools.

The figures in this and the preceding tables refer to all grades of Government Schools with the exception of senior technical colleges, and in Victoria and (in 1939) Tasmania, junior technical schools. Including buildings, the net cost per scholar in average attendance for the whole of the schools in Australia amounted in 1950 to £41 14s., and in 1951 to £50 16s. 8d. as compared with £4 9s. 3d. in 1901.

(e) *School Banking.* Particulars of School Savings Banks are included in Chapter XVI.—Private Finance.

§ 3. Non-Government Schools.

1. **Public Authority and the Non-Government Schools.**—In all States education is compulsory for all children between certain ages. It must be received 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 Queensland and South Australia it is possible under the present regulations for schools to exist without inspection. In New South Wales and Western Australia provision is made for the 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 can operate. Provision is made, too, for inspections at any time by the registering authority.

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 awards of State scholarships for secondary education, which can be taken only in government or in approved non-government schools.

The eight State-subsidized grammar schools in Queensland are the only non-government schools of Australia for which an annual inspection is prescribed by statute.

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

2. Numbers of Non-Government Schools, Teachers and Enrolments, 1951.—The numbers of non-government schools, teachers and enrolments for 1951 are shown in the following table:—

NON-GOVERNMENT SCHOOLS, 1951.

Denomination.	N.S.W. (a)	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	Total.
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NUMBER OF SCHOOLS.

Church of England ..	45	36	16	14	9	5	..	125
Presbyterian ..	13	18	4	2	3	2	..	42
Methodist ..	5	4	(b) 6	3	2	1	..	21
Roman Catholic ..	601	354	210	100	128	40	2	1,435
Other Denominational ..	17	19	6	19	3	5	..	69
Undenominational ..	59	48	12	8	65	6	..	198
Total	740	479	254	146	210	59	2	1,890

TEACHERS.

Church of England ..	713	586	245	175	108	79	..	1,906
Presbyterian ..	256	261	58	61	47	9	..	692
Methodist ..	147	183	(b) 109	68	23	28	..	558
Roman Catholic ..	4,229	1,835	1,309	485	548	197	11	8,614
Other Denominational ..	56	112	25	75	9	42	..	319
Undenominational ..	481	295	106	112	138	30	..	1,162
Total	5,882	3,272	1,852	976	873	385	11	13,251

ENROLMENTS.

Church of England ..	9,625	11,382	3,782	3,011	2,055	1,329	..	31,184
Presbyterian ..	3,824	5,654	558	894	1,033	191	..	12,154
Methodist ..	2,250	3,112	(b) 1,642	1,187	708	343	..	9,242
Roman Catholic ..	108,024	68,850	37,070	12,810	15,926	5,699	370	248,749
Other Denominational ..	788	2,104	359	1,235	184	978	..	5,648
Undenominational ..	6,279	6,167	1,912	1,540	2,884	499	..	19,281
Total	130,790	97,269	45,323	20,677	22,790	9,039	370	326,258

(a) Includes Australian Capital Territory.

(b) Presbyterian and Methodist Schools' Association.

3. Growth of Non-Government Schools.—The enrolment and average attendance at non-government schools in 1891 and at varying intervals to 1951 were as follows:—

NON-GOVERNMENT SCHOOLS : ENROLMENT AND ATTENDANCE.

Year.	Enrolment.	Average Attendance.	Year.	Enrolment.	Average Attendance.
1891	124,485	99,588	1947	280,543	257,430
1901	148,659	120,742	1948	281,354	251,092
1911	160,794	132,588	1949	293,306	264,104
1921	198,688	164,073	1950	309,673	275,562
1931	221,387	189,665	1951	326,258	293,429
1939	247,482	219,171			

4. **The Organization of Roman Catholic Education.**—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 minor 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, speech, etc.—teaching is done by members of religious orders.

5. **The Organization of Other Non-Government Education.**—(i) *General.* Within each State, although the other non-Government schools may be organized into loose forms of association for purposes such as sports, conferences, uniform conditions, etc., there is no system corresponding in size, detail or organization with the Roman Catholic Schools.

(ii) *Church of England.* In certain schools under direct church control the appointment of a majority of Council members rests with the Synod. More frequently perhaps the appointment of such Council members lies in the hands of the diocese or even the parish. The ecclesiastical head of the area, the archbishop or bishop, is typically *ex-officio* chairman of the school Council. The church may appoint all members or on the other hand it may appoint a majority or only one or two. The other members are secured in many ways; some may be nominated by parents, some by "old boys" some by the "school association," some by co-option by the existing Council. Many combinations of these forms of membership occur.

(iii) *Other Denominations.* In general the pattern is similar to that described above, with appointments usually controlled by the State authority of the Church concerned, either alone or acting in conjunction with the local congregation. In Queensland there are six schools operated under the joint auspices of the Presbyterian and Methodist Churches.

(iv) *Undenominational.* There are three main groups of such schools; firstly, those partly controlled by State action, such as those Grammar schools for which some members of the controlling body are appointed under Act of Parliament; secondly, those operated under the auspices of corporate bodies, usually in the form of limited liability companies which may be affiliated with particular churches; and, thirdly, a number of privately-owned schools, many of which are small and restricted to kindergarten or primary schooling.

§ 4. Pre-school Education.

1. **Types of Pre-school Centres.**—Nursery-kindergartens under trained teachers provide daily sessions for children aged three to six, while play groups or play centres provide shorter periods for smaller groups. Day nurseries or crèches care for the children of mothers in employment and Lady Gowrie Child Centres are special centres set up in each State capital city by the Commonwealth Government to demonstrate a child development programme. There are also some private and denominational nursery schools which vary considerably in standard.

Free kindergartens were originally established and financed mainly in congested industrial areas, by voluntary effort, but over the years State Governments and some municipal councils have provided an increasing amount of financial assistance.

2. **The Training of Teachers.**—Since the development of this work depends on the availability of trained teachers, nearly all Kindergarten Unions now have teacher training colleges providing three-year courses. The minimum entrance age is seventeen, and the Leaving Certificate is usually required before admission.

The New South Wales Department of Education gives a two-years' course at the Teachers' College, covering such subjects as biology, physiology, child development, psychology, mental hygiene, child welfare, home science, English, world history, current affairs, sociology, art, crafts, physical education, music and early child development (which embraces principles and methods, play activities, children's literature, music for children, art and other creative experiences, and curriculum planning). A considerable amount of time is also spent in all colleges in practice teaching.

Financial help, such as free training, bursaries provided by the Government or voluntary bodies and living allowances, is provided for teachers, but there is a considerable shortage of trained pre-school teachers.

The six Kindergarten Unions in 1938 united to form the "Australian Association for Pre-School Child Development", a federal body whose aim is to promote the continuous advancement of the pre-school movement throughout Australia.

3. **Kindergarten of the Air.**—Daily kindergarten sessions of half an hour are now broadcast in all States by the Australian Broadcasting Commission in collaboration with Kindergarten Unions.

4. **Kindergarten Unions.**—The following information regarding kindergarten unions has been compiled from particulars supplied by the principals of the chief institutions or the organizing secretary in each State, except in the case of Western Australia where the details were furnished by the Education Department. It refers to kindergarten unions or associations, and excludes the kindergarten branches in the Government schools of the various States.

KINDERGARTEN UNIONS, 1952.

State.	No. of Schools.	Average Attendance.	Permanent Instructors.	Student Teachers.	Voluntary Assistants.
New South Wales	33	1,447	99	26	1
Victoria..	45	1,595	67	..	35
Queensland	6	226	14	..	..
South Australia(a)	76	2,225	185	..	8
Western Australia	35	938	61	..	..
Tasmania	5	209	17	..	..
Total—1952	200	6,640	443	26	44
1951	209	6,784	463	39	67

(a) Includes affiliated suburban and country centres.

Only 26 of these 200 kindergartens in 1952 were located outside metropolitan areas; these were as follows:—New South Wales—two at Newcastle; Victoria—two each at Geelong and Ballarat, one each at Bairnsdale, Castlemaine, Colac, Euroa, Horsham, Maryborough, Mildura and Red Cliffs; South Australia—one each at Angaston and Nuriootpa; Western Australia—two at Kalgoorlie and one each at Carnarvon, Geraldton, Kojonup, Merredin, Northam and Pearce; Tasmania—two at Launceston. In each capital city except Hobart there is a training college and the number of students in training during 1952 was 88 in Sydney, 123 in Melbourne, 30 in Brisbane, 42 in Adelaide, and 25 in Perth.

§ 5. 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 they provide a form of education which is more properly regarded as secondary education.

The chief institutions for vocational training other than the universities are the senior technical colleges. These offer training not only in industrial skills, but also in commercial, agricultural and pastoral occupations, the plastic arts and homecrafts. There are, in addition, agricultural colleges and a substantial number of private business colleges.

Although, as in other branches of education, the main lines of technical education had been determined by 1929, expansion and development since then has, perhaps, been greater in this field than in any other. The following table gives some indication of the growth of technical education in the years 1935 to 1951.

TECHNICAL EDUCATION: AUSTRALIA.

Year.					No. of Colleges.	No. of Students.	No. of Teachers.(a)	Total Expenditure.
								£
1935	..	..	..	..	86	67,426	2,471	663,339
1939	..	..	..	..	94	89,215	3,276	1,359,800
1945	..	..	..	..	114	110,841	5,175	1,849,051
1947	..	..	..	..	119	144,882	6,239	2,685,896
1948	..	..	..	..	126	150,482	6,819	3,235,129
1949	..	..	..	..	131	153,602	6,530	4,081,331
1950	..	..	..	..	141	161,564	6,501	5,298,510
1951	..	..	..	..	146	159,310	6,784	6,617,049

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

Technical education is the field most sensitive to changing material needs and has expanded to meet the requirements of new industries and techniques. The desire for the comparative economic security of skilled jobs during the period of economic depression and the increasing demand for skilled workers due to the development of more advanced techniques in industry stimulated public interest in all States. For example, consequent upon the Nangle Commission in Western Australia (1928) and the appointment of a commission in New South Wales in 1933, there was a move in both of these States to decentralize facilities and set up advisory councils to maintain better contact with industries served by the colleges. In 1938 a Royal Commission on Youth Employment and Apprenticeship examined in some detail matters related to technical education in Western Australia.

A characteristic feature of technical education since 1929 has been the close co-operation between the Commonwealth and the States. This is understandable as the technical colleges were able to play an important part in meeting two crises with

Australia-wide implications. During the years of the economic depression in the 1930's States sought means to provide technical training for the young unemployed and this led, in 1936, to the Youth Employment Scheme, in which the States and the Commonwealth participated. During the 1939-45 War the Commonwealth and the States worked together in the Commonwealth Technical Training Scheme to meet the wartime need for technicians; after the war this type of training was continued in the technical colleges in the States as a part of the Commonwealth Reconstruction Training Scheme. In addition, 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.

The expansion of technical education in the last two decades has paralleled the growth of secondary production from predominantly scattered small-scale and light industry to more concentrated large-scale heavy industry utilizing advanced techniques. Technical colleges have always been linked with the industries from which they draw staff and students, but whereas formerly they produced skilled craftsmen they now also accept the responsibility of turning out persons capable of adapting themselves to swift technological changes and able to assume responsibilities of management and leadership. Furthermore, rapid changes in industrial methods call for a close connexion between college curricula and workshop practice in order that they may keep in step and so that applied research can make available to industry the results of pure research. The introduction of day training classes for apprentices is an indication of the development of this relationship between technical education and industry.

The history of the development of technical education since 1929 is one of increasing government support and control, increasing financial commitments by both State and Commonwealth Governments as well as considerable financial support and greater participation by industrial undertakings in the work of the colleges, increasing enrolments and facilities and the development of curricula and courses to meet new needs, and the growing realization of the need to recruit and train teaching staff in a systematic way.

2. **Teacher Training.**—Another important feature of technical education since 1929 relates to the training of teachers. Technical colleges at that time were staffed chiefly by men (and a few women) 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, there has been a move to develop schemes of training technical college teachers without breaking the important link provided by recruiting specialist tradesmen to teach in the colleges. For example, since the 1939-45 War, New South Wales has extended a system whereby tradesmen-instructors receive a course of teacher training in both general educational theory and teaching method. After appointment a teacher in a large centre attends classes for six hours each week during his first year of service and two hours weekly thereafter until he has completed the training course. Correspondence courses and itinerant teachers care for the newly appointed teacher-instructor in country colleges. Modifications of this aspect are in operation in other States. Many technical teachers, principally of academic, commercial and domestic science subjects, hold trained teachers' certificates from teachers' colleges.

3. Colleges, Teachers and Students.—The numbers of colleges, teachers and enrolments of individual students during the years 1939 and 1948 to 1951 are given in the following table :—

TECHNICAL EDUCATION : COLLEGES, TEACHERS AND ENROLMENTS.

