

MONASH UNIVERSITY



Report
of the
Council

1973

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REPORT OF THE COUNCIL FOR 1973

In accordance with section 41 of the *Monash University Act 1958*, I submit the annual Report of the Council of the University for 1973.

1. THE COUNCIL

The Council held ten meetings in 1973.

At graduation ceremonies during the year the following honorary degrees were conferred:

Doctor of Laws: John Thomson Gunther

Doctor of Laws: Edmund Francis Herring

Doctor of Letters: Samuel Merrifield

The year saw a number of changes in the membership of Council. The Deputy Chancellor, Dr F. G. Lennox, resigned upon being appointed to a position in the United Kingdom, having served as a member of Council elected by the members of the faculty of Science since 26 March 1964 and as Deputy Chancellor since November 1968.

This brought to a close an association of inestimable value to the University. Sir Brian Hone was elected as Deputy Chancellor for the balance of the term thus left vacant, and subsequently Mr I. Langlands was elected as Deputy Chancellor to take office for a three year term beginning in March 1974. Dr A. Walsh was elected by the members of the faculty of Science to replace Dr Lennox as the representative of that faculty on Council.

Professor B. W. Holloway was elected for a four year term by the professors in the University to replace Professor R. R. Andrew. Sir Walter Bassett completed his period of service as the representative of the faculty of Engineering, and Mr I. Langlands, who had until that time served as a co-opted member, was elected in his stead. Mr F. H. Brooks ceased to be a member of Council upon his retirement as Director-General of Education, and his place was taken by the incoming Director-General, Dr L. W. Shears. Dr Ursula Hoff was elected by the members of the faculty of Arts to fill the vacancy created by the resignation of Mr B. A. Grant, Mr B. Rechter was elected by the members of the faculty of Education following the resignation of Mr R. J. L. Hawke, and Mrs E. Mahlab was elected

to replace Mr J. G. Wilson as the representative of the faculty of Economics and Politics. The graduate students of the University elected Mr J. Zeleznikow to the casual vacancy created by the resignation of Mr G. D. Hubbert.

Messrs H. M. McKenzie, J. C. McNeill and K. P. Palmer were each re-appointed by the Governor-in-Council for a further term as representatives of commercial, industrial, and agricultural interests, and Sir Brian Hone, Mrs K. B. Myer and Dr P. F. Hutson were co-opted to serve further terms of four years. Mr D. Jackson was also co-opted to the membership of Council.

During the year a Bill to amend the Monash University Act was enacted by Parliament and received Royal Assent. The new Act provides among other things for increased representation of staff, students, and community interests on the Council.

2. DEVELOPMENT OF SITE AND BUILDINGS

The following buildings were completed and taken into use during 1973: engineering building 6, and physics, chemistry and squash court extensions.

Under construction with anticipated completion dates in 1974 are: science north stage 2 and extensions to the Robert Menzies School of Humanities, science-biology-zoology, "E" block medical school and the central animal house.

Education stage 2, main library stage 3 and sports field house are at tender stage, and it is hoped work can commence at an early date.

Among site works, Richardson Hall car park with associated landscaping and street lighting was completed; a report was received from our consulting engineers regarding vehicle and pedestrian hazards in our road system, and some of their recommendations will be proceeded with in the near future.

3. ADMINISTRATIVE MATTERS

Legislation

In 1973 Council made ten statutes including a new statute governing the Monash Association of Students and an amending statute to provide for a Board of Studies in Environmental Science. During the year, Council also made forty new and amending regulations pursuant to the University's statutes.

University Publishing

The official publications of the University—Calendar, Report of Council and seven faculty handbooks—appeared at the appropriate times throughout the year. Following a decision of the Professorial Board, an annual Research Report is to be published, commencing with the 1973 academic year.

The Publications Committee of the Professorial Board again subsidized a number of books by Monash staff members and provided support for several journals. In addition, two monographs, designed and printed within the University, were published.

Safety

The University continues its affiliation with the National Safety Council and the Dandenong and District Safety Group. The Victorian Government sponsored a safety convention at the University which attracted many people from Victoria and interstate, and University staff attended the varied sessions.

Protective footwear has been provided to staff working in potentially hazardous areas, and core balanced relays installed in the pathology laboratory, Alfred Hospital, to prevent cardiac arrest in the event of electric shock.

An emergency call number has been introduced into the University telephone system and has proved useful. The number of reported incidents has declined.

Three major road alterations have been recommended by the traffic consultants and accepted.

Personal monitoring by film badge is in use in thirteen departments where radiation is a hazard and all readings are well below the maximum permitted dose. Disposal of radioactive waste was causing concern and a suitable store is now to be provided.

Monash Associations Liaison Committee

The Monash Associations Liaison Committee is a committee of delegates from individual university associations interested in and working for the University.

During 1973 several successful functions were held including a parent orientation day and a dinner for parents of first year students.

4. STAFF APPOINTMENTS

The University's recruitment pattern in 1973 was somewhat similar to that for previous years in a situation of continuing high demand for University teaching staff.

The total full-time academic staff numbered 781 at 31 December 1973, an increase of 47 over the corresponding 1972 figures. There were 169 new appointments and 122 resignations.

Full-time Academic Staff (as at 31 December)

	Arts	Ecops	Educ'n	Eng'ng	Law	Medicine	Science	Total
Deans	1	1	1	1	1	1	1	7
Professors	21 (3)	11 (5)	5	8 (2)		17 (2)	22 (6)	89 (18)
Readers	4	3 (1)		2		6	14	29 (1)
Associate Professors	8 (1)	1	3	8	2	8	3	33 (1)
Senior Lecturers	64 (3)	33 (4)	16 (3)	31	16 (3)	38 (1)	56 (3)	254 (17)
Lecturers	49 (6)	22 (4)	17 (5)	20 (3)	17 (3)	24 (4)	44 (3)	193 (28)
Senior Tutors	14 (1)	2	3				1	20 (1)
Senior Teaching Fellows	19 (8)	6 (3)	7 (3)	9 (7)	5	26 (19)	27 (17)	99 (57)
Teaching Fellows	22 (12)	17 (13)	(1)		7 (6)	2 (5)	9 (9)	57 (46)
Total	202 (34)	96 (30)	52 (12)	79 (12)	53 (12)	122 (31)	177 (38)	781 (169)

The numbers in brackets indicate those who took up their first appointments at Monash in 1973.

Full-time academic staff who left Monash during 1973 to take up other appointments, or at the end of visiting appointments are:

Professors	2
Visiting Professors	8
Readers	1
Associate Professors	3
Senior Lecturers	15
Lecturers	9
Senior Tutors	1
Senior Teaching Fellows	54
Teaching Fellows	29
	<hr/>
	122
	<hr/>

The above numbers include those who left at the end of visiting appointments. Those who resigned included Professor J. E. Isaac, professor of Economics, who was appointed as deputy president of the Commonwealth Conciliation and Arbitration Commission, and Professor I. Gross, who left at the end of a two year appointment to the chair of Marketing.

One rotating University visiting professorship was filled during 1973 and nine other scholars who were accorded the title held appointments during the year.

Of the full-time academic staff who took up appointment during the year, 102 (of whom 90 had taken their first degree in Australia

and 12 overseas) were recruited from Australia and 68 (of whom 23 had taken their first degree in Australia and 45 overseas) were recruited from overseas.

The following professors took up their appointments during 1973:

Professor A. Brown, M.A., D.Lit. (Lond.) *English*
 Professor M. S. Henderson, M.Ec. (Adel.), Ph.D. (U.C.L.A.),
 A.A.S.A. *Accounting*
 Professor A. S. Henry, M.A., Dip.Ed., Ph.D. (St And.) *Classical
 Studies*
 Professor E. S. R. Hughes, C.B.E., M.D., M.S. (Melb.), F.R.C.S.
Surgery
 Professor W. R. Jackson, B.Sc. (Manc.) Ph.D. (Lond.) *Organic
 Chemistry*
 Professor E. M. Laurenson, B.E., Ph.D. (N.S.W.), F.I.E.Aust. *Civil
 Engineering*
 Professor J. S. Maritz, D.Sc. (Rand) *Mathematical Studies*
 Professor J. Marvan, Ph.D. (Prague) *Russian*
 Professor R. M. Parish, B.Sc.Agr. (Syd.), Ph.D. (Chic.) *Economics*

The following professors were appointed, but will not take up duty until 1974:

Professor P. Boss, M.A. (Liv.), Dip.Soc.Stud. (Lond.), Dip.Pub.Admin.
 (Brist.) *Social Work*
 Professor A. P. McCaughey, B.A. (Melb.) *Visual Arts*

Eight research fellowships and forty-eight more junior full-time research posts were filled during 1973.

In recent years there has been an increase in the number of part-time tenure academic appointments and the University has now introduced provision for academic appointments, the grade of lecturer and above, for fixed terms instead of the normal academic tenure. It is expected that a number of such appointments will be made each year.

There was an increase in 1973 of 13 in the total number of administrative and specialist support staff. The distribution is shown in the following table which shows for the first time staff in these categories in the library.

	<i>Admin. Assistant and above</i>	<i>Systems Analyst and Comp. Prog.</i>	<i>Lab. Mgr. and Managerial Staff</i>	<i>Prof. Qual. and Spec. Staff</i>	<i>Total</i>
Faculties and Teaching Depts.	22	2	21	27	72
Central Administration	72	9	—	5	86
Computer Centre	2	12	—	1	15
Library	2	3	—	—	5
Ancillary Areas (includes Halls of Residence and Bookshop)	18	—	8	4	30
	—	—	—	—	—
	116	26	29	37	208
	—	—	—	—	—

In the University library graduate and other staff with formal qualifications totalled 64, the same figure as at the end of 1972.

Total full-time staff of the University at 31 December 1973 was 2,561 compared with 2,416 in 1972.

The University records with regret the deaths in 1973 of Miss J. Winduss, chief cataloguer in the University library, and Miss J. Pudney of finance branch.

Mr J. R. Bainbridge, senior lecturer in the computer centre, retired at the end of 1973.

5. ACADEMIC DEVELOPMENTS

The following degrees and diplomas were conferred by the University at graduation ceremonies in 1973, the final column indicating the total number of degrees and diplomas awarded since the foundation of the University.

	<i>Male</i>	<i>Female</i>	<i>1973 Total</i>	<i>1961-73 Total</i>
Bachelor of Arts	171	345	516	3389
B.A. (Honours)	43	50	93	509
Master of Arts	17	5	22	95
Bachelor of Economics	238	64	302	1716
B.Ec. (Honours)	37	9	46	228
Master of Administration	15	1	16	22
Master of Economics	7	—	7	45
Bachelor of Education	102	34	136	335
Master of Education	12	3	15	18
Bachelor of Engineering	62	1	63	305
B.Eng. (Honours)	65	2	67	391
Master of Engineering Science	9	—	9	60
Bachelor of Jurisprudence	73	19	92	508
Bachelor of Laws	89	17	106	398
LL.B. (Honours)	10	2	12	44
Master of Laws	1	—	1	7
Bachelor of Medical Science	—	—	—	11
B.Med.Sc. (Honours)	12	4	16	76
M.B., B.S.	74	13	87	654
M.B., B.S. (Honours)	32	6	38	173
Bachelor of Science	162	89	251	1047
B.Sc. (Honours)	83	29	112	664
Master of Science	10	3	13	120
Doctor of Philosophy	83	10	93	437
Doctor of Medicine	1	—	1	8
Doctor of Science	—	—	—	2
TOTAL DEGREES	1408	706	2114	11262
Diploma in Education	237	305	542	2523

1973 Annual Examination Statistics

The first year pass rates continue to average over 80 per cent for the whole of the University, compared with a figure of just below 60 per cent in 1964. No marked increase is expected in the future as the stage has been reached whereby the overall figure will tend to fluctuate between 81 per cent and 84 per cent.

There are, as predicted, fluctuations in particular faculties, but this is expected when a high percentage pass rate has been achieved.

	PASS RATES (per cent)									
	(For first year full-time students)									
	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
<i>Group (a)</i>										
Arts	57	70	67	74	80	77	78	80	83	85
Economics and Politics	61	70	77	85	83	76	76	88	81	87
Law	60	71	76	72	80	72	80	82	79	88
Science	60	78	88	89	90	86	89	90	89	87
<i>Group (b)</i>										
Diploma in Education	84	88	90	90	89	92	92	92	96	97
Engineering	55	70	70	84	74	75	84	88	82	76
Medicine	64	84	89	91	97	96	99	96	98	98

Note: For the purpose of this table, students are regarded as having passed in—

Group (a) if they have passed more than half the subjects or units taken, except that those taking three subjects are regarded as having passed the year only if they have passed all three subjects; and

Group (b) if they passed all subjects or failed in one or two subjects but were granted passes in the year as a whole and continued into the next year of the course.

*Report of the Vice-Chancellor, Dr J. A. L. Matheson, C.M.G.,
M.B.E., Ph.D. (Birm.), Hon. D.Sc. (Hong Kong),
Hon. LL.D. (Manc.), F.I.Struct.E., F.I.C.E., F.I.E.Aust.*

In June 1973 the Council completed fifteen years' work. That period has seen the realization of all but one of the major features of the original master plan adopted by the Interim Council, which met first on 19 June 1958 under the chairmanship of Mr (later Sir) Robert Blackwood.

Now, for the first time, the University is able to review and evaluate the achievements of that first decade and a half, to begin the process of consolidation and "quality improvement", and to consider the direction we should take in the last quarter of the century.

This year, the thirteenth teaching year, enrolments approached 13,000 and the total number of degrees awarded passed the 9,000 mark. While mere size and speed of growth are, perhaps, not in themselves a matter for congratulation, the fact that Monash has grown so fast and at the same time has managed to acquire an international reputation in many fields may properly be recorded.

A number of changes to the Monash University Act were authorized by Parliament during the year and will take effect in 1974. Although

these slightly increase the academic, as opposed to the lay, membership of Council, it will still be necessary—and desirably so—to seek out competent and devoted citizens who are prepared to indulge in this form of public service. It is not sufficiently realized, in the world at large, that the public interest in the affairs of universities and other such institutions is to a large extent protected by government nominees and elected external members of governing bodies. While the Auditor-General and his organization make sure that the accounts stand up to scrutiny, examination of the educational, financial and employment policies of the University is very much a responsibility of the lay members of Council.

It is a central duty of the Chancellor to ensure that all this happens and Monash has been singularly fortunate in having first Sir Robert Blackwood and then Sir Douglas Menzies in this office.

Sir Robert's immense contribution to the University—as chairman of the Interim Council and as Chancellor until December 1968—is commemorated in Robert Blackwood Hall, the magnificent auditorium which in two years has become established as a major cultural centre, serving a very wide public in Melbourne's south-eastern sector.

Although Sir Douglas' duties as a Justice of the High Court of Australia prevent his participating in our affairs as much as he and we would like he generally presides at Council meetings and graduation ceremonies and has a far deeper knowledge of the University and its affairs than is readily explainable. It was a matter for general gratification when in November he accepted election to a third term.

We have been fortunate, too, in having had the services of a number of extremely able and dedicated Deputy Chancellors. The first was Sir Michael Chamberlin who was followed first by Dr Gordon Lennox, then by Sir Brian Hone who retired at the end of 1973 and is to be succeeded by Mr Ian Langlands, formerly chief of the C.S.I.R.O. Division of Building Research. Mr Langlands was a member of the Interim Council; he has served on a great many University committees and is the present chairman of the Buildings and Staff Committees; he is a former president of the Institution of Engineers, Australia, and is the recipient of its Peter Nicol Russell medal; and he is a holder of the Kernot Memorial Medal awarded by Melbourne University.

Mr Langlands' service to this University is outstanding but it is closely matched by that of several other distinguished people who put their talents and experience at the disposal of the University through their membership of faculty boards and Council and its committees.

Among the most important tasks of the Interim Council, fifteen years ago, was its consideration of the question of medical education. It soon decided that any new medical school should be an integral part of the new university but the provision of teaching hospital facilities was the responsibility of the Victorian Government and the Hospitals and Charities Commission. The former chairman of the Commission,

the late Dr John Lindell, whose untimely death occurred this year, chaired a committee on medical education in Victoria whose report in 1960 has guided progress ever since.

This report, which was immediately accepted by the then Government, recommended that clinical schools affiliated with Monash be established at Alfred and Prince Henry's Hospitals pending the construction of a hospital on the campus which, although not uncommon overseas, would have been the first of its kind in Australia.

The campus master plan was designed to accommodate this hospital and the medical school was located alongside. The functional brief for the hospital was written, in a year's secondment from normal duty, by the foundation professor of Surgery. As late as April 1973 the Premier of Victoria confirmed that in spite of all the delays "it is simply a question of priorities. Next financial year, beginning July, the Government will invite the University authorities and the Hospitals and Charities Commission to confer on the drawing up of plans".

But this did not happen. In December the Government decided to transfer the Queen Victoria Hospital, where our departments of Obstetrics and Gynaecology and of Paediatrics are located, from the city to a site about a kilometre from the University. Although this decision is welcome in itself it is a poor substitute for the visionary plans for a campus hospital from which so much had been hoped and which might well have provided a new thrust in medical education. Nor will it in itself improve the education of clinical students by giving them the much more extensive hospital experience which is needed.

The election of the new Commonwealth Government in December 1972 has been followed by a number of far-reaching changes in the university scene whose effects are not yet fully apparent. Specifically, the Commonwealth has assumed complete financial responsibility for tertiary education and has abolished tuition fees. Thus the recommendations of the Australian Universities Commission, which were formerly tempered (no doubt) by thoughts of the traffic that the States would bear are in future to be directed to the central Government alone.

In its understandable anxiety to give effect to its platform the Commonwealth Government has leaned heavily on the universities, both by borrowing staff to serve on expert committees and by providing pump-priming funds to get favoured programmes going.

Government interest in the previously under-provided area of special education will undoubtedly accelerate the development of Professor Marie Neale's work in the faculty of Education which has received a welcome stimulus by a generous gift from Mr and Mrs Henry Kron-gold to build a child training centre in which exceptional children, and their teachers, will be trained.

An important step has been taken in this area with the establishment of the degree of Bachelor of Special Education; students will be ac-

cepted for this course in 1974 and it is already apparent that it has attracted a great deal of interest.

Funds are also being offered for other favoured areas of education, such as social work and community health. When these offers match the intended programme of the University they can be very useful in enabling more rapid progress to be made than might otherwise occur, but it is to be remembered that the A.U.C.'s general policy, which this University supports, is against earmarked grants.

It is too early to say what will be the effect of the abolition, in 1974, of tuition fees apart from the obvious comment that a number of details of administration and interpretation remain to be worked out. It seems to be thought that the enrolment pattern in 1973 was distorted in anticipation of 1974 but even this is not certain because 1973 was the first year in which new students, having been accepted by this University, could freely elect to postpone entry for one or two years and still retain guaranteed places.

The Government's insistence that students must pay their own Union fees, aided where necessary by means-tested maintenance grants, was at first resisted by representative student bodies but now seems to be generally acceptable. The cost of a university education has been notably reduced by the Government's actions and only the most intransigent still fail to recognize this fact.

At the same time equality of educational opportunity seems as far away as ever and, in Victoria, is emphasized by the comparative strength of the private school sector and the comparative turmoil in the state system. Here the cumbersome administrative systems of the Education Department are so exacerbated by the actions of militant teachers that the educational future of pupils at the worst affected high schools can hardly fail to be seriously jeopardized.

The University is, of course, greatly concerned by all this for the educational assumptions on which first year courses are planned may be increasingly invalid.

In an attempt to ameliorate this situation the University has modified its selection procedures for 1974 so as to assist disadvantaged students; they will be considered in two categories: those who have gained the necessary minimum qualifications for entry, but who claim to have encountered handicaps during their years at school, and early leavers who left school before 1969 and who have not satisfied the minimum requirements.

It is very much to be hoped that these schemes will succeed in identifying intelligent and highly motivated students who might otherwise have missed the opportunity of attending a university.

This University, in common with 188 others, is a member of the Association of Commonwealth Universities which exists for the main purpose of providing all its members with exceedingly useful information and, for those of its members who choose, an even more useful

appointments service. These valuable if utilitarian tasks are supplemented by university congresses, held every five years, and conferences of executive heads held every two and a half years or so. In 1973 the eleventh congress was held in Edinburgh and was followed by a conference in Exeter; I attended both. They were stimulating and interesting, afforded an opportunity of exchanging ideas and experiences with colleagues from all over the British Commonwealth, and sent us all home comforted by the knowledge that, whatever our difficulties, others face greater.

We were refreshed too by seeing again the British countryside, fortunately in impeccable weather, from bases in two of Britain's most elegant cities.

The Australian Vice-Chancellors' Committee has for long been pressing for the establishment of proper machinery for settling university salaries. This year, in yet another *ad hoc* exercise, Mr Justice Campbell and two colleagues conducted a very thorough review of the salary position and produced an interesting, if not entirely satisfactory, report which recommended fairly substantial salary increases. It is true that some of the comparisons on which he relied were spoiled by salary movements elsewhere almost before his report was published, but nevertheless it was an important decision. It still remains for regular review machinery to be established.

The operation of an earlier report from Mr Justice Sweeney, which recommended parity of salaries between universities and colleges of advanced education, ensured that the Campbell recommendations flowed automatically not only to the big colleges like R.M.I.T. and Caulfield but to the much smaller and less well staffed colleges of the new State College of Victoria. The anomalies which have thus arisen will surely require the early attention of yet another learned judge.

It has been increasingly apparent for some years that the secondary school curriculum was unduly dominated by the needs of the minority who were planning to proceed to tertiary education. The higher school certificate examination, administered by the Victorian Universities and Schools Examinations Board, is strongly influenced by the requirements of university entrance; calls for its abolition or, at least, substantial modification were therefore heard from all sides.

The universities have responded by taking the initiative in setting up the Committee on Arrangements for Secondary Courses and Assessment. This committee, which is very representative, was at first attacked on the grounds that yet again it was university-dominated, but when it was eventually realized that CASCA is only in business to recommend a new organization, and not to dictate how that organization should function, its existence began to be tolerated and its report awaited with interest.

Sections of what used to be called the profession of teaching continue to resist the assessment of students by any means whatever, holding

that assessment is anti-educational, and some have even advocated the selection of university students by ballot. It is by no means certain, therefore, that it will prove possible to replace VUSEB by a system which is widely acceptable and the universities may find themselves compelled to establish their own entrance examination system. Let us hope that it does not come to this.

In my last report I explained that the Monash Association of Students now has a legitimate constitution. This has operated in 1973 and I have been watching with interest the working of the clause which effectively gives the students financial autonomy, subject to certain safeguards. Perhaps it was fortunate that the introduction of this new system coincided with a period when passions on the campus were at a fairly low ebb. At any rate the new arrangements worked smoothly and it is a pleasure to record that the students concerned have carried out their side of the arrangements meticulously.

The year closed in the knowledge that two deans are seeking to retire and that within a few years several more will have reached the point of retirement. The time is therefore ripe to look at the conditions of appointment of our deans; the arrangement which has served us so well during our first period of heady growth may not be so appropriate for the following period of consolidation. At least the question is to be examined.

Faculty of Arts—Dean: Professor G. R. Manton, M.A. (Cantab.)

Students

The student enrolments in 1973 were about 4 per cent higher than in 1972, owing mainly to an increase in postgraduate enrolments and to a higher retention rate in the later years of the B.A. degree.

The faculty board gave considerable thought to the problems of university entrance. It expressed a view in favour of retention of some form of content examination, possibly supplemented by school assessments.

Staff

An increase in the allocation of staff to the faculty of about 5.5 per cent has brought about an improvement in the staff-student ratio, but it has still been necessary to retain quotas in certain first year subjects, especially in sociology, for which the demand is far above the numbers which it is possible to accommodate, and in anthropology.

Five new professors have either been appointed or have taken up their duties during the year. In January, Professor A. S. Henry, M.A., Dip.Ed., Ph.D. (St And.), formerly associate professor of Classics in the University of New England, took over the chair vacated in 1972 by Professor H. D. Rankin. In August, Professor Jiri Marvan, Ph.D. (Charles), succeeded Professor Z. N. Oliverius in the chair of Russian.

This is the first permanent appointment to this chair since Professor R. de Bray resigned in 1966. In July 1973, Professor Arthur Brown, D.Lit. (London), formerly professor of English and later director of the school of Library Archive and Information Studies at University College, London, took up his appointment as professor of English in succession to the present Pro-Vice-Chancellor, Professor W. A. G. Scott.

Two newly created chairs were filled. Professor Peter Boss, senior lecturer in the department of Social Work at Leicester, was appointed to the chair of Social Work and was able to spend a month in preparation for the inauguration of teaching in social work in 1975. He takes up his appointment permanently in April 1974. The chair of Visual Arts was filled by the appointment of Professor A. P. McCaughey, fellow in Fine Arts in the University of Melbourne and formerly Harkness Fellow at the Museum of Modern Art, New York. A further senior appointment was that of Mr H. M. Rowe, formerly of the department of Education in the University of Queensland, who took over the directorship of Language Services in August with the rank of senior lecturer.

Dr H. H. R. Love, senior lecturer in English, was promoted to a readership, and Mr W. B. Steele, senior lecturer in English, and Dr E. D. Potts, senior lecturer in History, to associate professorships.

Professor A. G. L. Shaw succeeded Professor A. M. McBriar as associate dean and was acting dean during the absence of the dean on study leave from July to September.

Curriculum

The faculty board, in submitting its proposals for new developments in the 1976-78 triennium, recognizes that the new degree courses in social work and in visual arts in 1975 are likely to be the last major developments in the faculty for some time to come. It has, however, taken the lead in moving for the establishment of a postgraduate school of Librarianship with emphasis on courses at Master's level. Since the teaching will cover the fields of bibliography, sociology, management, information science and resource centres, it is expected to have close links with several faculties.

Other proposed new developments include minor sequences in Islamic studies and in Italian. A minor sequence in Chinese has already been approved. It is not proposed to provide teaching beyond second year in these subjects for the time being. Arrangements are being made for students who wish to proceed further in Italian and Chinese to transfer to the University of Melbourne.

The board finally decided to introduce from the beginning of 1974 new regulations involving a modification of the structure of the degree. There are still basic sequence requirements, but with the replacement

of later year subjects with units of varying sizes greater flexibility has been given to the pass B.A. course.