State.	Colleges.	Teachers.			Individual Students Enrolled.		
		Full-time.	Part-time.	Total.	Males.	Females.	Total.
New South Wales—							
1939..	24	894	301	1,195	27,403	9,861	37,264
1948..	38	1,036	1,724	2,760	46,624	15,259	61,883
1949..	38	1,010	1,755	2,765	48,624	16,333	64,957
1950..	42	1,047	1,403	2,450	(a)48,310	(a)20,775	69,085
1951..	44	1,131	1,356	2,487	(a)44,940	(a)19,356	64,296
Victoria—							
1939..	30	817	456	1,273	21,158	7,686	28,844
1948..	33	1,140	1,263	2,403	32,222	9,961	42,183
1949..	35	1,161	1,054	2,215	30,898	10,597	41,495
1950..	36	1,238	1,030	2,268	30,879	11,152	42,031
1951..	36	1,280	1,071	2,351	29,229	12,217	41,446
Queensland—							
1939..	13	94	108	202	5,125	1,272	6,397
1948..	12	125	227	352	10,181	3,352	13,533
1949..	12	111	264	375	10,746	3,911	14,657
1950..	12	135	346	481	12,350	4,551	16,901
1951..	12	135	346	481	12,654	5,425	18,079
South Australia—							
1939..	17	104	212	316	6,390	3,331	9,721
1948..	24	155	442	597	9,885	7,406	17,291
1949..	25	167	460	627	9,700	7,531	17,231
1950..	27	173	447	620	10,270	6,829	17,099
1951..	28	195	482	677	10,512	6,893	17,405
Western Australia—							
1939..	5	36	119	155	3,843	1,830	5,673
1948..	11	148	275	423	8,056	3,010	11,066
1949..	12	117	222	339	7,695	2,718	10,413
1950..	15	131	264	395	7,424	3,925	11,349
1951..	17	145	325	470	8,101	4,703	12,804
Tasmania—							
1939..	5	41	94	135	936	380	1,316
1948..	8	32	252	284	2,828	1,698	4,526
1949..	9	35	174	209	2,777	2,072	4,849
1950..	9	25	262	287	2,960	2,139	5,099
1951..	9	34	284	318	3,356	1,924	5,280
Total—							
1939..	94	1,986	1,290	3,276	64,855	24,360	89,215
1948..	126	2,636	4,183	6,819	109,796	40,686	150,482
1949..	131	2,601	3,929	6,530	110,440	43,162	153,602
1950..	141	2,749	3,752	6,501	112,193	49,371	161,564
1951..	146	2,920	3,864	6,784	108,792	50,518	159,310

(a) Partly estimated.

4. Expenditure.—The expenditure on technical education in each State for 1951 is shown below :—

TECHNICAL EDUCATION : EXPENDITURE, 1951.

(Including Loan Fund Expenditure.)

(£.)

State.	Salaries and Maintenance.	Equipment.	Buildings.	Total Expenditure.	Receipts—Fees, etc.	Net Expenditure.
New South Wales	1,545,331	324,482	484,717	2,841,602	274,114	2,567,488
Victoria(a)	1,746,372	75,998	403,123	2,342,201	261,638	..
Queensland..	275,371	110,058	64,538	449,967	38,626	411,341
South Australia	311,520	9,194	87,999	409,531	50,284	359,247
Western Australia	363,147	(b)	17,626	442,838	17,724	425,114
Tasmania	81,046	7,923	39,465	130,910	787	130,123
Total 1951	4,322,787	527,655	1,097,468	6,617,049	643,173	..
1950	3,701,316	473,662	884,132	5,298,510	667,678	..

(a) Includes expenditure on Junior Technical Schools.

(b) Included with salaries and maintenance.

Fees and other receipts are paid into Consolidated Revenue in all States except Victoria, where they are retained and spent by the Technical School Councils. The expenditure on buildings is largely financed from loan moneys, the sums provided from this source in 1951 being (the expenditure in 1950 is shown in brackets) :—New South Wales, £417,708 (£229,728); Victoria, £351,986 (£374,691); Queensland, £58,971 (£40,000); South Australia, £74,078 (£64,853); Western Australia, £626 (£1,961); and Tasmania, £35,183 (£20,348).

The expenditure on maintenance (including salaries) for technical education in Australia in 1951 amounted to 13s. 1d. per head of the mean population, as compared with £4 3s. 11d. per head expended on maintenance (including salaries) for primary and secondary education.

§ 6. Commonwealth Activities.

Although the primary responsibility for education rests with the Australian 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 training administrators for Papua-New Guinea and a School of Forestry. In each of the Australian Territories there is an education programme which provides for both the native and white children who live there. References to education in the Territories appear in Chapter VII.—The Territories of Australia.

The Commonwealth Office of Education, established in 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. This Office has responsibilities with regard to the education of migrants, the education of natives in the Northern Territory, the provision of scholarships at the tertiary level under the Commonwealth Scholarship Scheme and the Reconstruction Training Scheme, international relations including the association of Australia with the aims and activities of the United Nations Educational, Scientific and Cultural Organization and the provision of scholarships and fellowships for selected students under the Commonwealth Technical Co-operation Scheme, the UNESCO Fellowship Scheme and the South-East Asian Scholarship Scheme.

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. In 1951 the Commonwealth Government introduced a free-milk scheme for school children. This extends a service which some State authorities were already providing for a proportion of the school population. Under the Commonwealth Reconstruction Training Scheme many ex-servicemen and women have received the training which has enabled them to enter many different trades and professions.

The Commonwealth also assists a number of other bodies concerned with education. Besides grants to organizations such as the Australian Council for Educational Research and the National Fitness Council, Australian Universities have received grants for specific purposes through the Universities Commission.

§ 7. Australia and International Relations in Education.

Despite its isolation, 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 has participated in the Commonwealth Technical Co-operation Scheme and the United Nations Technical Assistance programme.

Perhaps the most important single factor behind the quickening of Australian interest in international cultural affairs has been membership of the United Nations Educational, Scientific, and Cultural Organization. Australia has been a member since 1946. Some eleven 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 UNESCO International Conferences and Seminars highly effective. Other work undertaken by these Committees has included the supervision of studies relating to community attitudes towards international affairs, and to the assimilation of migrants, the conducting of seminars in Australia, arranging for exhibitions and displays in Australia, 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.

§ 8. Universities.

1. **General.**—The last quarter of a century has seen a marked increase in the number of students and staff, the establishment of two new Universities and three new University Colleges, and the provision in the older Universities of additional courses. In spite of difficulties due, in some measure, to the economic depression of the 1930's and a World War, the period since 1929 has been one of significant development.

2. **University Expansion.**—(i) *The Establishment of New Universities.* The two new Universities represent new departures in the Australian University tradition.

(a) *The Australian National University.* By the Australian National University Act 1946, provision was made for the establishment of a University in the Australian Capital Territory. The University is required by the Act to provide facilities for post-graduate research including:—The School of Medical Research to be known as "The John Curtin School of Medical Research"; The Research School of Physical Sciences; The Research School of Social Sciences; and The Research School of Pacific Studies.

The Act also provides for the incorporation of the Canberra University College. In the first instance the Council has decided to concentrate on the establishment of the four Research Schools mentioned in the Act.

The government of the University is vested in a Council consisting of two representatives each of the Senate and the House of Representatives, up to eight nominated by the Governor-General, up to nine elected by Convocation, two elected by the students, and three elected by the academic staff; up to three members may be co-opted and the Vice-Chancellor is an *ex officio* member.

The senior academic body in the University is the Board of Graduate Studies of which all professors are members. The Board deals with questions affecting education, learning and research in the University.

The Act provides for a statutory grant of £325,000 per annum and in addition a supplementary grant is made to meet the running costs. A separate vote is made for capital works.

An area of 204 acres at Acton has been vested in the University. University House, a residential College for single members of the staff and the student body, is to be opened in February, 1954. University House will also act as the social centre for the whole University community.

The laboratories for the Research School of Physical Sciences have been completed and the office block is under construction. The John Curtin School of Medical Research (with the exception of the Department of Medical Chemistry which is at present located in the Wellcome Foundation, London) is housed in temporary laboratories on the University site. The workshop wing of the permanent building has been commenced and it is expected that the laboratory wings will be completed within the next two years. The Research Schools of Social Sciences and Pacific Studies and the Library are housed in existing buildings on the site known as the "Old Hospital Buildings".

Sixteen professors and fifty-four other members of the academic staff have been appointed.

Each department of the Research Schools accepts a small number of graduate students. Each student is assigned to a Supervisor and pursues a course of research. Subject to certain conditions, the following degrees may be awarded by the University :— Master of Arts (M.A.); Master of Science (M.Sc.); Doctor of Philosophy (Ph.D.); Doctor of Letters (Litt.D.); Doctor of Science (D.Sc.); Doctor of Laws (LL.D.). The Right Honourable Viscount Bruce of Melbourne is Chancellor of the University and Mr. L. G. Melville was recently appointed Vice-Chancellor. Mr. R. A. Hohnen is the Registrar.

Each of the Research Schools will eventually be headed by a Director. Professor M. L. Oliphant, F.R.S., is Director of the Research School of Physical Sciences. But until further appointments can be made the following Deans have been appointed to act : Professor A. H. Ennor, Dean of the School of Medical Research; Professor S. F. Nadel, Dean of the School of Pacific Studies, and Professor G. Sawyer, Dean of the Research School of Social Sciences. In 1953 forty students were enrolled in the University (including eighteen new enrolments).

Further information concerning this University appeared in Official Year Book No. 39, pp. 226-7.

(b) *New South Wales University of Technology.* The other University to be established within the period under review was the New South Wales University of Technology, which came into being by Act of the New South Wales Parliament in 1947. This foundation was a new departure not only for Australia but also for the whole British Commonwealth. It attempted to do for Australia the task that has been carried out by institutions such as the well-known Eidgenossische Technische Hochschule in Zurich or the Massachusetts Institute of Technology in the United States. The official handbook of the new University explained its particular function as follows :—

“ In a traditional university the scientist is concerned with the original contributions to principles and conceptions in essentials and pure research ; in the technical university the technologist is concerned with the utilization of scientific knowledge and experience for the solution of immediate problems.”

Three degrees were established, viz., Applied Science (B.Sc.), Engineering (B.E.) and Architecture (B.Arch.) and by 1952 Chairs had been set up in Applied Chemistry, Applied Physics, Chemical Engineering, Electrical Engineering, Mechanical Engineering, Metallurgy, Mining and Applied Geology, Mathematics, Wool Technology, Architecture and Humanities.

Two features are emphasized in the planning of University of Technology undergraduate courses. The first is the incorporation in the syllabus of industrial experience to supplement the laboratory and lecture-room work at the University. In the Faculty of Engineering, for example, this practical work amounts to five months a year and is supervised and organized to suit the stage and syllabus of each course of study. The second is the compulsory study, in all faculties, of general subjects such as language and literature, history, economics and psychology. These courses are designed to broaden the experience and interests of the student.

The University is making use of the buildings and equipment of the Sydney Technical College until its own buildings have been completed in another part of Sydney. Administratively it is at present under the control of the New South Wales Minister for Education and the Public Service Board, although the Act provides that administration shall eventually pass to a Council.

Towards the end of 1951 a branch College of the New South Wales University of Technology was established in Newcastle.

(ii) *University Colleges.* Particulars are given in Official Year Book No. 39, pp. 227-8, concerning the Canberra University College, which was created in 1930 mainly to establish courses of lectures for degrees in co-operation with the University of Melbourne, and the New England University College, which was established in 1937 and is governed by the University of Sydney.

(iii) *Expansion within the Universities.* An important administrative development which occurred in all Universities during the period under review was the appointment of full-time salaried Vice-Chancellors or Principals, a move which gave much greater effectiveness to University administration.

Within the past twenty years the appearance of some of the Universities has altered to a striking extent. New permanent buildings and some temporary ones have been erected and new wings have been added. An impressive expansion has been that taking place in Queensland where, since 1937, building has been proceeding upon a new site at St. Lucia, and, beginning with the transfer of some of the Engineering School in 1947, the University is being gradually moved into its new quarters. The University of Technology is also preparing to move to its new site.

This very considerable building activity has been made necessary primarily by the vast expansion in student numbers that has taken place since 1929. In that year, in all Australian universities, there were some 9,000 students; by 1952 the number had risen to 29,641. This more than twofold increase had the following characteristics:—

- (a) There was a continued increase in University enrolments up to 1940, followed by only a slight recession during the war period. The lowest point reached, in 1942, was still above the 1935 level. In the closing year of the war enrolments had already risen beyond any previous figures, and in the following year (1946) the rapid post-war expansion became strikingly apparent with an increase of 64 per cent. over the 1945 figures. The peak of enrolments was reached in 1948, and thereafter a slow decline has set in, which, it is anticipated, will be checked by the mid-1950's. From that point on, numbers will probably again increase until 1960, by which time it is estimated that some 40,000 may be enrolled in Australian universities.
- (b) Enrolments in every one of the largest eight faculties declined during the war period, and then took a sharp upward trend towards the close of the war, maintaining this increase until 1948, when a slow decline commenced. By 1952 enrolments had fallen by 20 per cent.
- (c) During the war and post-war period, the size of most of the major faculties relative to one another remained approximately the same.

3. *Courses.*—The post-war period has seen a noticeable expansion in the ranges of courses offered, particularly in the younger and smaller Universities. New faculties of Education were established in Western Australia and Queensland. Two new faculties of Dentistry, two of Commerce (Economics), three of Architecture and one each of Medicine, Law, Veterinary Science, Applied Science, and Engineering also came into being.

Within existing faculties, many new departments were set up. In Engineering, specialist departments of Chemical and Aeronautical Engineering, Civil, Electrical, Mechanical, Mining and Metallurgical Engineering and Surveying have been instituted.

In Medicine the most notable development has been the establishment of specialist courses leading to graduate diplomas in Radiology, Anaesthesia, Clinical Pathology, Ophthalmology, Laryngology, Gynaecology, Tropical Medicine, Dermatology and Psychological Medicine at Melbourne and Sydney.

In Science the smaller Universities followed the development of Melbourne and Sydney by breaking up departments such as Biology into Zoology and Botany, etc., and adding new departments such as Bacteriology and Biochemistry. Melbourne and Sydney also introduced some new courses and a new degree in Forestry was introduced in each University.

In Arts the same processes can be observed. New departments in Semitic Studies, Fine Arts, Music and Statistics were opened in various universities, and other departments were divided or sub-divided. The most prominent addition was the rapid development of Psychology departments which, in the post-war period, expanded into one of the biggest of the Arts departments.