Graduate Studies and Research

In addition to the normal research work carried on by staff and graduate students in all departments, the Centres of Southeast Asian Studies and of General and Comparative Literature have been actively engaged in arranging seminars and lectures by visitors. Certain departments also continue to publish periodicals which provide some outlet for the results both of our own researches and of guest contributors.

Public Lectures

A series of five public lectures on the Art of Cinema was given in the first semester by Professor Jerzy Toeplitz, foundation director of the National Film and Television School. In September Mr Patrick McCaughey gave three lectures on Modern Art.

Visitors

Departments of the faculty received visits from some thirty overseas scholars.

Accommodation

Throughout the year the pressure on accommodation in most departments in the faculty was severe. This should be relieved by the middle of 1974 when we expect to occupy the new wing.

*Faculty of Economics and Politics—Dean: Professor D. Cochrane,
B.Com. (Melb.), Ph.D. (Cantab.)*

Students

The quota on the number of first year students in the course for the degree of Bachelor of Economics remained constant for 1973 at the equivalent of 500 full-time students (approximately 540 total students) and no difficulty was experienced in filling the quota. The total number of applicants who placed the B.Ec. course as their first preference remained almost the same as in the previous year at 1,044 (1,053 in 1972). Overall the total number of applicants who placed the faculty in one of their preferences declined by almost 1,000 to 4,673, but with the continued increase in the number of courses being handled by the Victorian Universities Admissions Committee it was to be expected that the overall number of applications would decline. The faculty's cut-off score remained similar to the previous year at 260.

There has been a noticeable increase in the number of students who apply to enrol for the combined degrees of Economics and Law. This

increase in the number of applications for students wishing to do combined courses has resulted in an overall increase in the number of combined course students in the University. In 1973 at 30 April, there was a total of 277 students enrolled for the B.Ec./LL.B. combination compared with 243 in 1972.

Total undergraduate E.F.T.S. in 1973 declined slightly from the total number in the previous year. In 1973, there were 1,700 undergraduate E.F.T.S. compared with 1,728 in 1972. It is considered that this fall is partly attributable to the increase in the number of combined course students mentioned above and the consequent reduction in the number of students taking the Bachelor of Jurisprudence degree. There was also a sharp drop in the number of second year B.Ec. students. It is not clear why this decrease came about, but it is thought to be partially due to the anticipation of the abolition of fees in 1974. About twice the number of students requested leave of absence in 1973 than in any previous year.

Staff

Dr M. S. Henderson previously senior lecturer in Accounting, was appointed to the second chair in Accounting in the later part of the year. Mr C. A. Burrows, Dr D. Yerbury and Dr I. Wills were promoted from lecturers to senior lecturers and Dr W. A. Howard was promoted from senior lecturer to associate professor. New appointments included Miss B. S. Harvey, Mr D. K. Fausten and Dr R. D. Lansbury.

Professor J. E. Isaac resigned to take up an appointment of a Deputy President of the Commonwealth Conciliation and Arbitration Commission after nine years' service within the department of Economics; other resignations included Mr G. E. Ferris, Mr M. Naphtali and Dr R. E. G. Nicol, who took up a chair in Accounting at the University of Melbourne.

Curriculum Matters

The year 1973 was the first in which the University as a whole adopted a semester calendar. In previous years the faculty of Economics and Politics used a semester system in the teaching of its courses but was somewhat inhibited by imposing a semester system with a three term calendar. The three term calendar reduced the number of effective teaching weeks available within the faculty due to the cessation of lectures in the middle of the second term for examinations. Further, B.Ec. students enrolled in subjects taught by other faculties and the students of other faculties taking courses taught by the faculty of Economics and Politics experienced difficulties as lectures in the subjects taught by other faculties were continuing during the mid-year examination period. The problems have been removed by the adoption of a semester calendar.

During 1973, 341 candidates graduated with the degree of Bachelor of Economics including 45 honours graduates.

Graduate Studies

The structure of the course for the degree of Master of Administration was substantially revised for 1973. In previous years students were required to complete six units of course work in the first year of the degree and four units of course work and a minor thesis in the second year. This was changed in 1973 to eight units of course work in the first year with students being given an option in the second year of a further eight units of course work or four units of course work and a minor thesis. In place of students having two 1½-hour sessions in each unit for one semester, in the restructured course students are given one 2½-hour session per week in each unit for one semester.

There was a substantial reduction in the number of applications for the graduate degrees offered by the faculty in 1973. The number of applications for the degree of Master of Economics declined from 59 in 1972 to 41 in 1973 and the number applying for the Master of Administration course declined from 194 in 1972 to 148 in 1973. Similarly, there was a decrease in the number of offers made for the graduate courses and a reduction in the number of new enrolments. It is difficult to find an explanation for this decrease in graduate applications but again this could be associated with the abolition of fees in 1974.

The total number of students enrolled for the degree of Master of Administration increased from 152 in 1972 to 169 in 1973 despite the reduction in the number of new students being enrolled.

The total number of students enrolled for the degree of Master of Economics has remained constant over the past few years at about sixty and there does not appear to be much possibility that this number will increase as it is mainly dependent upon the number of students completing the degree of Bachelor of Economics with Honours.

Two candidates for the degree of Master of Administration were awarded five hundred dollar research grants by the Productivity Promotion Council of Australia during the year. The candidates were Mr John Gattorna who wrote a report entitled "Air freight in Australia: Its use and effectiveness incorporating physical planning", and Miss Susan J. Wheeler, "An examination of the effects of rate and regulations structure on corporate transportation operations". These reports will be published by the Productivity Council in 1974.

There were five graduates for the degree of Master of Economics and twelve graduates for the degree of Master of Administration. One degree of Doctor of Philosophy resulted from the successful completion of a thesis entitled "A study in the economics of education with

particular reference to the supply of secondary teachers for government schools in Victoria".

Special Management Seminar

A very successful three day seminar in Physical Distribution was conducted for twenty-four executives from industry in February 1973, by the new department of Administrative Studies. The seminar was organized and co-ordinated by Dr Peter Gilmour and staffed by other members of the department and faculty and by visiting academics and industrial executives. It is planned to offer a similar seminar in 1974.

Visitors

Among the visitors to the faculty during 1973 a number contributed to teaching in the departments and participated in vigorous staff and graduate student seminar programmes.

Faculty Government

Towards the end of 1972 the faculty recommended, and Council subsequently approved, that the department of Economics be subdivided into five departments making a total of six departments in the faculty.

This subdivision of the faculty should enable a substantial amount of the administrative work of the faculty to be decentralized.

A further development after the subdivision was an alteration in the composition of the faculty board. A ballot of the members of the faculty was held to determine the composition of the board and it was decided to expand the membership to include all full-time senior tutors and above and 25 per cent of the full-time teaching fellows holding appointments in the faculty.

*Faculty of Education—Dean: Professor S. S. Dunn, B.A., Dip.Ed.
(Adel.), B.Ed. (Melb.), F.A.Ps.S., F.A.C.E., F.A.S.S.A.*

Students

For the 500 full-time places in Dip.Ed. in 1973, there were 802 applicants who gave Monash as their first choice. Graduates who wished to take a diploma aimed specifically at preparing them to teach in primary schools were accepted for the first time. This course was organized in conjunction with Burwood Teachers' College (now State College of Victoria—Burwood) and twenty students completed the course. It will be offered again in 1974. B.Ed. numbers increased to 528 students. There were also 172 M.Ed. candidates, mostly part-time, and twenty-two Ph.D. candidates. The number graduating with higher degrees is increasing but the demand for graduates with Masters and

Ph.D.s is expanding particularly with the advent of the State College of Victoria and its affiliated colleges.

Staff

Although some additional staff were allocated for 1973 it was not possible to recruit them until late in the year so existing staff had a heavy teaching year.

The contribution of the Victorian Education Department to the method work and supervision of teaching practice by the secondment of practising teachers on a part-time basis is most welcome, and provides extremely valuable contacts between the faculty and the schools.

Curriculum

During 1973 plans were made and approved for a new degree, B.Sp.Ed. This is a two year full-time course for experienced teachers who have completed at least a three year training. For the twenty places* available, 356 applications were received. The second year of the course will involve supervised clinical experience working in schools and classes catering for handicapped children including work in the Krongold Centre. This centre was made possible by a very generous donation of \$100,000 by Dinah and Henry Krongold which enabled the University to approach the Australian Government for assistance from the Department of Social Services under the Handicapped Children Assistance Act and they have accepted the Dinah and Henry Krongold Child Training Centre as a project eligible for a subsidy.

Providing a satisfactory curriculum for a one year Diploma in Education course for 500 full-time students, nearly all of whom have just graduated, continues to exercise the faculty. Some variations were explored in 1973 and further changes are planned for 1974. The school experience programme is hampered by a shortage of school places and by restrictions associated with the method of payment to teachers for supervision. The position for 1974 is not clear at the writing of this report. The Education Department, which previously financed the payments for supervision in accordance with the Teacher Tribunal's determination, has indicated that this cost should be met by the training institution. The University did not receive funds from the A.U.C. for this purpose although, following the Cohen Report, the Commission on Colleges of Advanced Education includes funds in the budgets of the state colleges for this purpose. The matter is now before the A.U.C. If it is not resolved promptly the training of secondary teachers will be thrown into chaos.

The creation of the State College of Victoria, with its affiliated colleges, represents a major change in teacher education programmes which will have an impact, not only on this faculty, but on the under-

* Subject to additional funds being provided by the A.U.C., the number will be slightly increased.

graduate faculties as well. Students wishing to train for secondary teaching will have, in the near future, a four year first degree course in education as an alternative to the degree plus Dip.Ed. previously available only through the universities. This will lead in time to increased pressure in this faculty for higher degrees, especially Master's degrees. Other faculties may lose some undergraduate students.

Graduate Studies and Research

Applications for graduate scholarships at the end of 1973 showed a marked increase in the quality as well as in numbers indicating the high standing of the faculty for those seeking a research training. Unfortunately some candidates with Master's degrees from Australian universities could not be accepted because too few scholarships were available to the faculty.

In addition to funds provided by the faculty, several staff members obtained research funds for A.R.G.C. and A.A.C.R.D.E. The faculty, under the direction of Dr Mackay and Mr Spicer, is carrying out a major project for the Education Department, entitled "Educational turbulence among servicemen's children" which has wider implication for all parents and children who are forced to be relatively mobile because of their occupation. Professor Taft has a major grant from the Academy of Social Sciences for \$46,700 to study "Adjustment of newly arrived immigrant children", and Professor Musgrave \$18,690 from the Poverty Commission to investigate "Rural attitudes to education and related community services".

Professional and Public Service

The staff of the faculty are called on for many services to education outside the demands of the faculty. Members are serving on major Australian and State Government committees, including the Australian Pre-School Committee and the Australian Advisory Committee on Research and Development in Education.

Visitors

A number of distinguished overseas educators visited the faculty during the year.

Accommodation

The faculty hoped that extensions to its building, approved as a "greenlight" project, would have commenced in 1973 and been available for occupation early in 1974. Unfortunately cost escalation required that the building be replanned and, at the time of writing, the tender for the modified extensions, some 4,500 sq. ft. smaller than originally planned, exceeds the funds available. By transferring the Higher Education Research Unit, by crowding staff, by tight scheduling

of rooms and by some restriction on activities it will be possible to cope in 1974 with the expected number of students.

Plans have been drawn up for the Dinah and Henry Krongold Child Training Centre which will be built in 1974.

The Higher Education Research Centre and the Faculty of Education

The Higher Education Research Unit was attached to the faculty in 1973 and the report of the director follows. From 1974 the unit, which has been amalgamated with audio-visual aids, will operate from another building under the general direction of a Professorial Board committee.

*Higher Education Research Unit—Director: Dr T. Hore, M.Ed.,
Ph.D. (Alta), D.P.E. (Lough.), M.A.Ps.S.*

Staff

During 1973 Mr Clift, the director, resigned to take up a professorial appointment at the University of Victoria, Wellington, New Zealand. Dr T. Hore was subsequently appointed director. Mr Neil Paget was appointed as a lecturer in November 1973.

It should be noted that the titles of the HERU staff changed during 1973 from fellow and senior fellow to lecturer and senior lecturer.

Activities

1. *Workload studies and course evaluations.* Studies were conducted in the faculties of Science and Law with the Master of Environmental Science course, criminology and the legal aid seminar.

2. *In-service Courses and Consultative Work.* In-service courses were conducted on teaching techniques, assessment, evaluation and media. Consultations with individuals, from the workshops or others, or with groups from departments such as Electrical Engineering, Civil Engineering, Law, Anatomy and Clinical Medicine, led to an appointment to assist with this work.

3. *Projects.* Two externally-funded projects were concluded during this year; one from the Australian Advisory Committee on Research and Development in Education on the cost-effectiveness of micro-teaching and one funded by the A.V.C.C. surveying the use of television in university teaching.

4. *Reports.* Two issues of *Notes on Higher Education* were published during 1973; the first outlining the facilities available to staff new to Monash and the second issue on "Promotion through teaching". Other internal publications include a paper called "Comparison of higher school certificate examinations and scholastic aptitude tests",

and a comparison of Monash student intake with that of Melbourne (to be issued in 1974).

5. *"Early Leavers" Scheme.* HERU was involved in the selection of the students admitted under this scheme.

6. *Seminars at other institutions.* During 1973 Mr Clift and Dr Hore participated in seminars on tertiary teaching techniques conducted at the James Cook University of North Queensland and at the Caulfield Institute of Technology.

7. Staff of the Unit continue to be responsible for the Educational practices units of the Diploma in Education (Tertiary).

General

Two major changes were planned in 1973 to operate in 1974. Firstly the administrative and physical separation of the unit from the faculty of Education, and secondly the amalgamation of the audio-visual aids section within the Higher Education Research Unit which it is proposed will be renamed Higher Education Advisory and Research Unit.

Faculty of Engineering—Dean: Professor K. H. Hunt, M.A. (Oxon.), M.Mech.E. (Melb.), C. Eng., F.I.Mech.E., F.I.E.Aust.

Students

The number of students enrolled in first year dropped from 354 (in 1972) to 324. Clearly the fear, probably unfounded, of lack of opportunities in professional engineering fields has influenced this trend, at least in part; it has indeed tended to deflect school children away from the physical sciences on which studies in engineering are based. Also new courses in Victorian Colleges of Advanced Education may have attracted some of our potential students away. The total undergraduate enrolment rose from 1056 to 1128, partly by reason of A.E.S. admissions to later years, and also because the effects of earlier first year increases are working through into later years. The graduate student enrolment was 135, virtually the same as the figure of 134 for 1972.

Staff

During the year, Professor E. M. Laurenson took up his chair in Water Resources Engineering in the department of Civil Engineering, and Dr T. A. McMahon was promoted to associate professor in that department; Dr S. J. Redman was promoted to reader in the department of Electrical Engineering.

Curriculum

The revised course structure for first year, i.e. a somewhat enlarged and better organized Engineering 101 subject and new physics and

chemistry for engineers, seems to have worked well and to have been well received by the students.

With the introduction of the final year of the course in materials engineering, the complete undergraduate degree course in that department was offered for the first time, ten students successfully completing it. This course, which is the first of its kind in Australia, has attracted considerable interest and many inquiries have been received, notably from England, where a number of traditional metallurgy courses are being changed so that engineering materials may be covered more broadly.

The department co-operated with the department of Physics in introducing a second year subject, Materials Science 205, in the faculty of Science, to be followed in 1974 by a third year subject, Materials Science 303, for which planning is in hand. (The department of Chemical Engineering has, for some time now, offered roughly comparable subjects for science students.)

In the department of Chemical Engineering, a major elective in Minerals Processing and Extractive Metallurgy was offered in fourth year for the first time and about one-third of the final year class took it.

In response to a request from the Education faculty, second year students in mechanical engineering developed a teaching aid to help retarded children to read. It is now being produced by Environmental Design, Australia. The course in mechanical engineering is being examined with a view to substantially changing it over the next few years. Considerable thought is being given to a core subject, Engineering Practices, in each year of the course. At graduate level all new scholars are required to undertake a number of formal mechanical engineering study units, although a research thesis remains the major activity for the award of Master's degree.

Graduate Studies, Research and Professional Service

Research in all departments of the faculty, both by academic staff and research students, covered a wide field and continues to attract financial support from outside sources for scholarships, fellowships and equipment.

A large number of colloquia, papers and research reports was presented and published.

Academic staff are heavily and increasingly engaged in professional and educational activities outside as well as inside the University. Attendance at conferences and major consulting assistance to outside bodies continued, and the problem of finding sufficient time for adequate performance of all these necessary activities is becoming critical.

A one-week course on Developments in Stability Theory and the

Design of Structures was presented in July 1973. Several outside engineers also attended the postgraduate course on Transport Network Analysis.

Further short courses in Noise and its Control, Fluid Power Systems and Modern Machining were held for professional engineers in practice. They were well attended and highly successful.

The project on pollution minimization in Kanook Creek is continuing for the M.M.B.W., and other projects during the year have included work on box girders for the Lower Yarra Crossing Authority, fatigue testing of a tower crane, large-scale field testing of concrete conduits for the Dandenong Valley Authority, flood estimation for the Yarra Brae Dam for the M.M.B.W., flood estimation for the proposed Thomson and Aberfeldie dams for the M.M.B.W., hydrologic investigation of the Niddrie culvert, and the foundation investigation for the Johnson Street Bridge for the M.M.B.W.

Since May 1970 both the departments of Mechanical Engineering and Materials Engineering have taken a leading part in the Production Science Research Project. The aim of this project was to get practising engineers and academics together to examine the best direction for future industrial research programmes, and to promote increased liaison between the two groups. A recent report to the Productivity Promotion Council of Australia has recommended that a Data Acquisition and Dissemination Centre be set up to assist in the definition of a client's technical problem, to analyse, search out and evaluate alternative solutions from all relevant sources of information.

Visitors

Many academic visitors have spent varying periods in departments within the faculty in graduate teaching and research as well as in lecturing and supervision of projects in undergraduate courses.

Accommodation

The year has been a difficult one especially for the department of Materials Engineering because of delays in completion of its accommodation. Expansions in both undergraduate and postgraduate activities have placed much pressure upon laboratory space, but the move into new laboratories and staff offices commenced in December, and this gives some relief.

Architects' preliminary drawings have been prepared for building 7, to be shared by the departments of Civil and Mechanical Engineering. The eventual occupation of this building will allow further reallocation of space in existing buildings both to cover urgently needed facilities in the other departments and to improve the general teaching facilities for the faculty.

*Faculty of Law—Dean: Professor David E. Allan, M.A. (Cantab.);
of the Middle Temple, Barrister; Barrister (N.Z.); Barrister (Tas.);
Barrister (Vic.)*

Students

Enrolments in the faculty in 1973 were as follows:

	<i>Full-time</i>	<i>Part-time</i>	<i>Total</i>
B.Juris./LL.B.	577	101	678
B.A./LL.B.	131	4	135
B.Ec./LL.B.	269	9	278
B.Sc./LL.B.	37	1	38
LL.M. by thesis	7	—	7
LL.M. by course work	5	73	78
Ph.D.	7	—	7
	<hr/> 1033	<hr/> 188	<hr/> 1221

A review of faculty government in 1973 led to increased student membership of the faculty board and a further revision of the committee structure of the faculty. The increase in student membership of faculty board from four to twelve is a recognition of the responsible contribution that students have made since they became members of the board. The twelve will include representatives of different categories of students, including graduate students and this should ensure wide representation of different student opinions.

Staff

The faculty establishment in 1973 included seven chairs, one of which has not yet been filled. Appointments made during the year at the non-professorial level have considerably strengthened the faculty, and have included the reappointment of two former members of staff who have returned from legal employment overseas. There was also a number of resignations of valued members of staff, some of whom returned to practice and others went to new appointments.

Curriculum

The curriculum of the B.Juris. degree was revised in 1970 and its working was reviewed in 1973. Considerable dissatisfaction was felt with the working of many of the changes that had been introduced in 1970 and, accordingly, remedial action has been approved and will be phased in during 1974 and 1975. Broadly, the effect of these changes will be to make the B.Juris. a compact and contained three year degree in which the law content is largely prescribed. Some concern is still felt about the non-law content, which at present permits students to graduate with minor sequences in two non-law areas in addition to

their legal subjects. It may be still too easy for the B.Juris. student to pick "soft-options" among the non-law subjects, which bear little relation to the rest of his course. His non-law work therefore is often of little value in the overall picture of his degree and the philosophy of the degree is defeated.

The LL.B. continues to offer a wide range of options for specialization. These include a full range of the so-called practical subjects that would be desirable fields of study for those intending to practise, but they also offer a very full range of topics and approaches which capitalize on the interests of the available staff and of visitors to the law school.

During 1973 the faculty set up a special committee to investigate whether student participation in the Springvale free legal service could be organized in such a way that it would be possible to give academic credit for it towards a degree. This service was established by a group of students acting privately outside the University and has met a real need in the south-eastern suburbs and may have paved the way for more formal and official arrangements. It is a service to which a number of students and staff now devote many hours of private time. The committee reported favourably, and we are now planning, for introduction in second semester of 1974, a clinical legal education programme.

Special studies have been initiated in 1973 into two constant areas of student complaint. With the assistance of HERU, the staff-student liaison committee has conducted a survey of student work loads (and of student attitudes and expectations) at the third year level. The results are awaited. In the course of this exercise, a number of staff has found that they have derived benefit from the interest HERU has taken in their courses. The faculty education committee has, during the course of the year, given considerable attention to the whole problem of student assessment. It was predictably impossible to obtain complete agreement or a full reconciliation of staff and student views. Nevertheless, a report has been prepared, which is to be debated by the faculty in 1974.

Graduate Studies and Research

A number of students, many of them from overseas, continues to enrol for the Ph.D. degree and the LL.M. degree by thesis, but in 1973 the faculty introduced the LL.M. by course work. Courses have been offered in International Economic Law and International Trade and Investment, in Income Tax and in Estate Planning, in Aerospace Law, and in Problems of Proof. Some LL.M. students have also enrolled in LL.B. courses at an advanced level.

The enrolment in the LL.M. by course work has been excellent. Most of the students are legal practitioners covering a wide range of seniority. Some have enrolled for the courses because they are relevant

to the areas in which they practise; others have enrolled precisely because the courses are remote from the area of their daily work and have satisfied a need to diversify their interests. From the point of view of the law school, it has been very good to involve so many practitioners in our work, and it is obvious that this development fulfils a real need for professional continuing legal education as well as the purely academic need. It has also, incidentally, stimulated research among the staff, particularly in those courses that have been taught as a co-operative effort by a number of staff members. The development of team work in research and teaching has been a most valuable experience.

The law school of the University of Melbourne will offer a similar course in 1974 and, to avoid wasteful competition, there will be joint teaching of some courses and cross-crediting of others.

Professional and Public Service

A great deal of work continues to be undertaken outside the University by individuals or by groups of individuals and the faculty as such has participated in a number of programmes concerned with continuing legal education.

In December 1973 a highly successful special course was arranged for school teachers who will be teaching legal subjects in secondary schools in 1974.

In addition in 1973 the faculty collaborated with the Australian Finance Conference in the presentation of a weekend conference in which representative groups of lawyers financiers, traders, and consumers examined the proposals of the Molomby Committee on Consumer Credit. As a result of this conference, representations for the implementation of the Molomby proposals were made through the Standing Committee of Attorneys-General.

Visitors

The faculty has been much enriched by visits from legal scholars from overseas many of whom have shared in teaching or given special lectures or seminars.

*Faculty of Medicine—Dean: Professor R. R. Andrew, M.D.,
B.S. (Melb.), F.R.C.P., F.R.A.C.P.*

Students

With 939 undergraduates in the six years of the medical course, the faculty now has reached a steady state, apart from the increase now contemplated of 40 into second year in 1979 and any further growth of postgraduate students. There are 214 women students (28 per cent of the new entry were women) and 99 from overseas.

The faculty will reduce its intake of overseas students from a maximum of 15 per cent in 1973 to 10 per cent next year.

It was jointly agreed by University of Melbourne and this University to change the prerequisites for entry. The importance of English has been acknowledged, not only to broaden the base, but also in recognition after careful study of the years 1966 to 1969 (inclusive), that the subject is a useful prediction of academic success. In an attempt further to broaden the base, to include more of those of the "divergent thinking" group, only one branch of mathematics can be counted in their aggregate score apart from bonus points.

It should be recorded that about 150 applicants with Commonwealth Scholarships failed to receive a place in either Melbourne or Monash.

Staff

The situation over the last three years is shown in the table (A.U.C. calculations)—

	<i>EFTS</i>	<i>EAS</i>	<i>Student-Staff Ratio</i>		
			<i>Campus Downtown Faculty</i>		
1971	1249	173	9.9	5.5	7.2
1972	1298	166	9.6	6.2	7.8
1973	1388	177	9.6	6.2	7.8

Payment for teaching by the visiting staff has now been financed on the recommendation of the A.U.C. and commenced during the year. The Council first advocated this change on the advice of the faculty in 1966.

During the year Professor E. S. R. Hughes was invited to accept the chair of Surgery at Alfred Hospital, made vacant by Professor Dudley's resignation and departure for the chair of Surgery at St Mary's Medical School, London.

Council has agreed to the establishment of a department of Pharmacology first approved by the A.U.C. in 1966.

Curriculum

The first year has been changed very considerably to include from 1974 a behavioural sciences course. Depending on H.S.C. results the first year could for some highly gifted and successful students become an elective year. It is thought that most will choose behavioural sciences, biology and chemistry with an optional fourth subject. All new first year students will be interviewed by a faculty advisory committee to help with their choice of subjects.

The announcement of a five year medical course from 1974 by the Universities of Sydney and N.S.W., who together graduate nearly 40 per cent of the Australian total, and the possible implications of this move will need to be considered next year.

The results for those who sat for the examination conducted by the U.S.A. body (Educational Council for Foreign Medical Graduates) continue to be satisfactory. For this globally conducted test, the passing of which allows for temporary registration in U.S.A. hospitals, 18,487 candidates sat: of these 33 per cent passed. One hundred and thirteen of our final year students sat and 98 per cent passed. One hundred and eighty-six medical schools with twenty-five candidates or more are ranked: Monash is in the first five although the definitive position is not known nor does it matter. Clearly in this multiple choice examination in basic medical, clinical and paraclinical areas, our students do very well.