In the smaller faculties, similar innovations and expansions, reflecting an increasing demand for specialized study, have taken place. Examples are the development of departments of Physical Education, Social Studies, Town and Country Planning and Criminology.

In addition, however, there were several attempts to provide integrated general education courses within the faculties of Arts and Science.

4. **Research.**—A notable feature of student enrolments in recent years has been the steady increase in the number of higher degree students. It has long been a strong criticism of Australian universities that little provision was made in them for graduate students. Those students who wished to continue beyond their first degree would pursue work for a Master's degree or, more rarely, for a doctorate in tenuous contact with the University staff or would go abroad financed by private means or occasionally by scholarships. Exceptions to this practice were in some science departments which in the 'thirties organized regular fourth year work for a handful of promising graduates.

During the period under review five important factors came into operation which mark the increasing attention paid by universities to research and the training of graduate students.

The first resulted from the Commonwealth Government grant begun in 1936 for the prosecution of research and the training of research workers in Universities on projects that were connected with the Council for Scientific and Industrial Research. The later extension of this grant in 1941 to the Social Sciences gave that field also a welcome stimulus. A great impetus towards research came, secondly, from the work University staffs were called upon to do in the 1939-45 War. This was not confined to the more spectacular services rendered by research workers in Science, Technology and Medicine, but affected also in no small measure the Social Sciences and the Humanities where research into linguistics, teaching methods, psychological testing and social and anthropological problems was pursued at an increased rate. This activity was, in some cases, channelled through newly formed Research Departments. Some of these, such as the Waite Agricultural Research Institute in South Australia, existed before the War, but for the most part they were a development of the post-war period. Notable examples of these pure research schools are the Departments of Experimental Medicine, established in 1944, and Metallurgical Research (1946) in Melbourne. The same trend is shown on a larger scale by the establishment in 1946 of the Australian National University designed specifically for the encouragement of research and the training of graduate students in research. The fourth factor demonstrating an increasing emphasis upon graduate work was the institution in the post-war period of the Ph.D. degree, requiring two years of full-time graduate research. This degree was established in Melbourne (1945), Tasmania (1947), Sydney (1948), Queensland (1949), the New South Wales University of Technology (1949), Adelaide (1950), Western Australia (1950) and the Australian National University (1950). The fifth stimulus to advanced work was the development of four-year honours courses for the degrees of B.A. and B.Sc. Sydney had done this in Science in 1924, and in Arts in 1938, and most of the other universities followed in the post-war period. Almost without exception the additional year's work planned for these honours students includes an examination of the state of current research in the subject and some experience in the use of research techniques.

With the advancing interest in research, the nature of the research work has tended to change. Individual short-term projects undertaken by members of staff because of a special interest and often written up by them in short journal articles still constitute the bulk of the research done. But there appears to be an increasing trend towards long-term and also towards collaborative research.

Greater emphasis upon applied or service research has also become apparent. The problems on which University researchers have recently been working have tended to be those which have arisen from the practical application of their studies to the needs of the community. Attention has also been given more and more to matters characteristically Australian.

5. **Services.**—(i) *General.* The traditional division of the function of Universities into teaching and research seems no longer applicable. A third function has been added

in recent times, that of community service. The University has long been responsible for providing an important service to the community in the form of professional training in many fields and in a number of other intangible ways, but of recent years there has been a noticeable increase in the performance by university departments of direct and deliberate services to the community. This was most apparent in time of war when the Universities whole-heartedly accepted the role given them by the Minister for War Organization of Industry when he said in 1942 to a meeting of the Vice-Chancellors, "the Government requires of the Universities specific services, falling under two heads: (i) investigations and research into particular problems relating to the war effort; (ii) the training of personnel with special qualifications for the armed services, war production and other essential needs". The trend, however, was noticeable before the 1939-45 War and is still continuing. These services, which are of three main kinds, are dealt with hereunder.

(i) *Service Research.* This is a form of applied research in which a University department applies itself to the solution of a problem of immediate practical importance to the community. The development of producer-gas units for use on motor vehicles during the 1939-45 War, research on poliomyelitis, tropical food plants, bovine mastitis, and mosquito control are examples of work of this type recently undertaken in various University departments.

(ii) *Applied Research.* Closely associated with the kind of research just mentioned are the projects which are requested of the University by outside bodies and are usually in the field of applied research. Services of this kind are most frequently rendered by the engineering faculty. Testing work for government departments and private industry is carried out in almost every engineering department. In Melbourne, since 1934, 400 reports on problems associated with ores and concentrates submitted from all over Australia have been issued by the Department of Mining. Research on servomechanisms for the Department of Supply, aerals for the R.A.A.F., the stability of power systems for the Electrical Research Board and studies on the site, materials and design for the Warragamba Dam are some of other tasks that have been undertaken. Services of this kind, however, are by no means confined to the technological field. They have been rendered by almost all University departments and not least by workers in the Social Sciences who have been called upon to investigate matters such as colour-vision tests for the Civil Aviation Department, the teaching of English to foreign-born immigrants and anthropological problems encountered in the administration of New Guinea.

(iii) *Advisory Services.* Consultant and advisory services have come to occupy much of the time of the staff of many departments. There has been a long tradition of service in this field by members of the Departments of Agriculture and Medicine, and almost equally prominent have been the economists whose services were sought by governments and businesses in the depression period of the 1930's. The 1939-45 War saw an increase in demand for expert advice from University faculties and the seconding of personnel to government departments in considerable numbers. In the post-war period much of this demand has continued. Problems of land utilization have called for advice from agriculturalists, geographers and economists. Personnel and training problems in industry have required the services of psychologists and educationists. School broadcasts have been scripted by scientists, and lecturers in English history, modern languages and political science. University physicists, chemists and medical staff have played an important role in recent defence programmes. Developmental schemes have looked for advice to engineers, geologists and architects.

6. *The Commonwealth and the Universities.*—(i) *General.* Commonwealth financial support for university activities may be regarded as developing in three phases. Firstly, in the period up to 1939, Commonwealth interest in research projects carried out by or in collaboration with the Universities led to the granting of increasing sums for this purpose. Secondly, during and after the 1939-45 War the Commonwealth extended assistance to University students, at first with the object of increasing the number of highly qualified

people available for the war effort, then with the object of rehabilitating ex-servicemen, and finally as a social service of benefit to the community. Thirdly, in 1951, the Commonwealth initiated a policy of making special grants to the States for university purposes.

(ii) *Grants for Research.* The Commonwealth had given some support to research prior to 1926, chiefly through the Institute of Science and Industry, but the amount spent did not exceed £25,000 per annum. The provision of substantial Commonwealth contributions may be said to date from 1926. In that year the Institute was replaced by the Council for Scientific and Industrial Research (known since 1949 as the Commonwealth Scientific and Industrial Research Organization) with an annual appropriation of £250,000. It has ever since worked in close association with the Universities. Both kinds of research, fundamental and applied, have at times occupied the attention of both the Universities and the Commonwealth Scientific and Industrial Research Organization. In general, however, the preliminary training of graduates in research work has been left to the Universities.

In 1936 the Commonwealth Government decided to make a grant of £30,000 per annum for five years to Australian Universities for research in physical and biological sciences. In 1941 this grant was increased to £31,000 per annum for the next five years, and an additional £9,000 per annum was made available for research in Social Sciences. In 1946 the grants were £40,000 and £12,000 respectively. In 1947 the two grants were fused, an amount of £82,000 being provided—£52,000 for training of research workers and £30,000 for specific research projects. The allocations for each of the years 1948 and 1949 were £100,000 and for 1950 £110,000, the additional £10,000 being provided for the New South Wales University of Technology.

In 1951 the grant for research in the physical, biological and social sciences was absorbed in the larger general grant which was then made available by the Commonwealth to the States for Universities.

The research grants mentioned above, together with other Commonwealth payments for research purposes, totalled more than £3½ million in 1950-51, compared with less than £500,000 in 1939-40.

(iii) *Assistance to Students.* (a) *General.* There have been three stages in the provision by the Commonwealth Government of financial assistance to students (other than Commonwealth Reconstruction Training Scheme trainees) attending Universities and other institutions of similar standing.

(b) *Reservation during the 1939-45 War.* To ensure that the flow of trained professional personnel from Universities would be sufficient to meet the needs of the country during the war and post-war periods, the Commonwealth Government in 1942 set up the Universities Commission. This Commission, in co-operation with the Directorate of Manpower, administered a scheme of reservation of University students from the beginning of 1943. All these reserved students were eligible for supplementary assistance, subject to a means test, the maximum living allowance payable being £104 per annum for a student living with his parents, and £143 for a student living away from home.

(c) *The Interim Commonwealth Financial Assistance Scheme.* Financial assistance to students was continued under this Scheme for five years from the end of hostilities. The number of students assisted was fixed on the basis of the number of reserved students in 1945, and a minimum standard was prescribed below which a student would not be eligible for selection. The living allowance was increased by 5s. per week, from 1st July, 1947, and again from 1st January, 1949 to £130 per annum (£169 for a student living away from home). The maximum allowance was then reducible by £4 for every £10 by which the adjusted family income exceeded £150.

(d) *Commonwealth Scholarship Scheme.* This Scheme, which operated from 1st January, 1951, was based on a plan drawn up by the Universities Commission during the period of operation of the Interim Scheme. Under the new Scheme 3,000 scholarships are made available each year to boys and girls who have completed normal secondary courses. The scholarships are allocated to States on a population basis, two per cent. of them being reserved for students over the age of 25 years. The courses available

under the Scholarship Scheme include all first degree courses and certain under-graduate diploma courses at Universities; technical college and school of mines diploma courses at approved standards; and certain other professional courses.

The awards are made entirely on merit and no regard is had to the income of the students or their parents. All scholarship holders have their fees paid. In addition, subject to a means test, they are eligible for a living allowance. The maximum allowance is £169 per annum (£240 10s. for a student living away from home). A mature age scholar who is married may receive, in addition to this personal allowance, £1 11s. per week in respect of his wife, and 9s. per week in respect of the first dependent child under 16 years of age.

In 1951, 10,068 students applied for Commonwealth Scholarships, 7,142 being accepted. This number included 3,610 who had commenced courses before the Scheme came into operation, and 973 who continued from the Interim Scheme.

(e) *Commonwealth Reconstruction Training Scheme.* In addition to the above Schemes for assistance to civilian students, eligible ex-service personnel received training at Universities and similar institutions at Commonwealth expense under the Reconstruction Training Scheme. A general description of the Scheme is to be found on page 240 of Official Year Book No. 39.

A total of 53,466 ex-members of the Services applied to the Universities Commission for assistance under the Scheme, and 24,992 full-time and 19,237 part-time students have been selected for training. By the end of 1951 more than 18,000 of these had successfully completed their courses and only 4,662 remained in training.

In connexion with this Scheme the Commonwealth Government, in agreement with the States, made available to the training institutions concerned finance to the extent of approximately £1 million for buildings and £500,000 for equipment, and also paid all tuition fees and subsidies designed to meet the cost to the Universities of the Reconstruction Trainees.

(iv) *Direct Grants for General Purposes.* The Commonwealth Government in 1950, with the consent of the States, appointed a committee of inquiry with the following terms of reference:—“(1) To examine and report upon the finances of the Universities having regard to their facilities for teaching and research including staff, buildings and equipment; (2) To examine and report upon the requirements of Universities in relation to the work at present undertaken and to the need for their future development; and (3) To make recommendations as to whether any, and, if so, what, action should be taken.” Following a report submitted by that committee and with the agreement of the States, the States Grants (Universities) Act, No. 81 of 1951, was passed by the Commonwealth Parliament, enabling grants to be made to the States for their Universities.

The following grants were payable to the States for University purposes and for current expenditure only: (a) A special grant covering the six months' period ending 31st December, 1950 (payable to all States participating in the scheme); (b) A basic grant in each of the years 1951, 1952 and 1953 payable on condition that, for the University concerned, the total of State grants and fees received by the University in the year in question was at least equal to a stipulated “qualifying amount”; (c) An additional grant up to a stated maximum in each of the years 1951, 1952 and 1953 payable at the rate of £1 for every £3 by which, for the University concerned, the total of State grants and fees received by the University in that year exceeded the “qualifying amount”.

In each of the years 1951, 1952 and 1953 a further grant was also payable to the States to be applied towards the teaching and administrative costs of residential colleges, provided that the University concerned qualified for the basic grant referred to in (b) above. The following table indicates the size of the various Commonwealth grants for which the Universities could qualify.

COMMONWEALTH GRANTS TO THE STATES FOR UNIVERSITY PURPOSES, 1951 TO 1953.

(£.)

University or College.	Special Grant for Six Months ended 31st December, 1950.	Basic Grant for each of the years 1951, 1952 and 1953.	"Qualifying Amount" of State Grants and Fees Necessary to Qualify for Basic Grant.	Second Level Grant for each of the years 1951, 1952 and 1953.	Annual Grant for Residential Colleges (Included in Basic Grant).
New South Wales—					
University of Sydney ..	117,920	270,023	783,369	101,070	8,900
N.S.W. University of Technology ..	7,280	16,373	86,521	6,240	274
New England University College ..	5,810	13,099	64,164	4,980	220
Victoria—					
University of Melbourne	96,250	220,414	655,159	82,500	7,265
Queensland—					
University of Queensland	40,700	93,226	309,269	34,890	3,073
South Australia—					
University of Adelaide ..	41,020	93,893	272,394	35,160	3,095
Western Australia—					
University of Western Australia ..	27,650	62,845	183,531	23,700	1,668
Tasmania—					
University of Tasmania ..	14,870	33,127	106,319	11,460	505
Total	351,500	803,000	2,460,726	300,000	25,000

NOTE.—Further details of Commonwealth grants will be found in the Appendix.

7. **Teaching and Research Staff.**—The following table shows the number of professors, readers, associate and assistant professors, lecturers in charge, lecturers including senior lecturers and assistant lecturers (full-time and part-time), demonstrators (full-time) and tutors (full-time and part-time), and honorary lecturers and demonstrators, on the teaching and research staffs of the Universities and University Colleges during the years 1950 to 1952. :—

UNIVERSITIES : TEACHING AND RESEARCH STAFF, 1952.

University or College.	Professors.	Readers, Associate Professors, Assistant Professors, Lecturers in Charge.	Lecturers.(a)		Demonstrators and Tutors.		Honorary Lecturers and Demonstrators.	Total.
			Full-time.	Part-time.	Full-time.	Part-time.(b)		
Sydney	52	15	286	252	99	111	56	871
Melbourne	43	29	210	133	85	76	5	581
Queensland (Brisbane) ..	29	19	145	139	31	19	(c) 21	403
Adelaide	27	27	95	68	9	45	..	271
Western Australia (Perth)	16	12	65	35	12	..	..	140
Tasmania (Hobart)	15	4	44	11	8	..	..	82
N.S.W. University of Technology (Sydney) ..	10	5	204	311	10	..	..	540
New England University College (Armidale, N.S.W.) .. ..	..	16	27	5	2	..	15	65
Canberra University College	5	..	18	18	..	4	..	45
Total 1952	197	127	1,094	972	256	255	97	2,998
1951	188	108	1,015	1,219	233	232	87	3,082
1950	184	99	780	869	233	148	75	2,388

(a) Includes Senior Lecturers and Assistant Lecturers.

(b) Excludes Part-time Demonstrators.

(c) Department of External Studies.

The Conservatorium of Music in Sydney is attached to the Education Department, but in Melbourne and in Adelaide the Conservatorium of Music is under the control of the University.

8. Students.—(i) *Total.* The number of students, including Commonwealth Reconstruction Training Scheme students, enrolled for courses at the Universities and University Colleges during the years 1950 to 1952 is shown in the following table :—

UNIVERSITIES : TOTAL STUDENTS ENROLLED, 1952.

University or College.	Degree Courses.	Diploma Courses.		Certificate Courses.	Miscellaneous Subjects.	Total.(a)
		Post-Graduate.	Sub-Graduate.			
Sydney	6,361	115	771	..	182	7,380
Melbourne (b)	6,412	28	278	138	464	7,320
Queensland (Brisbane)	2,960	39	329	271	254	3,850
Adelaide	2,303	89	868	..	918	4,178
Western Australia (Perth)	1,586	25	..	..	73	1,684
Tasmania (Hobart)	447	33	..	24	66	564
N.S.W. University of Technology (Sydney)	561	..	3,240	78	295	4,170
New England University College (Armidale, N.S.W.)	185	21	1	..	4	211
Canberra University College	190	..	12	..	82	284
Total 1952	21,005	350	5,499	511	2,338	29,641
1951	22,341	309	5,768	546	2,778	31,671
1950	24,224	394	2,629	614	2,882	30,630

(a) Adjustment made for students enrolled for more than one course. (b) Includes 10 students enrolled but attending Canberra University College.

Of the total students in 1952, 23,798 were males and 5,843 females. Included in those enrolled for degrees were 96 enrolled for higher degree courses in Sydney, 201 in Melbourne, 57 in Queensland, 156 in Adelaide, 52 in Western Australia, 17 in Tasmania, 89 at the New South Wales University of Technology, and 13 at the Canberra University College.

(ii) *Commonwealth Reconstruction Training Scheme Students.* The number of Commonwealth Reconstruction Training Scheme students enrolled for courses at the Universities and University Colleges during 1950 to 1952 is shown in the following table :—

UNIVERSITIES : COMMONWEALTH RECONSTRUCTION TRAINING SCHEME STUDENTS ENROLLED, 1952.

University or College.	Degree Courses.	Diploma Courses.		Certificate Courses.	Miscellaneous Subjects.	Total.(a)
		Post-Graduate.	Sub-Graduate.			
Sydney	535	15	17	..	5	572
Melbourne (b)	663	6	19	20	15	723
Queensland (Brisbane)	244	..	40	47	7	338
Adelaide	186	3	72	..	14	275
Western Australia (Perth)	128	..	..	..	2	130
Tasmania (Hobart)	35	3	..	1	..	39
N.S.W. University of Technology (Sydney)	9	..	160	2	21	192
New England University College (Armidale, N.S.W.) .. .. .	..	..	..	..	..	..
Canberra University College	42	..	2	..	3	47
Total 1952	1,842	27	310	70	67	2,316
1951	3,691	71	588	161	152	4,662
1950	5,941	129	643	265	259	7,236

(a) Adjustment made for students enrolled for more than one course. (b) Includes 2 students enrolled but attending Canberra University College.

Of the total Commonwealth Reconstruction Training Scheme students in 1952, 2,287 were males and 29 females. Included in those enrolled for degrees were ten enrolled for higher degrees in Melbourne, one in Queensland, three in Adelaide, four in Western Australia and one at the Canberra University College.

(iii) *New Students Enrolled.* The number of new students, including Commonwealth Reconstruction Training Scheme students, enrolled for courses at the Universities and University Colleges during the years 1950 to 1952 is shown in the following table:—

UNIVERSITIES : NEW STUDENTS ENROLLED, 1952.

University or College.	Degree Courses.	Diploma Courses.		Certificate Courses.	Miscellaneous Subjects.	Total.(a)
		Post-Graduate.	Sub-Graduate.			
Sydney	1,939	..	388	..	17	2,326
Melbourne (b)	1,263	5	61	15	175	1,519
Queensland (Brisbane)	613	9	107	57	106	892
Adelaide	441	..	208	..	356	1,005
Western Australia (Perth)	414	1	..	..	5	420
Tasmania (Hobart)	130	2	..	6	23	161
N.S.W. University of Technology (Sydney)	192	..	579	46	153	969
New England University College (Armidale, N.S.W.)	85	..	1	..	..	86
Canberra University College	57	..	2	..	47	106
Total 1952	5,134	17	1,346	124	882	7,484
1951	5,127	5	1,344	103	1,061	7,601
1950	5,228	2	806	81	949	7,034

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

(b) Includes 2 students enrolled but attending Canberra University College.

Of the total new students enrolled in 1952, 5,607 were males and 1,877 females. Included in those enrolled for degrees were sixteen enrolled for higher degree courses in Melbourne, nine in Queensland, five in Adelaide, two in Western Australia, three in Tasmania, 59 at the New South Wales University of Technology and seven at the Canberra University College.

(iv) *New Commonwealth Reconstruction Training Scheme Students.* The number of new Commonwealth Reconstruction Training Scheme students enrolled for courses at the Universities and University Colleges during the years 1950 to 1952 is shown in the following table:—

UNIVERSITIES : NEW COMMONWEALTH RECONSTRUCTION TRAINING SCHEME STUDENTS ENROLLED, 1952.

University or College.	Degree Courses.	Diploma Courses.		Certificate Courses.	Miscellaneous Subjects.	Total.
		Post-Graduate.	Sub-Graduate.			
Sydney	10	..	8	..	..	18
Melbourne	9	..	..	..	3	12
Queensland (Brisbane)	2	..	2	1	..	5
Adelaide .. .. .	..	..	1	..	..	1
Western Australia (Perth)	5	..	..	..	1	6
Tasmania (Hobart)	2	1	..	1	..	4
N.S.W. University of Technology (Sydney)	2	..	6	1	3	12
New England University College (Armidale, N.S.W.) .. .. .	..	..	..	..	..	..
Canberra University College	2	..	..	..	1	3
Total 1952	32	1	17	3	8	61
1951	129	..	35	9	12	185
1950	341	..	87	3	43	474

Of the 61 new Commonwealth Reconstruction Training Scheme students 60 were males, including one male enrolled at the Canberra University College for a higher degree.

9. **University Receipts (or Income).**—The receipts (or income) of the Universities and University Colleges are derived principally from State and Commonwealth Government grants, students' fees, and income from private foundations, etc. From all sources other than new bequests the receipts during 1950 and 1951 for general university functions were 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 : RECEIPTS (OR INCOME), GENERAL ACTIVITIES, 1951.
(£.)

University or College.	Government Grants.(a)	Students' Fees.	Interest, Rent Dividends and Donations.	Other.	Total.
Sydney	698,058	406,692	46,057	22,590	1,173,397
Melbourne	832,197	259,663	60,025	44,753	1,196,638
Queensland (Brisbane)	435,877	126,726	14,786	19,031	596,420
Adelaide	315,758	64,121	48,977	27,119	455,975
Western Australia (Perth)	338,751	11,921	2,196	14,932	367,800
Tasmania (Hobart)	187,037	13,186	316	3,714	204,253
N.S.W. University of Technology (Sydney)	556,580	26,346	..	1,432	584,358
New England University College (Armidale, N.S.W.)	124,917	5,331	246	21,178	151,672
Canberra University College	49,934	4,877	77	498	55,386
Total 1951	3,539,109	918,863	172,680	155,247	4,785,899
1950	1,967,625	696,546	144,923	135,356	2,944,450

(a) Includes income in respect of previous years.

The figures in the foregoing table do not include the value of new foundations received by the Universities, which, in 1951, were as follows:—Sydney, £52,894; Melbourne, £56,741; Queensland, £7,148; Adelaide, £57,651; Tasmania, £60,751; New South Wales University of Technology, £192,231; and New England University College, £21,488.

10. **Principal University Benefactions.**—In previous issues of the Official Year Book information is given in some detail in regard to the extent to which the Universities have benefited from private munificence. Space will permit of reference herein to the more important benefactions only.

The endowments to the Sydney University include the Challis Fund, £374,680; the G. H. Bosch Fund, £268,929; the P. N. Russell Fund, £100,457; the Oswald Watt Fund, £115,744; and the Fisher Estate, £43,386. In addition, the University receives a large annual revenue from the trustees of the McCaughey bequest. Excluding the principal of the latter, the credit balances of the private foundations amounted to £1,884,240 at 31st December, 1952.

The main benefactors to the Melbourne University for the endowment of trust funds or for the erection of buildings have been: Mr. Sidney Myer, £60,000; The Supreme Court Library Fund, £55,000; late Dr. F. Haley, £51,798; late Miss Helen Mackie, £50,000; Sir Russell Grimwade, £50,000; late Mr. E. E. Truby Williams, £48,137; late Sir Samuel Gillott, £38,569; W. L. Ballieu Trust, £30,322, (income of £20,444 has also been received, the total receipts are expected to be about £100,000); late Sir Samuel Wilson, £30,000; Mr. R. B. Ritchie, £30,000; The Melbourne Herald and Weekly Times Ltd., £30,000; Messrs. N., M. H., and M. L. Ballieu, £30,000; an anonymous donor, £30,000; late Sir John Higgins, £25,910; late Dr. James Stewart, £25,624; late Mr. W. P. Greene, £25,308; late Dr. Georgina Sweet, £22,500; late Mr. C. D. Lloyd, £22,407; late Miss Mary A. M. Lockie, £22,500, (the receipts are expected to reach £75,000); late Hon. Francis Ormond, £20,000; Edward Wilson (the Argus) Trust, £20,000; late Sir Thomas Lyle, £20,000; and Nicholas Pty. Ltd., £20,000.

Queensland University to 30th April, 1953 had received £289,411 from the McCaughey estate and £50,210 from the Walter and Eliza Hall Trust, while the Hon. T. C. Beirne gave £20,000 in 1935 for the endowment of a Chair of Law in Queensland. The permanent site for the University and other land valued at £62,000 were presented by Dr. and Miss Mayne. In 1937 the trustees of Mr. W. Robertson donated £19,400 for the Chair of Agriculture.

The chief benefactors to the Adelaide University have been Sir George Murray, and his sister Miss M. T. Murray, £134,000; Mr. Peter Waite and his daughter, Elizabeth Macmeikan, £120,000; Sir Thomas Elder, £100,000; Sir Langdon Bonython, £72,000; Mrs. R. F. Mortlock and her son, Mr. J. T. Mortlock, £71,600; Dr. F. Lucas Benham, £51,000; Mr. T. E. Barr Smith, £44,000; Mr. Hugh Hughes, £35,000; Mrs. A. M. Simpson and Miss A. F. Keith Sheridan, £31,000; Mrs. Jane Marks, £30,000; The Broken Hill Proprietary Co. Ltd., £30,000; Mr. Edward Neale, £28,000; family of Mr. John Darling, £25,000; Sir William Mitchell, £25,000; Sir Walter Hughes, £20,000; and Mr. R. Barr Smith and family, £20,000.

Under the will of Sir Winthrop Hackett the University of Western Australia received £425,000 for the erection and maintenance of University buildings and for studentships, scholarships, bursaries and other financial help for deserving students. In addition, an endowment of £18,000 was made in 1913 for the Hackett Chair of Agriculture. The late Robert Gledden bequeathed an estate valued at £60,000, particularly to provide travelling scholarships, and numbers of bequests, aggregating about £55,000, have been made to the University, mainly for the establishment of a medical school or research in connexion therewith.

The Tasmanian University in 1951 received a donation of £50,000 from the Electrolytic Zinc Co. of Australasia Ltd. and £10,000 from an anonymous donor towards the cost of erection of a Hall of Residence for students.

11. **University Payments (or Expenditure).**—The principal item of disbursements under the general University activities consists of the maintenance of the teaching and research staff, representing 67.4 per cent. of the total in 1951 compared with 69.4 per cent. in 1950.