The State Government has now legislated for a compulsory pre-registration year for all graduates of Melbourne and Monash Universities to be effective from 1974 on. Council passed a resolution advocating this legislation in 1965. Victoria now joins all other states in this mandatory postgraduate education. The Government has also provided for a committee of the Medical Board of Victoria, which has a member of this University (the dean of Medicine was appointed) with wide powers, to accredit hospitals which have interns and their staff.

Graduate Studies and Research

A move for the establishment of a three year postgraduate course leading to a B.Med.Sc. was defeated after very careful consideration and much discussion.

Good support has continued for research activities, approximately \$842,810 from outside grants being made available to the faculty. Of this, \$341,430 came from the National Health and Medical Research Council and \$170,211 from the Australian Research Grants Commission.

Visitors

The faculty has been fortunate in its visitors during the year and has been grateful for their considerable contribution to its teaching and research programmes.

Faculty Government

Student interest in faculty government resulted in a meeting of the whole faculty on 14 March 1973. At this meeting, and as the result of subsequent consideration at various levels, it was decided to change the structure of the faculty board, to abolish the faculty executive and provide for a steering committee. The board now comprises ninety-eight members, of whom twenty-six are undergraduates including one from the B.Med.Sc. group, plus one postgraduate representative. Meetings are held each month, alternating campus and downtown.

Students have shown very marked interest by their attendance, which has been almost maximal. To safeguard against the possibility of staff or students being unavoidably absent because of examinations, vacations, etc., it was agreed that any ten or more members could, with certain provisos, seek a postal ballot on issues declared to be vital by the dean and associate deans.

A new education committee, elected by the faculty with ten staff, six students, two graduates from Monash M.B., B.S., with not more than two years standing, and one postgraduate student from the faculty, who had graduated from Monash, has been established. This followed the report to the faculty board of the *ad hoc* working party which met six times.

The name of the department of Pathology has been changed to Pathology and Immunology.

Accommodation and Clinical Resources

No major project was undertaken in the year. A small extension to physiology will ease some of the pressures arising from long existing shortfalls in space and the new department of Pharmacology.

The decision of the State Government not to proceed with the construction of the originally planned large campus hospital is referred to in the Vice-Chancellor's report (see above at pp. 10-11). Here it must be said that after thirteen years of expectation and planning, fortified and reassured by the State Government's acceptance and public announcement of the plan for a sophisticated teaching hospital on the campus, the last by the Premier in March 1973, the faculty was dismayed by this complete reversal of policy.

The whole question of adequate clinical resources for the teaching of Monash students has been the source of anxiety for a long time. A survey by the dean (14 September 1973) has demonstrated that this medical school has the worst ratio of students to patients of any in Australia, ranging from 6.9 for the University of New South Wales to 3.2 for Monash. The faculty has sought to enlarge the scope of its resources by other affiliations—Larundel Hospital 1966, Geelong Hospital 1973—and is engaged in negotiations with Dandenong and Southern Memorial Hospitals, as well as the new community health centre in Prahran (Fawkner Park). But limited academic staff cannot be spread too thin.

It has now been agreed by Council, on the advice of faculty and Professorial Board, that we shall accept a 25 per cent increase in intake in 1979 (second year) as the result of the Report of the Committee on Medical Schools to the A.U.C., July 1973 (Karmel Report). This increase, it has been made quite clear, is subject to the provision of adequate preclinical and clinical resources, or else what is now a difficulty could become a disaster.

The deployment of Queen Victoria Hospital less than a mile from the campus is obviously of great importance to the community, which numbers about 400,000 within a five mile radius of the University. The University in turn will enjoy an advantage, although building a campus hospital clearly would have been of greater advantage, not only to the faculty of Medicine, but also to the ever enlarging number of disciplines concerned in health-welfare.

It should be recognized, however, that the ultimate deployment of Queen Victoria Hospital at Clayton will add nothing significant to our clinical resources, if it is to comprise an upper limit of 600 beds as stated by the Minister of Health.

In the meantime the faculty will do all in its power to co-operate with the hospital and the Hospitals and Charities Commission in the planning of this project on all matters which touch on university teaching and research.

Affiliation Matters

Affiliation of Geelong Hospital to the University for teaching purposes was adumbrated in the last Report of Council and effected by an exchange of documents on 18 September 1973 along the same lines as our affiliation agreements with other teaching hospitals.

Fawkner Park Community Health Centre, an autonomous centre financed by the Hospitals and Charities Commission and established near Alfred Hospital, has been created largely on the initiative of Professor Hetzel and members of his department of Social and Preventive Medicine. It was opened by the Premier (Hon. R. J. Hamer, M.P.). Preliminary approval for affiliation has been given by the faculty board and already some teaching has commenced.

It is confidently expected that this is just the beginning of an increasing deployment of students in the community for teaching parallel to their clinical work in hospitals.

A grant of \$40,000 has been given by the Federal Government for 1973-74 and it is expected that further and continuing support will follow.

Arrangements have been made for students accompanied by the specialist in charge of private patients to visit St Andrew's Hospital. While this will be carefully controlled it is the beginning of a new addition to educational resources, which is likely to be extended.

*Faculty of Science—Dean: Professor K. C. Westfold, B.Sc.,
M.A. (Melb.), D.Phil. (Oxon.)*

Staff

Two new professors joined the faculty in 1973, Professor J. S. Maritz in the department of Mathematics in January and Professor W. R. Jackson in the department of Chemistry in February.

Dr K. I. Forster (Psychology), Dr L. J. Gleeson (dean's research fellow), Dr H. Lausch (Mathematics) and Dr W. R. Webster (Psychology) were promoted to readerships during the year.

Curriculum

The department of Earth Sciences commenced teaching students in 1973. Approximately thirty-five students were enrolled in each of the courses, Geology 203 and Earth Sciences 205, while two students also completed honours degrees during the year.

Most departments in the faculty continue to explore alternative teaching methods to those traditionally used in their various subject areas. Three only may be mentioned as examples. Thus in Information Science 205 an experimental "Keller plan" course was introduced as an option in the first half of the year. The course was based on self-paced study units, with diagnostic tests (non-assessment) available after each unit. A flexible schedule of three assessment tests was offered as an alternative to the usual single terminal examination. The course results were encouraging and it will be re-offered and possibly extended in 1974.

The department of Botany re-planned its third year practical course which was divorced from the lecture streams and based on three field studies, a marine environment at Sorrento, a swamp at Berwick, and an arid environment at Wyperfield. Students collected data which were then collated by informal seminars. The new programme was a great success in the views of students and staff.

New chemistry and physics courses were introduced, aimed specifically at engineering students, and a chemistry planning group commenced work on a course oriented especially towards medical students.

Graduate Studies and Research

There were fifty degrees of Doctor of Philosophy awarded in the faculty of Science, and fifteen degrees of Master of Science.

Research output still continues at a high level within the faculty. Financial support from outside bodies shows this very well. A particularly large degree of support was received from the Australian Research Grants Committee during the year and special note may be made of a three year study by Professor R. W. Cumming (Psychology) of road user behaviour as it relates to accidents. This is made possible by a grant from the Commonwealth Department of Transport.

Professional and Public Service

Many members of the faculty continue to take active parts in activities of the various professional societies in the scientific area and to participate in educational committees such as the subject committees of VUSEB and VIC.

Dr D. F. Dorward (Zoology) presented the thirteenth Crosbie Morrison Memorial Lecture; Professor R. W. Cumming gave the presidential address to the Australian Psychological Society; Professor W. A. Rachinger (Physics) gave the Australian Institute of Physics Youth Lecture; Professor R. Day (Psychology) presented a series of lectures to members of the Victorian Society of Occupational Therapists; Professors P. D. Finch and J. S. Maritz (Mathematical Statistics) gave a course on Statistical and Operations Research Methods for the Australian Minerals Foundation in Adelaide; Professor C. S. Wallace was invited to join a committee to advise the Federal Government on the integration of data systems; Professors G. B. Preston, P. D. Finch and B. R. Morton were invited speakers at international mathematical meetings in the United States during the year.

Members of the Botany department assisted in establishing a nature trail in Sherbrooke Forest.

Accommodation

During the year the extensions to chemistry and physics buildings were completed and occupied, while work commenced on extensions to mathematics and the biological sciences link building. This latter extension is eagerly awaited as the additional accommodation will relieve the pressures for space in the biological sciences areas.

The trend of student preference for these subject areas indicates that extensions to the various departments concerned will become of primary importance in building plans for the next triennium.

Library—Librarian: Mr T. B. Southwell, B.A. (Syd.), A.L.A.A.

It appeared likely that 1973 would be a depressed year as far as book intake was concerned, that the University would be unable to support a programme as ambitious as in 1972 in the face of constantly rising prices. In the event, successive revaluations gave a much-needed breathing space in the race against the diminishing dollar and as well a considerable further sum was injected into the budget. These two windfalls alone would have made it an extremely busy year. Volumes taken into stock totalled just under 60,000. Then, as it happened, a pile of book deliveries probably sufficient to provide a new record intake, arrived on the library's doorstep within the last week of the year, too late to be taken into that year's stock. Total stock at the end of the year was approximately 625,000, with 11,100 periodical titles currently received.

As well as from the University itself, support for these purchases was received from students, graduates and parents (the latter both individually and through the indefatigable Parents' Group), the Friends of the Library, and again this year, The American Council of Learned Societies and the Victoria Law Foundation. Very respectable

collections in some areas of study are beginning to show, and thanks must be expressed to all those who have made this possible.

A major policy change by the A.U.C. will have important effects on university libraries; this is the recognition that basic book material is analogous to expensive equipment, and that no university can form a library—or indeed support a collection for a new field of study—from its normal recurrent funds. Much of 1973 was spent in selecting and placing orders for back set material from funds released for this purpose, and the library will clearly be a much more useful research tool as this material comes into stock in 1974.

Even now we are clearly contributing to the book resources of the nation. Loans to other libraries rose from 10,286 in 1972 to a startling 13,100 in 1973. Borrowings fell slightly, from 6,913 to 6,521.

The overall total of loans rose once again, by some 10 per cent to over 390,000.

Mr D. R. May was created deputy librarian, with special responsibility for the further development of reader services, and Miss Patricia White (ex James Cook University) replaced him as humanities and social sciences librarian. His previous position, that of librarian, Hargrave library, was filled by Mrs Marta Chiba.

The library was shocked and saddened by the death after a short illness of its chief cataloguer Miss Joan Winduss, a member of the staff since 1961. Her common-sense approach to her job will be sadly missed.

Mrs Fay Baker, of the biomedical library, spent several weeks in the Philippines, on an assignment for the W.H.O.; a further assignment, in Vietnam, is planned for early 1974.

Space problems beset the library from two angles: as predicted, the main library collection outgrew its housing during the year, and the first instalments (of what will clearly be many) of selected periodical runs, were temporarily moved to the law building. Tenders for the planned extension so clearly reflected the runaway market that early relief seems unlikely.

At the same time the swing in interest from the physical to the biological sciences was reflected in steadily increasing usage of the biomedical library. Continuing doubts as to the future of the Monash medical centre have made long-term planning impossible and short-term action beyond the minimal, unproductive. Conditions for library staff and readers alike are here well below standard.

Plans for data-processing development are to an extent in limbo, during the proving-out of new input equipment and especially while details are awaited of the National Library's projected service for the distribution of cataloguing data.

As suggested earlier, the library's emphasis is changing towards an enhanced service to readers, and it is becoming a partner in more and more teaching programmes. The interest this generates requires better

staffing to satisfy it. We are fortunate in the high quality and enthusiasm of our recruits in this area, as we have been in the capability shown by our present staff.

6. UNIVERSITY FACILITIES

Alexander Theatre

1973 began as usual with a children's holiday production and proved an extremely busy year, with five major student productions, a production of *Coriolanus* by the department of English, the *Ramayana in Java* by the Music department, and numerous guild-sponsored productions and outside hirings. Attendance at productions in the theatre is estimated at 73,000, of whom 25,000 attended productions originating in the University.

This year also saw the beginning of the Saturday Club, sponsored by the guild in conjunction with the Monash Women's Society. This provides Saturday shows for children and combines live shows with good quality children's films. The Saturday Club was so successful that its frequency had to be doubled. This venture will be continued with increasing emphasis on live productions and educational programmes.

The greatest single problem in the theatre, apart from air conditioning, is still lack of space, particularly for rehearsals and storage. This problem is likely to become even more acute in 1974.

The Alexander Theatre Committee has been concerned for some years with the quality of adult productions in the theatre, and has finally decided through the agency of the guild (which is under the chairmanship of Dr Logan Francey, director of the theatre), to run its own professional theatre company. For this purpose, it has taken over the existing highly successful group known as the Players' Caravan, under the leadership of Mr Don McKay who has been appointed executive officer to the guild. It is proposed in 1974 to run two seasons of plays. The financial resources of the theatre committee and of the guild will be heavily committed, and efforts are being made to obtain the services of a promotion officer to ensure the greatest possible support for this enterprise, both inside and outside the University.

Robert Blackwood Hall

Robert Blackwood Hall must be rapidly becoming one of the best utilized university great halls in Australia. In 1973 it was used for 204 activities taking up 184 days of the year, this representing an increase of a third over the 1972 figures. Attendances showed an even greater increase, with 68,000 (compared with 40,000 in 1972) in addition to those attending examinations and enrolment. Our ex-

pectations regarding the bookings from outside organizations were justified, with nineteen functions compared with thirteen in 1972, but student entertainment activities were down during the year, reflecting a general move away from rock concerts. Graduation ceremonies, examination periods, lunchtime concerts and student-organized forums and lectures formed the major part of the day-time activities in the hall. These can be expected to continue and this type of usage will remain fairly constant.