The following table shows the payments (or expenditure) excluding capital expenditure on buildings, during the years 1950 and 1951:—

UNIVERSITIES : PAYMENTS (OR EXPENDITURE), GENERAL ACTIVITIES, 1951.
(£.)

University or College.	Adminis- tration.	Maintenance of—			Other.	Total.
		Teaching Depart- ments.	Premises.	Libraries.		
Sydney	120,921	753,662	133,654	35,613	65,397	1,109,247
Melbourne	80,495	705,291	117,229	40,695	171,349	1,115,059
Queensland (Brisbane)	33,626	402,038	57,889	19,056	76,647	589,256
Adelaide	27,634	328,582	53,821	22,457	49,202	481,696
Western Australia (Perth)	26,018	198,671	45,777	14,068	34,329	318,863
Tasmania (Hobart)	18,941	120,040	9,221	14,900	15,340	178,442
N.S.W. University of Tech- nology (Sydney)	49,717	474,838	38,248	12,707	8,848	584,358
New England University College (Armidale, N.S.W.)	15,962	59,188	18,950	5,513	38,814	138,427
Canberra University College	10,329	36,531	1,567	4,776	212	53,415
Total 1951	383,643	3,078,841	476,356	169,785	460,138	4,568,763
1950	248,823	2,105,904	327,037	114,837	236,820	3,033,421

12. **Extra-University Activities.**—(i) *General.* The tables shown in paragraphs 9 and 11 relate to the general University activities while those following show the financial position of all extra-University activities. The heterogeneous character of the items in

the statements for these activities varies to such extent between the Universities and University Colleges that comparisons of the totals are misleading, but they include all items excluded from the general statement and give useful information within limits.

(ii) *Receipts (or Income), Extra-University Activities.* The following table shows the main receipts (or income) for the years 1950 and 1951 :—

UNIVERSITIES : RECEIPTS (OR INCOME), EXTRA ACTIVITIES, 1951.

(£.)

University or College.	Government Grants.	Interest, Rent, and Dividends.	Candidates' Fees, Public Examinations.	Special Research Grants.	Other.	Total.
Sydney	20,900	180,843	4,501	23,012	49,140	278,396
Melbourne	1,400	72,005	43,849	97,369	112,852	327,475
Queensland (Brisbane)	3,300	11,681	18,885	14,401	30,404	78,731
Adelaide	7,048	10,821	11,836	22,628	8,822	61,155
Western Australia (Perth)	1,850	38,268	17,346	9,992	(b) 57,949	125,405
Tasmania (Hobart)	2,000	1,306	2,164	14,731	(c) 16,470	36,671
N.S.W. University of Technology (Sydney) .. .. .	..	..	..	6,150	(d) 16,100	22,250
New England University College (Armidale, N.S.W.) .. .. .	..	1,176	..	730	..	1,906
Canberra University College .. .. .	..	208	..	..	1,964	2,172
Total 1951	36,498	316,308	98,581	189,013	293,761	934,161
1950	35,841	299,076	84,682	209,670	183,259	812,528

(a) Includes receipts, Superannuation Fund, £34,936, University Press, £45,713 and £26,770 students' fees collected on behalf of allied Institutions. (b) Includes University Press, £26,724. (c) Includes Superannuation Fund, £16,369. (d) Includes £10,000 donation by Electricity Meter and Allied Industries Ltd. and £6,000 grant by Joint Coal Board.

(iii) *Payments (or Expenditure), Extra-University Activities.* The following table shows the main items of payments (or expenditure) for the years 1950 and 1951 :—

UNIVERSITIES : PAYMENTS (OR EXPENDITURE), EXTRA ACTIVITIES, 1951.

(£.)

University or College.	Salaries, Fees, etc.	Public Examination Expenses.	Adult Education and Extension.	Special Research Expenses.	Other.	Total.
Sydney	35,037	..	12,085	104,390	18,273	169,785
Melbourne	9,161	46,386	1,902	121,382	111,995	290,826
Queensland (Brisbane) .. .. .	..	32,864	3,277	30,859	(b) 33,289	100,289
Adelaide	5,825	12,421	4,124	28,788	15,963	67,121
Western Australia (Perth) .. .. .	..	18,706	32,518	10,621	(c) 49,855	111,700
Tasmania (Hobart) .. .. .	..	2,300	..	18,876	16,039	37,215
N.S.W. University of Technology (Sydney) .. .. .	..	..	..	1,964	394	2,358
New England University College (Armidale, N.S.W.) .. .. .	..	..	..	730	(d) 135	865
Canberra University College .. .. .	..	..	..	..	(e) 3,499	3,499
Total 1951	50,023	112,677	53,906	317,610	249,442	783,658
1950	45,298	87,465	37,372	312,420	230,626	713,181

(a) Includes University Press, £43,282, Superannuation Fund, £29,188. (b) Includes University Press, £20,536. (c) Includes Scholarships, £25,204, and University Press, £24,277. (d) Scholarships. (e) Superannuation Fund, £1,964, Scholarships, £1,535.

13. 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 1951 :—

UNIVERSITIES : DEGREES CONFERRED, AND DIPLOMAS AND CERTIFICATES GRANTED, 1951.

Particulars.	Sydney.		Mel-bourne.		Queens-land.		Ade-laide.		Western Australia.		Tas-manian.		Total.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Degrees—														
Arts	245	158	205	131	56	38	51	29	58	31	17	18	632	405
Law	175	3	76	4	14	..	24	..	5	..	10	..	304	7
Commerce or Economics ..	104	5	151	9	41	3	19	..	..	..	19	1	334	18
Education	1	..	24	2	2	..	..	..	3	..	..	..	30	2
Science	240	56	154	38	85	9	101	19	70	19	33	3	683	144
Medicine	405	54	168	18	76	8	72	9	..	..	..	..	721	89
Engineering	199	..	114	..	59	..	68	..	37	..	16	..	493	..
Agriculture	43	3	25	1	8	..	..	..	26	2	..	..	122	6
Veterinary Science	17	1	..	..	11	..	..	..	..	..	..	..	28	1
Dentistry	187	7	57	1	57	4	29	..	7	1	..	..	337	13
Music .. .. .	..	..	9	19	..	..	..	..	..	..	..	..	9	19
Architecture	49	6	39	3	..	..	..	..	..	..	..	..	88	9
Divinity	4	..	..	..	..	..	..	..	..	..	..	..	4	..
Total	1,669	293	1,022	226	409	62	384	57	206	53	95	22	3,785	713
Diplomas (Post-Graduate)—														
Arts	118	59	48	12	5	2	15	5	11	5	13	4	210	87
Science .. .. .	..	..	..	1	..	..	..	..	..	..	..	..	..	1
Medicine	34	3	12	..	..	..	..	..	..	..	..	..	46	3
Total	152	62	60	13	5	2	15	5	11	5	13	4	256	91
Diplomas (Sub-Graduate) ..	22	24	53	20	64	33	112	53	..	..	2	5	253	135
Certificates .. .. .	..	..	..	..	65	7	1	..	..	..	..	..	66	7

§ 9. Further 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 them are the mass media of communications (press, film and radio) 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 exert a powerful influence on the cultural level of the population. There are also bodies such as Adult Education Authorities, Libraries, Art Galleries and Museums which aim at catering for the educational requirements of particular groups.

2. *Adult Education.*—(i) *New South Wales.* *University Department of Tutorial Classes.* In 1914 the University Senate established a Department of Tutorial Classes to provide classes and study groups along the lines of similar work in England. The Department is supervised by a Joint Committee of the Senate, on which representation is provided for the Workers' Educational Association, and the Secretary of which is the Director of Tutorial Classes.

The Department has, in addition to the Director, a full-time academic staff of nine, and administrative and typing staff. It has establishments at Newcastle and Armidale as well as Sydney. Its work consists of the following :—

(a) *Tutorial Classes.* Each year the Department conducts tutorial classes in a variety of subjects, grouped under the broad headings of Social, Political and Economic Studies; History and International Affairs; Psychology; Philosophy; Literature and Drama; Foreign Languages; Child Study; Music and Art. Most of the classes in these subjects are organized by the Workers' Educational Association, and the Department supplies tutors from its full-time and part-time staff. In New England, however, the Department organizes its own classes. Courses range from 9 to 28 lectures, and some go on from first to second and sometimes fourth year. In 1952 the Department conducted 129 classes with a total enrolment of 3,581.

- (b) *Discussion Groups*. Since 1938 the Department has conducted a Discussion Group scheme, designed to provide country people in particular with opportunities for group study of the same type of subjects as are studied in its tutorial classes. Groups of five or more people are formed to discuss written lectures with the help of a corresponding tutor. In 1952, 120 groups were operating, taking in all 181 courses. Total enrolments were 1,950. This compares with nine groups and 114 enrolments in this scheme's first year of operation, 1938.
- (c) "*Kits*". In 1946, the Department embarked on a new venture for groups of people who were interested in activities such as play reading and performance, writing, public speaking, painting and music-making, rather than discussion. A number of "*Kits*" has been devised to provide programmes for such activities. In 1946, 16 groups were formed with a total enrolment of 179; by 1952 these figures had grown to 57 groups and 759 enrolments.

It will thus be seen that the Department enrolled 6,290 students for continuous work in classes and groups in 1952.

- (d) *Current Affairs Bulletin*. In November, 1951 the Senate of the University arranged for the Department to take over the fortnightly bulletin from the Commonwealth Office of Education as from the beginning of 1952. A Commonwealth Government grant was made available to assist in meeting costs of publication. Commencing publication in 1942 for the Services, this periodical was re-started as a Service and civilian bulletin in 1947 by the Commonwealth Office of Education, edited from the Department of Tutorial Classes. Twenty-five issues were published in 1952, and just over one million copies were distributed to educational bodies, groups, business organizations and individual subscribers in Australia and overseas.

Finance for the Department's activities comes from a University appropriation (£14,100 in 1952); from the Adult Education Expansion Grant, distributed on the advice of the Adult Education Advisory Board by the New South Wales Government (the Department's share in 1952 being £18,490); and, to a small extent, from Discussion and Kit Group fees. Half the fees for the Department's tutorial classes, except in New England, are allotted to the Workers' Educational Association for organizing purposes.

A library service is provided to all students in classes and groups by the Adult Education Section of the Public Library of New South Wales, a special section which is financed from the Adult Education Expansion Grant.

(ii) *Victoria*. The Council for Adult Education is a statutory body, with a basic annual grant of £25,000. Its expenditure was £74,000 in 1952-53. The Council organizes evening classes, summer and week-end schools, public lectures, sends drama and music to the country-centres through its Travelling Theatre and Music Tours, co-operates with the National Gallery of Victoria in the organization of a Travelling Art Exhibition, operates an extensive system of discussion groups in Victoria and provides service for country dramatic and music societies.

(iii) *Queensland*. The Adult Education service in Queensland has continued to expand. In 1952 a total of 140,709 attendances was recorded at 4,567 meetings held in Brisbane and 125 country centres. Students attending regular courses included 2,800 at the Brisbane centre and approximately 11,000 in the country. Subjects most in demand were English Literature, English Expression, Psychology, Appreciation of Music and Art, Home Handicrafts and Photography. In smaller centres study circles and groups have been formed. There were 127 of these operating in 1952, and many were regularly visited by members of the permanent staff located in five country towns.

The full cost of Adult Education is borne by the State and admission to all courses is free. The expenditure for the year 1951-52 was £31,468.

(iv) *South Australia.* Since 1917 the University of Adelaide, through the Joint Committee for Tutorial Classes, has provided each year in the metropolitan area series of tutorial classes, lecture classes and study circles on a wide range of subjects of cultural and current interest, for people who have no intention of proceeding to a degree or diploma and are unable to attend the ordinary University courses. The fee is £1 15s. a course and is paid to the Workers' Educational Association, which accepts the responsibility of organizing the classes. The enrolment for these classes in 1953 was 1,238. The Joint Committee extends its activities into the larger country centres by sending art exhibitions and plays on tour, lending boxes of books and arranging lectures and film screenings.

(v) *Western Australia.* In Western Australia the Extension Services of the University are handled by the Adult Education Board, the staff of which consists of a part-time Director and eleven full-time officers.

The objective and the revised policy of the Board in recent years has been defined in the following terms:—"To provide men and women of varying educational attainments in country districts as well as in the metropolitan area with facilities for the constructive use of leisure by use of head or hands and in such a way as to stimulate in the individual a sense of citizenship and to encourage community activities among groups".

Examples of the application of this policy in 1952 and preceding years include:—

Music, Drama, Films and Ballet. Artists of outstanding quality are being presented to the metropolitan public in programmes of a classical nature. A notable feature of the work of the Board was the sponsorship of foreign films in the open-air theatre at the university during the summer months, and in a city theatre during the winter. Total attendances at the Board's activities of this nature in metropolitan centres were 32,109.

Country Drama and Ballet. The year 1952 has seen a consolidation of the work done in previous years by the Board. The addition of a tutor-organizer to the staff enabled it to extend its activities and give more attention to the demands of the various local repertory clubs. Dramatic and ballet companies have frequently visited country towns, with total attendances of 15,082.

Summer School. In 1952 Summer School attracted 282 men and women of whom 115 were in residence. A series of open-air symphony concerts took place in the Somerville Auditorium, as well as screenings of foreign films, while in the Sunken Garden and Somerville Auditorium open-air dramatic productions took place.

Metropolitan Lecture Classes. Two series of Metropolitan Lecture Classes, each of ten meetings, are conducted each year. The average annual attendance at these classes totalled 800 in post-war years. With a few suburban exceptions, classes are held in the Adult Education rooms in Perth. The scheme was extended to Fremantle in September, 1951.

Box Discussion Group Scheme. The pre-war Box Discussion Group, which has been functioning in very reduced form in post-war years, is being revised and extended for use in country districts in 1953.

(vi) *Tasmania.* Although Tasmania was the last of the Australian States to set up a State Adult Education Organization, some form of Adult Education has existed since the formation in 1913 of a Workers' Education 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 definition of Adult Education under the Act is very wide—"cultural or educational pursuits and the encouragement of the arts and sciences".

The executive officer of the Board is the Director of Adult Education, at Hobart, under whose direction three Regional Officers organize Adult Education in areas each covering approximately one-third of the State, and a fourth is organizer for Hobart. Each Regional Officer is responsible, under general direction, for the development of adult education within his region. The system is efficient provided there is constant co-ordination by the Director. In larger centres the Board sets up classes of its own and enrolls students. In smaller centres it encourages voluntary groups to organize themselves, and provides them with study material or instructors. Frequently these groups are formed within existing organizations, such as the Country Women's Association. In several centres Committees have been formed. These occupy themselves with local arrangements and advise Regional Officers of their needs.

Regional Officers circulate among groups and classes and visit each as often as possible. Such visits are very important in maintaining group keenness, but as numbers increase, each officer finds the task increasingly difficult. They report their needs for tutors and instructors, and these are engaged on part-time instruction. The Board also brings to Tasmania as many musicians, actors, and other artists as it can afford to guarantee. Local Arts Committees have been formed in many centres to help the Board with local arrangements. In several cases these committees have developed further into nuclei of Community Centres, with plans to raise funds and erect buildings for community culture and recreation. A sub-committee of the Board, with a panel of architects, town-planners, health and legal experts, gives advice on long-range planning of Community Centres, and their design. The W.E.A. remains one of the voluntary organizations through which the Board will work, and the Board assists it by paying fees to its tutors, and rent of premises.

A link has been made between the University and the Board by the setting up of a Joint Committee to plan courses of serious study of a more academic nature. These are tutorial classes and are confined mostly to the cities.

In 1952 there were 167 courses in all subjects, with nearly 2,000 enrolled students. The State Government grant in 1952-53 was £20,000. Subjects most in demand are women's crafts such as dressmaking, then, in descending order of interest, drama, arts and crafts, public speaking, useful hobbies like photography, languages, psychology, science like marine biology, world affairs, economics, academic subjects.

3. Workers' Educational Associations.—In 1913, Workers' Educational Associations were formed in all the States of Australia, and later in New Zealand. The movement has for its object the bringing of the University into closer relationship with the masses of the people, and providing for the higher education of the workers in civic and cultural subjects.

In Victoria the Association has been superseded by the Council for Adult Education, a statutory body appointed by the Government. A Statutory Board has also been appointed in Queensland. Direct grants are made by the Governments of New South Wales and South Australia. Grants in 1952, for classes and discussion groups organized by the Association and serviced by their respective State Universities in these two States, were as follows:—New South Wales, £32,590, 110 tutorial classes, 120 discussion groups (taking 181 separate courses) and 57 Kit groups; South Australia, £5,000, 34 tutorial classes and extension lectures at country centres.

Grants from fees from the Tutorial Classes amounting to £10,850 were made to the Association in New South Wales for both organizing work and a teaching service. The teaching service in 1952 included 25 classes, 5 summer schools (two each of 10 days, one of 7 days, and 2 of 5 days), 24 week-end schools, 37 public lectures (mainly in short courses of 3 lectures), 63 lectures to various organizations, and 35 broadcast talks. In South Australia the Association receives a grant of £812 for general organizing purposes.

In Tasmania the Association received a grant of £1,000 from the Adult Education Board and 108 lectures were organized in 1952, mostly in short series from 3 to 12. The Association's primary interest has been in subjects related to social change such as Industrial History, Economics, Political Science and Sociology. In recent years, however, there has been a substantial increase in the number of classes studying Psychology, History, Literature, Music, Drama and Popular Science.

4. **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.

One of its principal functions is the organization of periodic conferences, to which leading oversea educators are invited. Sessions are usually held in each of the capitals and in various country centres, thus enabling oversea leaders of educational thought to influence considerable numbers of Australian teachers and others. Conferences of this type were held in 1937, 1946, 1949 and 1951.

§ 10. 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 in all States, all of which have now passed legislation 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, its functions now including 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 National Library, Canberra, and the Public Libraries at Sydney and Melbourne.

2. **Commonwealth.**—(i) *Commonwealth National Library.* This library was created as the Commonwealth Parliamentary Library in 1901. The library of Congress was chosen in 1903 as the model upon which its collections and services should be developed and it has therefore assembled a great reference collection with special emphasis on Australian material and rendering services on a national basis.

While the provision of a reference service to members of Parliament and to Government Departments remains a primary responsibility, the National Library now offers research facilities to University institutions in the Australian Capital Territory and to students of Australian history and affairs, publishes basic bibliographies in the field of Australiana and serves as a free public library for residents of the Australian Capital Territory.

In 1952 it contained about 400,000 volumes, together with many tens of thousands of pamphlets, pictures, prints, maps, manuscripts and historical objects, scores of thousands of feet of microfilm, about two and a half million feet of moving picture films and 100,000 cubic feet of archives. It is particularly strong in the social sciences, in its holdings of Government publications, Australiana, and material relating to countries of the Pacific and adjacent regions.

The rapid growth of its Australiana, strengthened by the acquisition of the Petherick collection of 16,500 items in 1911, and the notable collection of Cook manuscripts in 1923, caused the Library Committee in the latter year to adopt the title of "Commonwealth National Library".

It has been enriched by several important gifts, notably the Gregory Mathews collection on Australian Ornithology in 1940, and the Ferguson collection of books, manuscripts and pictures relating to Australia and the South Seas in 1946. The great pictorial collection of Rex Nan Kivell in the same field was received on indefinite loan in 1947.

The National Library's activity in the field of Australiana was substantially advanced when, following the posting of a Liaison Officer to London in 1944, arrangements were concluded to microfilm, in association with the Public Library of New South Wales, original records relating to Australia in the Public Record Office and elsewhere. Acquisition of these microfilms will permit resumption at a later date of the *Historical Records of Australia* of which 34 volumes had been published by 1926.

The operation of the Commonwealth Publications Exchange Agency, established in 1947, brings substantial sets of official publications of oversea countries as well as those of research institutions and learned societies throughout the world. Under the Copyright Act 1912 the publisher of every book, pamphlet, etc., printed in Australia is required to deposit a copy in the Library.

In 1945, following the death of President Roosevelt, the Government established, as its memorial to him, a Roosevelt wing in the Library, housing a comprehensive and growing collection of material illustrating the growth and activity of the American people.

Following the appointment of the War Archives Committee in 1942, the National Library became an Archival Authority for the war-time records of all Commonwealth Departments and agencies other than the Service Departments, the latter being entrusted to the Australian War Memorial. In 1947 the activity was extended to cover all records created since 1901, and in 1952 the National Library became the authority for all Departments. Repositories have been established in Canberra, Melbourne, Sydney, Brisbane and Adelaide, and to date over 1,000,000 cubic feet of records have been surveyed, of which about 100,000 cubic feet of records have been transferred to the custody of the Library.

Following the establishment of the Australian National Film Board in 1945, the Library's existing activity in the collection of Australian historical films was expanded into a central library of documentary and educational films and made the non-theatrical distributing agency in Australia for the Board, on which the Library has been represented since its creation. Films are loaned direct to organizations in Commonwealth Territories and to Commonwealth Departments and agencies, and to State Education Departments and State film centres to supplement their individual resources. An information service is given on new and unusual films, and exchanges are conducted with a number of oversea governments. The film collection contains about 4,000 titles, together with Australian historical films and a great number of film strips.

Training in librarianship for Commonwealth Government Departments and for students from the States has been a function since 1938. A post-graduate library school is conducted in which students are prepared for the examinations of the Library Association of Australia.

The National Library is also responsible for providing and servicing the Australian reference libraries at all Commonwealth Government establishments overseas. These now number 36, those in London and New York being major collections under the direct control of officers of the National Library. The services to Commonwealth Territories began in 1936, when, with the assistance of a Carnegie grant of 7,500 dollars, free library services were established in association with the local Administrations. All of these were interrupted by the 1939-45 War, but have since been re-established on an extended basis in Papua-New Guinea and in the Northern Territory, as well as in Norfolk Island and Nauru. The National Library selects, purchases and catalogues the major part of the book stocks, assists in meeting reference needs, and provides from its staff the Chief Librarian in the Northern Territory. In Papua-New Guinea the central library is at Port Moresby, with regional libraries at Rabaul, Lae and Samarai, and several small branches. Parcels of books, carried free by the postal service, are sent to remote areas.

Since the transfer of the seat of Government to Canberra in 1927, the National Library has been accommodated in more than one building in Canberra. Plans are being drawn for further building on its permanent site to enable a consolidation of its collections and services.

A union catalogue of serials in the social sciences held by Australian libraries has been compiled and the following publications issued:—Historical Records of Australia—34 volumes, 12s. 6d. per volume (publication temporarily suspended in 1926); Parliamentary Handbook and record of elections—eleven issues, 10s. 6d. per volume; Annual Catalogue of Australian Publications—No. 1, 1936 to date, 2s. per volume; Books published in Australia, a list of books supplied under copyright—January–March, 1946 to date (monthly); Select List of Representative Works dealing with Australia (reprinted from the Official Year Book)—1933 to 1948 (annual); Australian Books (supersedes Select List)—1949 to date (annual); Australian Public Affairs Information Service (subject index to current literature)—July, 1945 to date (monthly); Catalogue of 16mm. films—1950, and supplements 1951 and 1952, 10s.

(ii) *Patent Office Library.* The library of the Commonwealth Patent Office, Canberra, contains over 56,000 volumes. Patent specifications of inventions are received from the principal countries of the world, and a wide range of technical literature and periodicals is available.

(iii) *The Australian War Memorial Library.* In the War Memorial library are housed the documentary and pictorial records of Australia's fighting Services, collected during and after both world wars. This mass of material is constantly being augmented by the addition of books, periodicals and other records covering contemporary trends and events in the field of military history and science, as well as records of earlier wars in which Australian troops participated.

The printed records section contains approximately 50,000 volumes, a large collection of military maps, newsclippings and newspapers, sound recordings of war leaders and personalities, 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.

Written records comprise correspondence files of head-quarters and units of both world wars, and the original war diaries compiled from day to day by each unit during its existence.

The collection of official war photographs covering 1914–18 and 1939–45 Wars numbers over 250,000, and a similar collection of official motion picture film depicting Australia at war totals about 4 million feet.

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

(iv) *Other Departmental Libraries.* The following Commonwealth authorities in Canberra have specialized collections in their own fields, and in addition draw largely on the National Library:—Attorney-General's Department, Commonwealth Bureau of Census and Statistics, Commonwealth Forestry and Timber Bureau, Department of Commerce and Agriculture, Department of External Affairs, Department of Territories, Department of Health, Department of National Development, Commonwealth Public Service Board, Department of Trade and Customs, Department of Works and Housing, and News and Information Bureau of the Department of the Interior.

The Department of Labour and National Service has its main library in Melbourne, and branch libraries in Sydney and Adelaide. Other departmental libraries in Melbourne are those of the Department of Air, Department of Defence, Department of Social Services and Postmaster-General's Department. The library of the Commonwealth Office of Education was established in Sydney during 1945.

(v) *Commonwealth Scientific and Industrial Research Organization.* The head office in East Melbourne maintains a library covering all branches of science except the medical sciences. In addition, each division and section of the Organization has its own library; together, these form a series of specialist libraries covering such subjects as food preservation, horticulture, fisheries, entomology, botany, agriculture, veterinary science, animal husbandry, building research, dairy products, etc. There are 22 such branches, each with its own staff varying in number from one to sixteen, and also smaller collections

under the care of research officers aided by visiting librarians. Ten of the branches are in Victoria, eight in New South Wales, two in South Australia, and one each in the Australian Capital Territory and Queensland.

The Head Office Library maintains a union catalogue of the holdings of all C.S.I.R.O. libraries, and smaller union catalogues are being developed among groups of branch libraries with similar interests.

The collections are particularly strong in the publications of oversea scientific and technical research institutions, with many of which exchange relations exist.

The general public may have access to these materials for reference purposes.

3. States.—(i) *Metropolitan Public Libraries.* In each of the capital cities there is a well-equipped Public Library, the institutions in Melbourne and Sydney especially comparing very favorably 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, 1952 :—

METROPOLITAN PUBLIC LIBRARIES, 30th JUNE, 1952.

City.	Number of Volumes in—			Total.
	Reference Branch.	Ordinary Lending Branch.	Country Lending Branch.	
Canberra (a)	400,000	..	(b)	400,000
Sydney	(c) 472,426	(d)	134,279	606,705
Melbourne	600,182	78,720	36,090	714,992
Brisbane	105,568	..	18,123	123,691
Adelaide	184,695	31,970	(e) 55,415	272,080
Perth	189,413	..	2,838	192,251
Hobart	48,435	26,547	(f) 153,506	228,488

(a) Commonwealth National Library, including Parliamentary Section. (b) Books are lent to libraries or students throughout Australia whenever necessary for research work. (c) Includes 152,609 volumes in the Mitchell Library. (d) The maintenance and control of the ordinary lending branch of the Public Library at Sydney were transferred in 1908 to the Municipal Council. In 1951, books in this library numbered 122,043. (e) Includes 7,767 volumes in the Children's Branch. (f) Includes 109,116 volumes in 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. The Library Board was fully constituted in 1944, and came into effective operation in September of that year. One hundred and sixteen local authorities have adopted the Library Act and during 1951-52 spent £182,002 on their libraries from rates, as well as £119,000 received in subsidy. There are 107 libraries, containing 690,500 volumes, being operated by 100 councils.