The management committee increased its own sponsored concerts during the year. The highlights were the series of five concerts by the Elizabethan Theatre Trust Melbourne Orchestra with guest conductors Robert Pikler, Tibor Paul, George Tintner, William Reid and John Lanchbery, the visit from Münster University of their choir, and the Carl Pini Quartet.

Once again we received a grant from the Australian Council for the Arts which helped towards presenting eight Sunday afternoon concerts. We look to these concerts to build up a regular following for our many concerts and other cultural activities.

This year the committee embarked on an ambitious venture of joint sponsorship of concerts with such bodies as the Australian Broadcasting Commission, the Elizabethan Theatre Trust, J. C. Williamson Theatres and the Alexander Theatre. The result was a festival of Indian Music and Dance, the state finals of the A.B.C. Instrumental and Vocal Competition, the Melbourne Symphony Orchestra school concert, and the Marionette Theatre's presentation of *The Water Babies*. All these proved both a financial and artistic success. Following the success of the Philadelphia Boys Choir concerts in 1972 organized for school children, the committee arranged this year for concerts for school children by the Münster University Choir, the American contemporary pianist Selma Epstein, the Melbourne Symphony Orchestra and pupils from Sogeri Senior High School, Papua New Guinea.

The manager's office and booking office complex is well on the way towards completion, as is the installation of additional lighting and the intercommunication and paging system; for the latter we are indebted to the Monash University Parents' Group for providing the extra unit needed to equip the manager's office.

During the year the management committee, with a membership drawn from all sections of the University, was restructured into sub-committees covering building and equipment, publications and publicity, cultural and general programming, academic functions, student functions, and finance. The change has been successful in allowing all members more direct participation in the running of the hall and should make for even further development of Robert Blackwood Hall as a cultural centre for the University and the community.

Audio-Visual Aids

The year 1973 could be viewed as the first year in which a consolidation of activities has occurred. From the appointment in 1964 of a single television officer to work in the one faculty of Medicine, the staff grew by 1970 to its present total of thirteen, serving all faculties and offering a wide range of services.

In the past year, all the various activities of the section have again been used, a growth of interest being shown in the production of sound motion picture films. Many more video tapes were transferred to film than previously. Reports from overseas conferences where the films have been shown indicate that the participants were most impressed with the quality of the films.

There also began an audio recording of lectures for student retrieval from the main library. The section provided the cassette audio tape recorder, cassette tape and microphone to the lecturer for use during the lecture, collecting them again at the end of the lecture. Each cassette was labelled and placed in the main library for student use. The service was particularly appreciated by students who suffered from time clashes for certain lectures.

The lectures were held on the cassette in the library for one semester only. Where departments required additional copies of the lecture, or in a different format, e.g. standard quarter-inch reel tape, the copying was done by the section.

The most recent innovation was provided by the introduction of video cassette record/replay machines. Student access to television material video taped for use in lectures is now possible as the material can be transferred to the video cassette (similar to but larger than audio cassette). The replay of the material is completely under the control of the student. All the facilities of stopping, rewinding and spooling the tape forward in the cassette are available so that segments of the tape can be replayed many times or handwritten notes made as convenient to the student.

The temporary installation of a video cassette machine and a colour television monitor in the foyer of the audio-visual aids section building approximately six weeks prior to the end of the academic year showed it to be a popular service as far as the students were concerned. Plans for similar facilities to be installed permanently in the biomedical library have been completed.

1973 also saw the first issue of an occasional publication *Equipment in Education*. Favourable reactions to its presentation and contents were received from both local and overseas sources.

Outside earnings again provided a significant portion of the total budget of the section. As the greatest income has been derived from the hire of television equipment outside normal hours, in particular to television broadcast stations, it is expected that with the imminent

introduction of colour television broadcasting, this source of funds will cease.

The section continued to maintain a close liaison with the buildings branch for the specification of audio-visual services. In addition, the consultative role of the section has been used to a greater extent than in past years as more and more departments are becoming involved in the purchase of low cost television equipment. It would also appear that there is a greater awareness of the types and quality of expertise which can be made available from the section to assist in reaching decisions on audio-visual equipment purchase.

The audio-visual services provided in the rotunda group of lecture theatres by two technicians of the section continue to receive a significant amount of use. In addition to the normal service to University departments, the facilities are made available to seminars and conferences organized by groups from outside the University.

Bookshop

The bookshop had a good year with increases in turnover and merchandising range. Sales for 1973 exceeded \$800,000. Profitability declined due primarily to salary increases during 1973. A further \$20,000 of the advance made available to the University has, however, been repaid. It is clear that salary increases will continue to have an adverse effect on profitability during 1974.

In May 1973 M.U.M.U.S. Co-operative Limited made arrangements with Ramsay Surgical Limited to obtain trade prices direct from that company. Consequently, the arrangement under which the bookshop had supplied the co-operative with titles otherwise unobtainable was discontinued.

A major matter of concern and planning during 1973 was a proposal to build a new bookshop in the projected new wing of the Union building. However, for financial reasons, among which escalating construction costs and major increases in interest rates loomed large, this project has now been postponed for the foreseeable future.

The bookshop manager, Mr E. J. Plumb, has accepted a senior appointment with a large commercial bookseller and has tendered his resignation to take effect in mid-1974. The board, which has accepted Mr Plumb's resignation with regret, takes this opportunity to draw attention to the magnificent results in terms of turnover, service and profitability which have been achieved during his period of management. At the time of writing, the board is in the course of considering applications for the position of bookshop manager.

Professor Maureen Brunt, who has been chairman of the bookshop board since its inception in 1969, retired from her position as chairman at the end of 1973. The board wishes to place on record its indebtedness to Professor Brunt whose drive, insight and breadth of vision have been major factors in the growth and development of the

bookshop. Professor Brunt's position as chairman has been taken by Professor Nash.

Careers and Appointments

The general employment situation for graduates improved substantially during 1973, and the number of those who finished courses in 1972 and who were still without employment in May-June of 1973 was significantly less than in the previous year. There were, however, some important movements in the distribution of graduates amongst the various activities they undertake after completing their first degrees. The most notable of these was a sharp rise in the proportion of them taking teacher training. Of all Monash students who completed first degrees in arts, economics and politics, engineering and science in 1972, 31.4 per cent took teacher training, compared with 22.6 per cent for the previous year. Employment of arts, economics and science graduates in private industry and commerce declined still further from the low levels established a year ago, whilst government employment remained at a reasonably stable level.

The demand for vacation workers was higher at the end of 1973 than at any time since the office was established in 1965. There were some signs that the number of jobs would fall away in January, but on the whole there seemed little likelihood that any student who needed vacation work, and who was reasonably persistent in seeking it, would not be satisfactorily placed.

Last year's report spoke of the importance of such subjective factors as attitudes and expectations, and the need for career counselling in the schools so that students have some chance of approaching tertiary education with a degree of realism in these matters. Experience this year has underlined the urgency of this need, and has revealed a lack of flexibility as well as widespread misunderstanding of the career implications of many kinds of university degrees. It is unfortunately true that these deficiencies are not confined to graduates or graduating students, but extend to some employers and members of the academic staff. We are doing whatever we can to overcome this problem through publications such as *Careers Weekly* and by personal contact.

The work of the adviser to prospective students is of obvious importance in this connection, and 1973 provided him with his busiest year so far. The demand for his help from schools near and far, from students and their parents for personal interviews, and from the organizers of functions designed to help young people make the vital decisions that face them in the concluding years of secondary schooling, has placed a considerable strain on him, and necessitated some supplementation of his efforts by other members of the staff.

The research projects mentioned in last year's report have been continued. The career development research project has been extended to include all branches of science, and it is hoped that a study of en-

gineering graduates can be undertaken during 1974. The work on career guidance facilities in Victorian schools is virtually complete. The usual survey was carried out of the first occupations of all those who finished courses in 1972 and statistical information was supplied to the Graduate Careers Council of Australia for inclusion in a study of the destinations of Australian graduates.

A staff exchange with the Australian Department of Labour was arranged during the year. A member of this office spent three months working in the Victorian region of the Department and gained a deep insight into its methods and problems whilst a member of the Department's staff worked with us at Monash. The experiment was judged successful, not only as a training exercise but as a means of building a closer working arrangement with the Department with mutual benefit resulting.

Health Service

It will be seen from the statistics below that 1973 was another record year so far as numbers attending the health service were concerned—so much so that our inadequacies in accommodation and staffing were fully exposed and every member of the staff, on many occasions, was stretched to the limit. Despite the difficulties every effort was made to maintain a high standard of work. However, there was a general feeling among the doctors that some of our important roles, particularly counselling, were becoming submerged by the increasing patient load.

Gynaecological and psychiatric help was given by visiting specialists whose assistance was invaluable. Women doctors worked five sessions per week and their contribution to the smooth functioning of the health service was considerable.

Dr J. Green took part in several seminars during the year—no mean feat considering his work load in the health service. More people than ever before presented for injections prior to departing overseas.

Sabin poliomyelitis vaccine was offered in the Union in first, second and third terms. The decreasing numbers attending probably reflected the effects of the campaigns conducted by the local councils and raised doubts as to the necessity of persisting with our own campaign in 1974.

Statistics for 1973 were as follows (1972 in brackets):

1,549 (1,509) staff members, i.e. 56.6 per cent, visited the health service on 4,231 (4,037) occasions.

5,183 (4,963) students, i.e. 42.6 per cent, visited the health service on 20,330 (18,296) occasions.

588 (428) visitors attended the health service on 1,652 (882) occasions.

In total 7,320 (6,900) persons visited the service on 25,787 (23,220) occasions.

Student Counselling

1,236 clients visited the service in 1973. This represents a 6 per cent overall increase on 1972. It is interesting to note that the proportion of "first time" visits in 1973 rose to 78 per cent of the total number seen (72 per cent in 1972). Compared with 1972 we saw 15 per cent more "new clients" and 17 per cent fewer "old clients". The decrease in the latter is at least in part due to staff turnover. What is encouraging is that an increasing proportion of students is becoming aware of our services and using them. It would appear that about one student in every four seeks counselling at least once during his stay at University. The vast majority present with problems appropriate to their stage of psychological development and/or to their situation as a student.

1973 was quite eventful in many ways. Various innovations in working methods were introduced. We offered more group activities and these were very well received by students. For the first time we offered a "couples group" in which couples could discuss their interpersonal difficulties together and among other couples. We also conducted a training group. This consisted of fourteen participants, mostly senior students in social sciences and some "contact" students. Participants were given some training in group dynamics and group management and subsequently were helped to organize a two day camp for first year students. The whole venture was most successful and will be repeated in 1974. Our activities and innovations attracted three counsellors from other tertiary institutions who volunteered their services as participant observers in our group work.

Collaboration with the student run "contact" and its executive officer has been excellent. The flow of communication and joint consultations has been most rewarding and heartening. This has led to numerous joint projects which we have little doubt will lead to an improved environment for the general student population.

Student Residence

A total of 3,353 student inquiries was handled by the student housing service during 1973, an increase of 300 above the 1972 total. This number includes those seeking advice on various aspects of housing as well as those actually applying for accommodation.

There has been a marked increase in applications for flats, houses and independent group-living with 801 requests (603 in 1972) but only 234 of these students have been directly housed (196 in 1972).

Applications for private-home accommodation fell dramatically from 481 in 1972 to 296 this year, but only 168 (241 in 1972) have been directly placed, as the availability of suitable accommodation in accessible areas has diminished. The rising costs of rents, board, fares and the continuing inadequate public transport to the University, has limited the areas in which students can accept accommodation.

The growing numbers of local suburban students who choose to live independently has caused an extra drain on the already short supply of flats and houses available to students.

The popularity of group-living has produced an increase in allied problems, and much time has been spent in giving advice and help in coping with various social, financial and housekeeping matters, reforming incompatible groups to keep complete numbers in groups, and liaising between students and estate agents and landlords.

Finding accommodation for single student mothers and their children and for the growing numbers of married undergraduate students, with or without children, has proved an added difficulty.

Despite the fact that it has not been possible to satisfy all housing demands the student housing service has had a busy year with widening scope and usefulness.

1973 was the first year of joint operation of the five halls of residence, with a total of 861 student places. There were about thirty vacancies at the beginning and end of the academic year, but this number fluctuated during semester. About equal numbers of students moved into hall to study for examinations as moved out.

There were several staff changes in 1973. Dr J. R. Lawry first warden of Roberts Hall and chairman of the Committee of Wardens, left in December to become the foundation dean of Education at the Gippsland Institute of Technology. Dr M. C. Spencer, first warden of Richardson Hall, left Monash to assume a chair in French at the University of Queensland.

Dr D. M. White became the second warden of Deakin Hall following Dr J. A. McDonell's resignation. There were also three new deputy wardens: Howitt, Mr C. O'Hare (formerly Dr D. M. White); Farrer, Dr J. Pope (formerly Dr M. Redwood); Roberts, Mr D. Lyttle (formerly Dr G. Sampson).