The Joint Coal Board made grants for library purposes to Councils in coal-mining areas, a grant of £5,000 having been made to the City of Greater Wollongong to help establish branch libraries and a mobile library service to mining centres, and a grant of £4,150 to the City of Greater Newcastle to meet part of the cost of establishing a library at Wallsend.

The State Library has been housed since 1942 in a new building, whose reading room provides seating accommodation for 500 persons, and has 50,000 volumes in open access. Within four years, however, the old building had to be reoccupied in part owing to lack of space caused by the Library's extended functions.

New South Wales departmental libraries are staffed by officers seconded from the State Library, which also provides a central book-buying and master cataloguing service for departmental libraries, and municipal and shire libraries constituted under the 1939 Act.

In 1943 the Banks Memorial Trust was set up to report on the best use of funds which had accumulated since 1905. The government has approved of a memorial at Kurnell, and of the publication of the Banks Papers.

The State Library has undertaken the management of the libraries of the University Tutorial Class and the Workers' Educational Association.

The Country Circulation Department forwards books on loan to State schools, to Schools of Arts and to individual students. During 1951-52, 103,424 books were lent to small State schools, 43,434 to Schools of Arts and small country libraries, 306 to the Far Western Division, and Special Loans lent for extended periods to shire and municipal libraries and to Lord Howe Island, while 25,019 reference works were lent to individual country students.

The Mitchell Library in Sydney of more than 60,000 volumes and pamphlets, and 300 paintings, principally relating to Australasia and the Southern Pacific, and valued at £100,000, was bequeathed to the trustees of the Public Library in 1905 by Mr. D. S. Mitchell, together with an endowment of £70,000. The testator stipulated that the regulations of the British Museum were to be adopted as far as possible, hence the library is the resort of specialists. There are now 152,609 volumes in the library, in addition to valuable manuscripts, collections of Australian postage and fiscal stamps, and various pictures, coins, etc.

In Newcastle, Dr. Roland Pope has given his collection, worth £10,000, which is being housed temporarily at the School of Arts.

Other important libraries in New South Wales are the Australian Museum, 33,363 volumes; Teachers' Colleges, 123,192; Technical Education Branch, 78,484; Public Schools, 1,104,899; Railways Institute, 140,619; Road Transport and Tramways Institute, 47,777; Cooper Library of the New South Wales Public School Teachers' Federation, 17,467; and the Library at the National Herbarium, 10,000 volumes. At 30th June, 1952 the Parliamentary Library contained 107,838 volumes.

(iii) *Victoria.* Until the establishment of the Free Library Service Board in 1947, the only public library facilities available in Victoria except from the State Public Library and one or two Metropolitan Municipal Libraries were those offered by about 200 out-moded Mechanics' Institute Libraries situated in country areas all over the State.

The Board's policy has been to substitute for these inadequate services an efficient system of adequately stocked, modern public libraries controlled by local Municipal Councils and subsidized by the Board.

Since the Board's inception 56 municipalities, comprising 934,000 of the State's population, have established libraries. Of these, 15 are in the city, serving 616,000 people, and 41 in the country, serving 318,000 people.

The amount of £96,000 was paid to the Councils in library subsidy for the year 1952-53 and a total of £173,435 was expended in Municipal Library Service for the same year. Since 1947-48, £334,000 has been expended by the Board as library subsidy.

There are 435,745 books available to the communities in which libraries are established and combined circulation figures were 2,794,600 as at 30th September, 1952.

(iv) *Queensland.* Prior to 1945 Queensland's library needs were met by the State Public Library, established in 1902 and administered by the Chief Secretary's Department, and by Schools of Arts or similar libraries in metropolitan and country districts supported by members' subscriptions. The Libraries Act 1943 constituted a Library Board "to attain efficient co-ordination 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 throughout the State".

The control and management of the Public Library has been entrusted to the Board, which had built up the book collection to 123,691 volumes in 1951-52. The Libraries Act Amendment Act of 1949 provides for the deposit in the Public Library of a copy of all books, pamphlets, maps and other printed material published in Queensland.

By means of subsidy to local bodies the Board, as in previous years, endeavoured to encourage the establishment of new library services and the extension of existing facilities.

During the year 1951-52 the Board granted subsidy on the following basis:—
(a) Books—50 per cent. of the amount spent in the purchase of books; (b) 50 per cent. of the cost of library accommodation and equipment with an upper limit of £2,000 in respect of accommodation.

The Act empowers local authorities to establish library facilities. In 1952, 23 local authorities were conducting library services, several others have indicated that they will do so in the near future.

The Brisbane City Council has established seven libraries, of which five have separate children's collections, and hopes to increase the number to 28. The number of local bodies subsidized was 88 in 1951-52. The Board's policy is to subsidize not more than one local body in any area in providing library facilities.

A country extension service for people residing outside the metropolitan area is now operating on a limited scale. Its book collection numbered 18,117 in 1951-52.

The Oxley Memorial Library was established under the terms of a Declaration of Trust dated 26th August, 1926. Its object is the promotion of the study of Australian literature, literature relating to Australia and Queensland historical material. The library, housed in the Public Library since 1934, remained under separate administration until 1946, when its assets were transferred to the Library Board. Since that date it has been administered as a department of the Public Library, and the collection kept segregated. It is governed by a committee which has advisory powers only. During the year 1951-52 its holdings in volumes increased from 15,872 to 16,272. A valuable addition in 1950 was the L'Estrange collection of Queensland stamps.

The library of the Parliament of Queensland was established in 1860. It contained in 1952 approximately 80,000 volumes, consisting of official publications and books devoted largely to history and the social sciences. The cataloguing and reclassification of the library commenced in 1948. An amendment to the Act in 1949 entitles the library to a copy of every book published in Queensland.

(v) *South Australia.* Following the Price Report of 1937, which stressed the need for a free lending service for metropolitan and country readers, and suggested the establishment of a State Libraries Board, the Public Library of South Australia was separated from the Museum and Art Gallery early in 1940 and became a government department, administered by a Principal Librarian and a Libraries Board.

In the Reference department there are about 187,000 volumes and seating for 300 readers. Most of the books may be borrowed, and about 35,000 volumes are lent every year. Over 3,000 periodicals are filed, and the collection of newspapers includes every newspaper printed in South Australia.

The library of the Parliament of South Australia contains 65,000 volumes.

The Adelaide Lending department, which lends books to persons living in the metropolitan area, has 32,000 books, 27,000 registered borrowers, and an annual book issue of 262,000 volumes.

In the Country Lending Service there are 48,000 volumes, of which about half are suitable for children. In 1951-52 this service sent out 48,000 volumes to adults and 91,000 to children, including 21,000 volumes lent to schools.

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 Institutes Association in 1952 comprised 250 suburban and country libraries with 766,004 volumes.

(vi) *Western Australia.* At the end of 1951 the Library Board of Western Australia Act was passed. The Board, now appointed, consists of 13 members whose functions are to advise the Minister on matters of general policy, to approve of libraries to be registered as free libraries and to provide for their control, and to control and manage libraries and services and the training of librarians.

In 1945 an Archives Branch was established at the Public Library as a repository for the non-current records of the Government and other historical material relating to Western Australia, including the collection of the Western Australia Historical Society.

An Adult Education Library of 12,000 volumes of general reading and fiction provides for readers in metropolitan and country areas. The library is conducted by the Adult Education Board and requires no deposit from its readers. The Board pays outward freight for country readers.

(vii) *Tasmania.* Library service in Tasmania has expanded rapidly during the past few years. Under the Libraries Act 1943 the Tasmanian Library Board was constituted, and the State Library of Tasmania was established on 1st January, 1944. The Board, in addition to administering the State Library headquarters in Hobart, is responsible for the extension of library services throughout the State and for the control of State aid. Municipalities adopting the Act spend the proceeds of local rates on library premises, salaries and maintenance, and books for permanent retention. State aid is provided in the form of books of a value equal to the amount collected in rates, which are exchanged at intervals. In Launceston State aid is given in cash. In 1951-52 the Launceston City Council contributed £4,392, and £5,119 was received in State aid. During the year, book issues increased from 300,238 to 314,639.

Of the 49 municipalities in the State, 34 have adopted the Act and seven libraries have been established with the support of the Hydro-Electric Commission.

The State Library 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, summer schools, 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, and undertakes to catalogue all new books added to the library as well as supplying recreational reading.

4. *University Libraries.*—The libraries of the Australian Universities provide material not only for the education of graduates and undergraduates, but also for scholars, 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 seventh and eighth. The following table shows the sizes and rates of growth and expenditure of the Australian university libraries; it is impossible to give borrowing statistics, as they differ too widely to be comparable without much explanation.

UNIVERSITY LIBRARIES, 1952.

University or College.	Volumes.	Accessions during year.	Expenditure.
	No.	No.	£
Sydney	343,000	9,351	42,951
Melbourne	184,447	9,403	53,162
Queensland	108,141	5,767	25,794
Adelaide	178,927	8,051	26,527
Western Australia	109,167	6,441	18,374
Tasmania	79,700	2,682	16,221
New South Wales University of Technology	31,940	3,940	28,660
New England University College	22,881	1,999	7,588
Canberra University College	13,177	1,887	5,170

The first books were bought for the Library of the University of Sydney as early as 1851; only since 1910, however, has it possessed a building of its own. It is named after the principal benefactor, Thomas Fisher, who bequeathed to it in 1885 the sum of £30,000. It contains an up-to-date bookstack of glass and steel and a fine reading room in which, since the beginning of 1941, about 18,000 volumes of the collection have been made available on open access shelves. In addition, members of the teaching staff and certain classes of undergraduates are admitted to the bookstacks; all readers are encouraged to borrow freely. The Library possesses a large number of periodicals, especially scientific, valuable collections of seventeenth-century pamphlets and Elizabethan translations from the classics, and an extensive collection of Australian literature. Besides medical and law branches, there are a number of departmental libraries.

Early in 1854 the University of Melbourne made its first allocation for books, but the Library was housed in temporary quarters for a number of years. In recent years the university authorities have treated the Library generously, and there have been some welcome benefactions, but accommodation is insufficient and a new library building is a pressing need of the University. The W. L. Baillieu Trust has made available the first instalments of a £100,000 gift for building purposes. All the books are accessible on open shelves, and though the Library is intended primarily for reference purposes, borrowing, except of text-books and certain valuable volumes, is made as easy as possible. The Library is administered from the centrally situated general library; there is a large medical branch library specially rich in periodicals, and smaller branch libraries in some of the science departments.

The Library of the University of Queensland, founded in 1911, began with £3,000 worth of books, £2,000 having been raised by public subscription and £1,000 granted by the Government. The main library is now in its own building in the new University at St. Lucia.

The Adelaide University Library bears the title of its original benefactor, Robert Barr Smith, who, with members of this family in and after 1892, gave the University about £50,000 for library purposes. Some 20,000 volumes are shelved in the reading room and are available to the ordinary student. Up-to-date steel bookstacks provide accommodation for about 100,000 volumes. Borrowing facilities are available to all matriculated students, to country students and to graduates. There are medical and law departmental libraries. The medical library has on permanent loan the collection of the Institute of Medical and Veterinary Science, and also incorporates the library of the British Medical Association (South Australian Branch).

In the University of Western Australia the first permanent library staff was not appointed until 1927. Provision of permanent library accommodation was not possible when the University moved to its present site, and space and facilities have consequently been inadequate. Extensions to the temporary quarters were made in 1946. The whole collection, consisting of about 109,000 volumes, is accessible on open shelves, and there are several departmental libraries. A special feature is the use made of students' co-operation.

The Library of the University of Tasmania was founded in 1893, but for many years it comprised little more than a collection of text-books. In 1913 a substantial increase of funds was allotted and important gifts were received. In 1919 it was organized for the first time in accordance with modern library practice. A full-time librarian was appointed for the first time at the end of 1945, and the staff has increased from two to ten. The Library is now providing a cataloguing service for the library of the Royal Society of Tasmania.

The New England University College Library was founded in 1938, and bears the name of its first benefactor, Sir William Dixon. At the end of 1952 it contained some 22,880 volumes mainly on open shelves.

The Canberra University College Library was established in 1938. At the end of 1952 it contained 13,177 volumes, which are on open shelves; reference books may be borrowed.

The library of the Australian National University is unique in that it is designed to serve the research staff of a wholly post-graduate institution. It specializes in the fields of the physical and medical sciences, excluding clinical materials. In the social sciences and Pacific studies consideration is given to the holdings of the Commonwealth National Library to avoid unnecessary duplication. The library was established in 1948 and operated in Melbourne until December, 1950, when it was transferred to Canberra. The collection comprises some 70,000 volumes, and in addition a special collection of 25,000 volumes in Oriental languages.

5. *Children's Libraries and School Libraries.*—(i) *General.* A survey conducted early in 1946 revealed that only a small proportion of children was being catered for by adequate library service. The effective use made of the few existing children's libraries is proof that the growing interest in this branch of library work will be well rewarded.

(ii) *New South Wales.* Children's libraries are being developed as departments of municipal and shire libraries. Three formerly independent children's libraries at Mosman, Wollongong and Moss Vale are now departments of municipal and shire libraries and have greatly increased budgets.

From 1937-38, school library work has been fostered by the State Library in co-operation with the Education Department. A "Model School Library" was established, and vacation classes for teacher librarians are held. In 1949 there were 63 district units under the central library scheme.

(iii) *Victoria.* Since 1943-44 children's libraries have shared a grant of £500 between them, the number participating in 1950 being 34.

The Education Department is making provision for libraries in new schools being erected. Where accommodation is available in existing schools, grants of up to £4 for £1 are provided to furnish and equip libraries. In addition, the Government subsidizes the purchase of approved books on the basis of £1 for £1, or £2 for £1, according to the size of the school, to a maximum grant of £60 per annum.

With the assistance of school committees and municipalities, subsidized by the Department, many country districts have established circulating group libraries. Boxes of books are circulated to all schools in the group, changes being made at the commencement of each school term.

Financed by a bequest from the late William Gillies, a scheme of circulating libraries for small schools, particularly in remote areas, has been operating for some years. At present 441 schools benefit from this scheme.

The Department has a Library Services Officer with a small staff to advise and assist schools in the organization of libraries. A number of Education Department teachers have been trained at the Library School of the Public Library of Victoria, and an increasing number of schools have well-equipped library rooms with trained teacher-librarians in charge.

(iv) *Queensland.* 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 Public Instruction on a £1 for £1 basis. The subsidy was suspended from 1931 to 1943.

In 1937 a system of Circulating Supplementary Readers was commenced. Books are graded for age levels and are moved from school to school, sufficient copies of each book for a whole class being sent, and reading being done in school. There are 96,000 such books now in use, the distribution at present being confined to primary schools.

(v) *South Australia.* A Children's Library of 7,800 volumes is used by school classes and individual children living in the metropolitan area. Books of fiction are lent to children of fourteen years and over, while other books may be borrowed by children of any age.

(vi) *Western Australia.* For schools with more than two teachers, including high schools and technical schools, £1 for £1 subsidy up to £50 is granted each year. New primary schools are provided with a room for a library, while high schools and some technical schools have a teacher acting as librarian.

For schools with one or two teachers there are two services. Through the Small Schools Fixed Library Service reference books up to the value of £15 are supplied annually to be kept permanently in the school. The Charles Hadley Travelling Library provides recreational reading, and operates 250 boxes which can be exchanged every three months through a local school acting as distributing centre for a district. All boxes are returned to headquarters for repair and renewal at the end of the year. The Government grants £250 per annum for this service, and the participating schools contribute the commission received from the Commonwealth Bank for the teachers' services—about £200.

Children in isolated country areas are catered for by books sent out by the State Correspondence Schools Library. The children are kept in touch with the Library by means of radio talks and leaflets issued periodically. There is as yet no general scheme to serve children in the metropolitan area.

The Federation of Police and Citizens Boys' Clubs of Western Australia aims at establishing a system of circulating boxes of books at an estimated cost of £10,000. Books are in circulation to 44 centres, of which 15 are Police Boys' Clubs, 24 State Schools, and 5 Children's Libraries.

Western Australian Children's Book Council Inc. was incorporated in 1948 and receives a government grant to assist its work of interesting local authorities in establishing children's free libraries.

(vii) *Tasmania*. The Lady Clark Memorial Children's Libraries, with headquarters at the State Library, in Hobart, aim to serve all children in Tasmania with books. They work through the municipal authorities; at 30th June, 1952, children's libraries had been established in 55 municipalities, including Hobart, and five special Hydro-electric districts, children's books being provided on a population basis.

Practically all State secondary schools in Tasmania have libraries, with full-time librarians in four of them. The libraries of the Friends' School, Hobart, and the Hobart High School are among the foremost of their kind in Australia.

A Schools' Library Service assists with loans of curriculum books, 30 at a time, and provides advice and guidance in the use of books. In 1951 the number of schools receiving service was 64 and books issued was 3,678. The majority of primary schools have libraries; most area schools, in particular, have good ones.

The Education Department sends, each year, selected students or teachers to the Library School in Sydney.

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 specialist or other staff. These libraries, which are most numerous in Sydney and Melbourne, are being increasingly staffed 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 supplies and "M" microfilm supplied):—*Australian Capital Territory*—Australian War Memorial (P), Commonwealth National Library (PM), C.S.I.R.O. (M); *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); and *Tasmania*—University of Tasmania (PM).

§ 11. Public Museums.

The Australian Museum in Sydney, founded in 1836, is the oldest institution of its kind in Australia. In addition to possessing fine collections of the usual objects found in kindred institutions, the Museum contains a very valuable and complete set of specimens of Australian fauna. The cost of construction of the building to 30th June, 1950 was £86,560. The number of visitors to the institution during 1951-52 was 247,104, and the average attendance on week-days 542, and on Sundays 1,487. The expenditure for 1951-52 amounted to £47,542. A valuable library containing 33,363 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. Nature talks are also broadcast by radio. 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, 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 four country centres. Expenditure during the year 1952 was £40,296. 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.

The National Museum at Melbourne, devoted to natural history, geology and ethnology, is located in the eastern section of the Public Library Building. The National Art Gallery is situated in the same building. The Museum of Applied Science, also housed under the same roof, contained at 30th June, 1950, 23,320 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.

The Queensland Museum, founded in 1855, comprises exhibited and reference collections of zoology, geology and ethnology. It is entirely maintained by the State Government, and the cost of the building was £31,736. Expenditure for the year 1951-52 was £14,218. The collections are principally, but not exclusively, Australian; there is, for example, the excellent series of ethnological material formed by Sir William McGregor in New Guinea. The publication is *Memoirs of the Queensland Museum* which was preceded by the *Annals of the Queensland Museum*. The library is extensive and valuable, and of great assistance to research workers in the State. In 1952 during the schools vacation, special programmes were held, including brief talks, natural history films, and natural history questions and early in 1952 natural history lessons were given to eleven classes of school children to which the children supplied the answers by reading the explanatory labels in the cases.

The Queensland Geological Survey Museum has branches in Townsville, opened in 1886, and in Brisbane, opened in 1892.

The South Australian Museum has considerable collections of most branches of natural history and was attended by 150,000 visitors in 1951-52. Cost of construction of the Museum building was returned as £65,000. In 1951-52 expenditure was £30,800.

The latest available returns show that the Western Australian Museum and Art Gallery contains altogether 205,000 specimens, of an estimated value of £106,250. The Museum, Art Gallery, and Library are housed in one building, and the visitors to the combined institutions during the year reached 80,000. At 30th June, 1952, the structure was valued at £65,500.

There are two museums in Tasmania—the Tasmanian Museum at Hobart, and the Victoria Museum and Art Gallery at Launceston—both of which contain valuable collections of botanical, mineral, and miscellaneous products. The Museums received aid from the Government during 1951-52 to the extent of £10,000. The cost of construction in each case is included in that of Art Galleries given below.

§ 12. Public Art Galleries.

The National Art Gallery of New South Wales originated in the Academy of Art founded in 1871. Cost of construction of the present building amounted to about £96,000. At the end of 1951 its contents, which are valued at £261,000, comprised 1,104 oil paintings, 715 water colours, 1,915 black and white, 236 statuary and bronzes, and 1,057 ceramics, works in metal and miscellaneous. Since 1895, loan collections of pictures have been regularly forwarded for exhibition in important country towns.

The National Gallery at Melbourne at 30th June, 1950 contained 2,190 oil paintings, 7,792 objects of statuary, bronzes, ceramics, etc., and 22,033 water colour drawings, engravings and photographs. The Gallery is situated in the same building as the Museum and Public Library, the total cost of construction being £439,000. Cost of purchases during 1949–50 was £57,653. Several munificent bequests have been made to the institution. That of Mr. Alfred Felton, given in 1904, amounts to about £8,000 per annum. In 1913, Mr. John Connell presented his collection of art furniture, silver, pictures, etc., the whole being valued at £10,000. There are provincial art galleries at Ballarat, Bendigo, Geelong, Castlemaine and Warrnambool, and periodically pictures are sent on loan from the National Gallery.

The Queensland National Art Gallery, situated in the Executive Buildings, Brisbane, was founded in 1895, and contains a small but well-chosen collection of pictures. At the end of 1950 there were on view 279 oil paintings, 135 water colours, 243 black and white, and 44 pieces of statuary, together with 158 various prints, mosaics, and miniatures. Exclusive of exhibits on loan, the contents are valued at about £23,500. Visitors during the year averaged 925 on Sundays and 214 on week-days.

The Art Gallery at Adelaide dates from 1880, when the Government expended £2,000 in the purchase of pictures, which were exhibited in the Public Library Building in 1882. The liberality of private citizens caused the gallery rapidly to outgrow the accommodation provided for it in 1889 at the Exhibition Building, and on the receipt of a bequest of £25,000 from the late Sir Thomas Elder, the Government erected the present building, which was opened in April, 1900. The Gallery also received bequests of £16,500 in 1903 from the estate of Dr. Morgan Thomas, and valuable prints and £3,000 in 1907 from Mr. David Murray. In 1935 Mr. Alex Melrose gave £10,000 for the extension of the building. At 30th June, 1952 there were in the Gallery 1,481 paintings in oil and water colours, 565 drawings and black and white, and 91 items of statuary, the contents being valued at £95,900. The cost of construction of the Art Gallery amounted to £48,000. The expenditure during 1951–52 was £17,900.

The foundation stone of the present Art Gallery at Perth in Western Australia was laid in 1901, and the Public Library, Museum, and Art Gallery are all situated in the one structure. The collection comprises 225 oil paintings, 152 water colours, 371 black and white, 276 statuary, and 1,388 ceramic and other art objects, the whole being valued at £33,000. Cost of construction of the buildings amounted to £10,000.

In Tasmania, the Art Gallery at Hobart was opened in 1887. At June, 1952 the contents consisted of 119 oil paintings, 64 water colours, 7 black and white, 3 statuary and 103 etchings, engravings, etc. The cost of construction of the building was £4,500. Expenditure in 1951–52 was £9,932.

The Art Gallery at Launceston was erected in 1888 at a cost of £6,000, and opened on the 2nd April, 1891. Only a small proportion of the contents belongs to the gallery, the bulk of the pictures being obtained on loan. At June, 1952 there were on view 51 oil paintings, 23 water colours, 4 black and white, and 3 engravings and miscellaneous exhibits. Expenditure in 1951–52 was £7,891.

§ 13. Scientific Societies.

1. **Royal Societies.**—In previous issues of the Official Year Book an outline was given of the origin and progress of the Royal Society in each State (*see* No. 22, pp. 454–5). The accompanying table contains the latest available statistical information regarding these institutions, the headquarters of which are in the capital cities.

ROYAL SOCIETIES 1952.

Particulars.	Sydney.	Mel- bourne.	Bris- bane.	Ade- laide.	Perth.	Hobart.	Can- berra.
Year of Foundation	1866	1854	1884	1880	1914	1843	1930
Number of members	382	261	243	201	193	448	89
Vols. of transactions issued ..	86	96	62	75	36	86	..
Number of books in library ..	30,400	20,780	44,900	40,000	4,500	29,684	..
Societies on exchange list ..	420	355	257	100	200	271	..
Income	£ 2,505	1,469	417	1,471	321	1,100	56
Expenditure	£ 2,293	678	413	1,128	244	1,181	38

2. **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 meetings are usually held biennially within the various States and in the Dominion of New Zealand. The latest meeting was held in Canberra in January, 1954.

3. **Other Scientific Societies.**—The Linnean Society of New South Wales, with headquarters 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 maintains a research bacteriologist and 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. Two fellowships were awarded in 1952. The library comprises some 18,000 volumes, valued at about £9,000. Seventy-seven volumes of proceedings have been issued, and the Society exchanges with about 260 kindred institutions and Universities throughout the world. The membership at the end of 1952 was 233.

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

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

§ 14. State Expenditure on Education, Science and Art.

The expenditure in each State on education, science and art during the years 1950–51 and 1951–52 is shown in the following table. Owing to the details not being 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, etc. :—

STATE EXPENDITURE ON EDUCATION, SCIENCE AND ART.

(£.)

State.	Expenditure from—				Receipts.	Net Expendi- ture.
	Revenue.	Loan.	Other Funds.	Total.		
1950–51.						
New South Wales ..	16,143,253	2,636,302	..	18,779,555	476,731	18,302,824
Victoria ..	10,694,797	2,618,968	..	13,313,765 (a)	154,557	13,159,208
Queensland ..	5,058,620	645,261	236,708	5,940,589	58,310	5,882,279
South Australia ..	3,036,000	604,068	..	4,240,068	110,938	4,129,130
Western Australia ..	3,183,924	511,895	17,161	3,712,980	103,404	3,609,576
Tasmania ..	1,601,757	540,255	..	2,142,012	9,203	2,132,809
Total ..	40,318,351	7,556,749	253,869	48,128,969	913,143	47,215,826

(a) In addition, fees in respect of technical education amounting to £236,730 in 1950–51 and £252,926 in 1951–52 were received and spent by the School Councils.

STATE EXPENDITURE ON EDUCATION, SCIENCE AND ART—*continued.*
(£.)

State.	Expenditure from—				Receipts.	Net Expenditure.
	Revenue.	Loan.	Other Funds.	Total.		
1951-52.						
New South Wales ..	20,950,039	4,432,517	..	25,382,556	643,262	24,739,294
Victoria ..	13,286,302	3,535,820	..	16,822,122	(a)161,543	16,660,579
Queensland ..	6,247,917	900,948	262,234	7,411,099	297,632	7,113,467
South Australia ..	4,577,797	1,534,762	..	6,112,559	252,798	5,859,761
Western Australia ..	4,304,534	749,490	10,510	5,064,534	88,809	4,975,725
Tasmania ..	2,116,010	639,739	..	2,755,749	9,764	2,745,985
Total ..	51,482,599	11,793,276	272,744	63,548,619	1,453,808	62,094,811

(a) In addition, fees in respect of technical education amounting to £236,730 in 1950-51 and £252,926 in 1951-52 were received and spent by the School Councils.