Mannix College had approximately forty empty rooms for much of 1973 but as in 1972 a considerable number of students sought residence there for the final months of the academic year. Tutorial classes and consultation for the main University courses were provided by twenty tutors, and the library continued its programme of expansion. The Mannix College Students' Society arranged successful social activities throughout the year.

Marist College which was constructed in 1969 and opened to male students at the beginning of 1970, has experienced increases in enrolment in each subsequent year. During 1973, capacity was almost reached.

Religious Centre

The establishment of chaplains for 1973 included the Rev. P. Knowles, O.P., the Rev. D. Willis, O.P., and Mr Henry Shaw. Mr Howard Shub was appointed in November as assistant chaplain to

Jewish students and news was received of the appointment of Dr J. R. Gaden as Anglican/Protestant chaplain in 1974. Regular visitors to the chaplaincy included Rev. Adrian Scott, Miss Denise Sullivan, and Father F. Carey.

Eight student societies continued their close affiliation with the chaplaincy and were joined by the transcendental meditation society. Each week a prayer group and study group met on Tuesday evenings. The department of Anthropology and Sociology made use of the vestries for tutorials and seminars during both semesters.

The chapel singers gave two well-attended recitals. They are conducted by Mr Gerry Almond. The group includes staff and students and has now affiliated with the clubs and societies council. Their repertoire is exclusively early church music.

Weddings now total more than one thousand. There were 230 weddings in 1973.

Student ushers acted as guides for Orientation Week, Parents' Orientation Day, Landladies' Day and Open Day. The centre was used by the Eucharistic Congress in February when the Ecumenism-Community Conference was held at Monash. One other notable event in 1973 was the visit paid by Cardinal Knox to the University when he was entertained by members of the Newman Society.

Father Knowles is on leave for six months. We acknowledge this tribute to his work as chaplain at Monash and thank those whose generosity made the overseas trip possible.

Students' Loan Fund

In 1973 the students' loan fund continued to provide assistance to students with financial problems. The committee received and considered 102 applications and approved 93 loans totalling \$43,816. Despite the introduction of the Monash University Grants and Loans Scheme, following the grant of \$231,000 for this purpose from the Australian Government, the number of loans approved from the students' loan fund was only three fewer than in 1972 while the total value increased by \$6,500.

The committee continues to receive from graduates completing repayments of loans, expressions of gratitude for the assistance rendered.

Computer Centre

For the computer centre, 1973 proved to be a busy and rewarding year. The most important project undertaken was the evaluation of new equipment to provide for future computing needs of the University. The introduction of the charge-out system for computer time to departments was another significant development. Late in 1973 a contract was finalized between the University and Burroughs Corporation for the purchase of a B-6700 dual processing computer system costing approximately \$750,000. The B-6700 system represents

a significant reinforcement of the single processor system installed in April 1973 to provide peak capacity for the Gas and Fuel installation in the city. (In return for housing and operating this machine, the University used a minimum four hours of prime-shift daily for departmental work.) In addition to making a significant improvement in speed and size, the new system also provides a number of special facilities. These include remote job entry terminals, graphical output, and interactive graphics and programming via teleprinters and displays. Other features include the running of fifteen to twenty terminals simultaneously, with their availability on a three shift basis daily. The B-6700 configuration also has a high degree of duplication and it is a relatively small step to add an appropriate switching system to develop a "fail soft" capability. This will provide suitable insurance against failure for time critical work for the administration and library.

The computer centre's maintenance and consumable budget of \$476,000 less \$40,000 allowed for teaching responsibilities was distributed to departments to purchase computer requirements from the computer centre. Charging rates were:

Control Data 3200	\$40 per chargeable hour
Burroughs B-5500	\$40 per chargeable hour
Burroughs B-6700	\$100 per chargeable hour

The \$436,000 was divided into 10,900 computing units which were allocated to departments. (1 B-6700 hour = 3 CDC3200 hours = 3 B-5500 hours = 3 computing units)

By the end of the year, the number of units provided was 10,380 and the budget recovered \$378,112. This represented 95 per cent of the units allocated and 87 per cent of the available funds. One reason for the difference in recovery of computing units and allocated funds relates to the way the work was distributed between the various machines and the pricing policy adopted.

This result would not have been achieved without:

- (a) the allocation of an additional \$50,300 to University departments during the year when it was seen that not all the initial allocations were reasonable, and
- (b) the use of the B-6700 computer at up to 16 hours per day at no charge which enabled the very large increase in demand in the second semester to be met. (Had use of the B-6700 been charged for the first two months after its installation, nearly 100 per cent of the allocated units would have been recouped.)

The 10,380 units used in 1973 represented a 25 per cent increase over the 8,304 units used in 1972.

Total hours of computer operation rose in 1973 to 19,106 hours compared with 18,865 hours in 1972. While this was only a marginal increase, the extra power of the B-6700 meant that total equivalent hours provided were 23,456, an increase of approximately 25 per cent on 1972.

Of the time provided, the University used 12,419 hours to process approximately 405,000 jobs compared with 382,000 in 1972, the Victorian Hospitals Computing Service used 4,410 hours to process approximately 120,000 jobs, and the remainder was used for maintenance. A number of research calculations requiring more substantial computing power than that available on campus (particularly before the availability of the B-6700) was sent to the Cyber 73 computer at Melbourne University where the equivalent of approximately 817 CDC3200 hours of computer time was used.

MIDITRAN processing continued to be used exclusively for undergraduate course work. Approximately 122,000 jobs were run on the B-5500s while a further 10 per cent of the year's MIDITRAN work was run through the Educational Computer System (ECS). MINITRAN continued to be run for schools and there was a rise from 39,000 jobs in 1972 to 63,000 in 1973.

For the first time in approximately two years, the computer centre was able to improve the service given. On the B-6700 it was normal for persons requiring less than five minutes of computer time to have their work returned within an hour, while for longer jobs delays of more than twenty-four hours were unusual. On the CDC3200 and B-5500s, however, there was only marginal improvement, since the decrease in departmental work was matched by an increase in data processing for the administration, library and the Victorian Hospitals Computing Service.

Expenditure for the year, excluding the Victorian Hospitals Computing Service, amounted to \$839,579 of which \$505,741 came from University recurrent funds and \$333,838 from revenue earning activities. Revenue earning work accounted for 12 per cent of the 12,419 hours of computer time used by the University. A total of \$27,581 in A.R.G.C. and outside earnings funds was used to purchase Cyber 73 time from Melbourne University.

7. STUDENT ENROLMENT

The net total undergraduate population increased from 9,089 in the previous year to 9,330, an increase of 241 or 2.7 per cent. Graduate enrolments increased from 1,158 to 1,402 and total enrolment of all students from 11,638 to 12,147. Full details of enrolments are given in the table on pp. 47-8.

Of the total of 12,147 students, 605 (5 per cent of the total) were from overseas, as follows: Borneo 5; Brazil 1; Brunei 3; Burma 3; Cambodia 1; Canada 3; Ethiopia 1; Fiji 6; Hong Kong 30; India 9; Indonesia 11; Iran 1; Jamaica 1; Japan 12; Kenya 2; Khmer Republic 1; Korea 2; Malawi 3; Malaysia 411; Mauritius 1; New Zealand 6; Pakistan 1; Papua New Guinea 5; Singapore 42; South Africa 1; Sri Lanka 1; Swaziland S.A. 1; Switzerland 1; Thailand 8; Tonga 3; Turkey 1; Uganda 1; United Kingdom 4; U.S.A. 5; Vietnam 18. Total of 472 males, 133 females.

NET ENROLMENTS 1973 (as at 30 April)

Faculty and Year	Full-time			Part-time			Total		
	M	F	T	M	F	T	M	F	T
HIGHER DEGREE									
Higher Doctorate	—	—	—	1	—	1	1	—	1
Ph.D.	268	42	310	104	21	125	372	63	435
Master	219	70	289	548	129	677	767	199	966
Total	487	112	599	653	150	803	1140	262	1402
MASTER PRELIMINARY	30	16	46	46	21	67	76	37	113
POSTGRADUATE DIPLOMA									
Education	197	288	485	72	70	142	269	358	627
Microbiology	—	1	1	—	—	—	—	1	1
Total	197	289	486	72	70	142	269	359	628
POSTGRADUATE BACHELOR DEGREE									
Education	9	2	11	349	139	488	358	141	499
BACHELOR DEGREE									
Arts									
I	236	484	720	158	221	379	394	705	1099
II	164	451	615	132	133	265	296	584	880
III	235	439	674	93	113	206	328	552	880
IV	57	76	133	3	1	4	60	77	137
Total	692	1450	2142	386	468	854	1078	1918	2996
Eco. & Pol.									
I	242	109	351	81	15	96	323	124	447
II	210	92	302	84	11	95	294	103	397
III	271	89	360	118	14	132	389	103	492
IV	35	7	42	—	—	—	35	7	42
Total	758	297	1055	283	40	323	1041	337	1378
Engineering									
I	305	18	323	—	—	—	305	18	323
II	332	8	340	2	—	2	334	8	342
III	248	4	252	1	—	1	249	4	253
IV	205	3	208	—	—	—	205	3	208
Total	1090	33	1123	3	—	3	1093	33	1126
Law: B.Juris.									
I	—	—	—	1	—	1	1	—	1
II	2	1	3	—	—	—	2	1	3
III	6	—	6	3	1	4	9	1	10
Total	8	1	9	4	1	5	12	2	14
Law: LL.B.									
I	3	—	3	5	3	8	8	3	11
II	2	1	3	10	3	13	12	4	16
III	8	3	11	5	1	6	13	4	17
IV/V	161	18	179	27	5	32	188	23	211
Total	174	22	196	47	12	59	221	34	255

(Continued overleaf)

NET ENROLMENTS 1973 (as at 30 April)

Faculty and year		Full-time			Part-time			Total		
		M	F	T	M	F	T	M	F	T
Law: B.Juris./LL.B.										
	I	70	28	98	10	3	13	80	31	111
	II	75	23	98	5	2	7	80	25	105
	III	58	12	70	10	2	12	68	14	82
	IV/V	89	18	107	2	1	3	91	19	110
	Total	292	81	373	27	8	35	319	89	408
Law/Arts										
	I	28	18	46	—	—	—	28	18	46
	II	27	16	43	1	—	1	28	16	44
	III	18	11	29	1	—	1	19	11	30
	IV/V	12	2	14	1	1	2	13	3	16
	Total	85	47	132	3	1	4	88	48	136
Law/Eco. & Pol.										
	I	82	10	92	2	—	2	84	10	94
	II	82	3	85	2	—	2	84	3	87
	III	70	4	74	2	—	2	72	4	76
	IV/V	16	1	17	3	—	3	19	1	20
	Total	250	18	268	9	—	9	259	18	277
Law/Science										
	I	17	—	17	—	—	—	17	—	17
	II	12	—	12	1	—	1	13	—	13
	III	5	1	6	—	—	—	5	1	6
	IV/V	1	—	1	—	—	—	1	—	1
	Total	35	1	36	1	—	1	36	1	37
Medicine										
	I	116	49	165	—	—	—	116	49	165
	II	127	39	166	—	—	—	127	39	166
	III	114	42	156	—	—	—	114	42	156
	IV	120	34	154	—	—	—	120	34	154
	V	121	29	150	—	—	—	121	29	150
	VI	113	22	135	—	—	—	113	22	135
	Hons.B.Med.Sc.	10	2	12	—	—	—	10	2	12
	Total	721	217	938	—	—	—	721	217	938
Science										
	I	332	182	514	15	8	23	347	190	537
	II	348	192	540	40	16	56	388	208	596
	III	265	157	422	39	14	53	304	171	475
	IV	111	46	157	—	—	—	111	46	157
	Total	1056	577	1633	94	38	132	1150	615	1765
TOTAL		5170	2746	7916	1206	707	1913	6376	3453	9330
NOT FOR DEGREE		8	2	10	103	62	165	111	64	175
TOTAL OTHER THAN HIGHER DEGREE		5405	3053	8458	1427	860	2287	6832	3913	10745
TOTAL NET ENROLMENTS		5892	3165	9057	2080	1010	3090	7972	4175	12147

8. ORIENTATION 1973

A joint committee of students and staff is set up annually by the Professorial Board to organize the orientation of first year students. In 1973 for the first time orientation activities were funded on a 50:50 basis by the University and the Union.

In 1973 the committee comprised six student members and four staff members. Six staff members were co-opted, one from each faculty except Education, in order to establish direct liaison with the faculties and to assist with the organization of deans' addresses, faculty coffee sessions, departmental discussions and forums, all of which were aimed at building up student-staff rapport.

Orientation ran for three days from Tuesday 27 February to Thursday 1 March 1973. During this time many functions, films, discussions and informal sporting events were organized by the clubs and societies, sports and recreation association and the Monash Association of Students. The purpose of the various events was to introduce the fresher to his faculty and department and secondly to aspects of non-academic life which form part of university "education" in the broadest sense of the term.

An editor selected by a sub-committee of the joint orientation committee produced an orientation handbook which was distributed to all freshers. This book was designed primarily as a general information manual intended to answer the new students' questions relating to university organization, financial assistance, academic structure, student counselling and health services and also as to the areas of extra-curricular activity available to him.

The committee again sponsored a very successful contraception forum where the physical and psychological aspects of failure in contraception were discussed.

9. STUDENT ACTIVITIES

The Union—Administration and General

During 1973, some of the objectives of Union operation and development were reassessed since the student population is now reaching its maximum and, therefore, the full building needs of the Union can now be foreseen. A cyclical maintenance programme has been introduced in order to keep existing buildings in first class condition despite heavy usage. Plans for an extension on the south face of the main building and for a recreation centre adjacent to the sports centre were completed for tender, and preliminary planning of the major north-east extension of the main building commenced. Catering costs escalated during the year and, in spite of efforts to meet the situation by selling-price increases and cost-saving exercises, the final result

was a deficit on the year. A customer preference for take-away snack items became evident and will be catered for in 1974, with some reduction in the proportion of hot, plated meals available. As an anti-pollution measure, the use of paper cups and plastic spoons was discontinued. The Union joined with other Victorian university unions to negotiate with the State Government for legislation to enable the Unions to obtain liquor licences.

Several new staff positions were created to handle increasing activity in the areas of function catering, film screening, hire of rooms and development of commercial activities.

A natural food shop, known as the Pantry was introduced by popular request. A number of student ventures became established: a weekly bazaar, the 3MU broadcasting station and the "Contact" advisory and referral service. The Student Welfare Action Board and its executive officer, the student welfare officer, investigated a number of matters relating to the economic, academic and personal welfare of students. Arrangements were made to incorporate both the S.W.A.B. and the S.W.O. position into the M.A.S. structure from the beginning of 1974. A new development was the emergence of the Community Research Action Centre (CRAC) which is a departure from the usual club structure. It draws its membership from clubs actively engaged in social and environmental concerns. The Union Board approved finance for a CRAC secretariat for a trial period.

Other matters discussed by the Union Board were the case for and against the legislation of marihuana, additional Union facilities for medical students at the teaching hospitals, the application to Union staff of equal pay for work of equal value, the theft situation in the Union and effective communications within the Union.

Monash Association of Students

The first woman chairman of M.A.S. was elected during 1973 and she was kept busy by student general meetings.

As a result of structural changes which occurred during the year a new committee, the Student Welfare Action Board, is to be incorporated into M.A.S. as from 1 January 1974. The Alternative Learning Service began operating within the education section of M.A.S. The lowering of quorums at some M.A.S. meetings was widely debated but accepted by a student general meeting. However Council rejected the motion, leaving M.A.S. in a difficult legal position.

Monash maintained its strong links with A.U.S. especially through travel, friendly societies and personal contact. More students than ever before travelled overseas on A.U.S. schemes and were covered by hospital and medical benefits.

Several campaigns developed during the year. "The B.H.P. Can Fraud" was the first and it received wide media cover. Students also mobilized over the issues of abortion, equal pay, course assessment, semesterization and the environment.

Monash Research Students' Association

The thesis-typing service, now in its third year, is progressing well; it is proving to be of great value to postgraduates with technical theses. This year's orientation programme took the form of a forum on Changing Attitudes in Australian Education. This was well attended by both postgraduates and the public generally. An issue of the graduate students' magazine, *The Researcher*, was published early in 1973. It is hoped to publish more frequently during 1974. The newsletter, the *Monash Researcher Bulletin*, continues to appear at intervals.

Clubs and Societies

The number of clubs affiliated to the clubs and societies council hovers just above the 100 mark, representing a wide range of non-sporting interests. Particularly active during 1973 were those concerned with environmental issues, which gained added impetus from their joining of strengths in CRAC.

Theatre activities prospered with assistance from the director of student theatre, and many groups pursuing other arts, as well as political and religious groups, continued to involve large numbers of students.

Clubs were assisted financially to run activities including conferences, camps, forums, speakers, tuition, Orientation Week and Open Day displays, to publish broadsheets and magazines, and to work on special projects which ranged from the building of a Skylab tracking station by the astronautical society to the construction of a metal dome by the communal living society. The native plant society did a thriving business in the propagation of native plants.

The Sony half-inch portable videotape unit, donated to the Union by the parents' group late in 1972, was put into continuous use by hundreds of Union members, including groups from the clubs and societies, sporting clubs, Contact service, the director of student theatre, and individual students and academics. The video has been used for an exciting variety of purposes. The medical students society has made an Orientation Week documentary, the railway club has recorded train excursions, theatre and dance groups have taped rehearsals, and rowing, horseriding and gymnastic groups have taped their performances. History department students and staff have recorded interviews for research purposes.

The 1973 Union workshops programme offered courses in subjects including pottery, sumi-e (Japanese painting), weaving, drawing and painting, jewellery and first aid, and music teachers in a number of different instruments were available. Hundreds of students and staff participated in this programme.

The 1973-74 summer school comprised ninety-three courses in some sixty different subjects. Over 2,000 students, staff and members of the public enrolled, but many others were unable to be accom-

modated in popular courses, especially those in the arts and crafts, where space and facilities at present impose very serious limitations.

An attempt was made this year to involve a number of community organizations and a number of University departments in organizing their own courses in fields of interest to them, and this policy will be developed in the future.

Sports and Recreation Association

General: The association continued to develop its general recreation and leisure activities programme but was still hampered in its efforts by the lack of facilities. Unfortunately, because of problems of design and cost, construction of the new multi-purpose recreation hall was not commenced in 1973 as scheduled but the building should be completed by the end of 1974. While it will not contain the changing facilities which were originally planned, nor have the desired standard of finish, it will provide an extremely large covered area for general as well as specialized use. However it is hoped sufficient finance will eventually be available not only to complete this hall but also to develop a full recreation and leisure centre for both the University and the local community. It is pleasing to note that government and public support for such community centres is now growing.

Competitions: Monash teams contested thirty-three intersvarsities, were placed in the top three on twenty-six occasions and won the following contests: women's badminton and trampolining, men's trampolining, golf, rowing, squash and table tennis. Club teams were fielded in a variety of regular local competitions throughout the year without any outstanding wins in top grades.

Recreation: Recreation classes and competitions were conducted through the year with nineteen basketball and ten volleyball teams playing in a regular lunchtime competition. The interest in martial arts continued to grow and there were also good attendances at the general fitness classes.

10. FINANCE

1. Funds Available

1.1 Recurrent

Funds for expenditure on recurrent purposes during the year ended 31 December 1973 were available from the following sources:

	Total \$000	University \$000	Teaching Hospitals \$000	Halls of Residence \$000
State Government grant	12,868	12,752	116	
Academic fees	3,803	3,803		
Commonwealth Govern- ment grant	9,097	8,963	62	72
	<u>25,768</u>	<u>25,518</u>	<u>178</u>	<u>72</u>

1.2 Capital

Government funds available for expenditure on capital projects during the 1973-75 triennium are as follows:

Buildings and furniture:	\$000
On University site, other than halls of residence	6,830
Non-collegiate accommodation	250
Teaching hospitals	105
	<u>7,185</u>

1.3 Research

Special research grants	680
	<u>680</u>

1.4 Equipment

Grants for approved items of equipment	2,780
	<u>2,780</u>

2. Students' Fees

A summary of the table of fees payable by students enrolled for the year 1973 is set out hereunder.

(a) Academic Fees

Undergraduate courses:	full-time \$480 per annum,
Graduate courses:	
Master—	full-time \$168 per annum, part-time \$84 per annum for first two years and \$20 per annum thereafter,
Doctor of Philosophy—	full-time \$114 per annum,
Higher Doctorate—	\$210

(b) Union Fees

Students studying on campus:	full-time \$58.50 per annum, part-time varying amounts less than \$58.50 per annum.
Students studying off campus:	full-time \$15 per annum, part-time \$10 per annum.

Academic fees are not to be charged in 1974.

3. Accounts

The audited accounts of the University for the year 1973 are appended to this Report.

4. General

During 1973 the rate of inflation increased considerably and made it impossible for the University to achieve all the objectives for which grants were received. Building costs soared to an unprecedented level and non-academic salaries rose by 19.7 per cent. The only supple-

mentary grant the University received in facing these increased costs was for the National Wage increase in June, with the consequence that, for the first time, the University ended the year with a substantial deficit.

The University is encouraged by the announcement of the Australian Government that, in assuming responsibility for the full financing of tertiary education, it has undertaken to make adjustments to approved programmes of expenditure of universities and colleges of advanced education to take account of variations in costs for both capital and recurrent expenditure over and above those which were allowed for when the programmes were adopted.

However, as these adjustments will be made only as from 1 January 1974, an approach will be made to the State Government for relief from the financial shortfall which resulted from cost escalation during 1973 when the State was primarily responsible for our funding.

11. GIFTS AND GRANTS

The following gifts and grants were received by the University:

Abbott (Australasia) Pty Ltd to Professor B. G. Firkin for travelling expenses in 1974 (Medicine)	\$750
Aboriginal Affairs, Ministry of:	\$31,460
Aboriginal Pre-School Project (Dr P. Scott, Education)	\$24,860
Study in Aboriginal Health (Dr M. Dobbin, Social and Preventive Medicine)	\$6,600
Advisory Committee on Advanced Education to Professor R. Taft and Professor P. Fensham: supplementary payment for research project (Education)	\$500
Albright and Wilson (Australia) Ltd: final contribution towards scholarship to encourage research into the effects of phosphates on biological systems in inland water	\$900
Altona Petrochemical Co. Ltd to department of Chemical Engineering	\$100
American Council of Learned Societies: final instalment of grant for American Studies library purchases (\$US7,500)	\$5,840.67
Anonymous donors as follows:	\$6,440
Toward purchase of sample oxidizer (Surgery)	\$1,000
For use by Biophysics (Surgery)	\$2,000
In support of venous thrombosis study (Surgery)	\$1,500
Research (Chemistry)	\$600
Arts and Embellishments Committee (Education)	\$100
Employment of temporary clerical staff (Education)	\$1,000

Purchase of elective materials (Education)	\$200	
A. R. Wallace Prize (Zoology)	\$40	
Angliss, William (Victoria) Charitable Fund, to Associate Professor J. C. McNeur (Surgery)		\$3,000
Anti-Cancer Council of Victoria, to support research projects conducted by the following in 1973, plus 5 per cent administration and salary adjustment costs:		\$42,292.25
Dr G. N. Brodie (Medicine)	\$4,880	
Mr S. K. Poon, studentship (Pathology)	\$180	
Dr H. G. Burger (Medicine)	\$6,114	
Dr M. N. Cauchi and Dr H. A. Ward (Pathology)	\$6,032	
Professor R. C. Nairn (Pathology)	\$15,262	
Professor J. McK. Watts and Mr P. S. Hunt (Surgery)	\$5,000	
Mr B. A. K. Khalid, studentship (Anatomy)	\$240	
Apex Trust for Autism, in support of diagnostic survey in the field of autism to be conducted by Mrs M. Prior (Psychology)		\$800
Asthma Foundation of Victoria in support of research:		\$7,388
Dr H. Konrad Muller (Pathology)	\$5,000	
Dr R. Westerman, "Isolated Intact Tracheal Smooth Muscle Preparation from the Guinea Pig"	\$240	
and "Effects of Antibody Antigen Reactions on respiratory smooth muscle functions" (Physiology)	\$2,148	
Australian Advisory Committee on Research and Development in Education to:		\$20,241
Faculty of Education	\$13,566	
Higher Education Research Unit	\$2,501	
Centre for Continuing Education	\$4,174	
Australian-Asian Association of Victoria, Proficiency Prize in Indonesian		\$50
Australian Chicken Meat Research Committee, for research on development of the chicken cartilage by Professor D. A. Lowther (Biochemistry)		\$18,401.81
Australian Council for the Arts for assistance with Sunday concerts in Robert Blackwood Hall		\$2,000
Australian Council for Educational Research: first instalment of a grant of \$18,690 to Professor P. Musgrave (Education) for research project entitled "Rural Attitudes to Education and Related Community Services"		\$4,762
Australian Institute of Aboriginal Studies, research by:		
Mr G. Breen (Linguistics)	\$8,550	
Mr T. Tsunoda (Linguistics)	\$500	
Mrs A. Moyle (Music)	\$5,110	
Mrs G. J. Lowrey (Music)	\$4,500	

Australian Institute of Nuclear Science and Engineering
for research projects:

Dr R. J. Fleming (Physics) "The effects of radiation
on the electrical conductivity of some simple polymer
and polymer-like systems" \$268

Professor B. W. Holloway (Genetics) "Radiation
sensitivity and radiation repair mechanisms in *Pseudo-*
monas Aeruginosa" \$500

Dr T. J. Hicks (Physics), "Distribution of magnetic
moment in *Cu Fe* and *Cu Mn* Alloys" \$200

Drs Read and Rolland (Pathology) \$109.20

Research fellowship, Dr J. S. Plant (Physics)
\$5,052.63

Australian Kidney Foundation, The

Drs D. J. Davies and E. A. V. Pihl to assist with
research project "Ultrastructural Protein Tracing in
the Renal Glomerulus" (Pathology) \$1,500

Australian Psychological Society, The, annual prize \$50

Australian Research Grants Committee \$747,098

On the recommendation of the committee, the Com-
monwealth government approved grants for 1974 as
listed at the conclusion of this Report.

Australian Road Research Board to Professor N. W.
Murray for continued research on steel box girders
(Civil Engineering) \$6,873

Australian Society of Accountants, annual prize in
Accounting and Commercial Law \$40

Australian Society of Anaesthetists, awarding Jackson
Rees Research Grant to Dr T. F. Lambert (Paedi-
atrics) \$1,000

Australian Tobacco Research Foundation, research
grants \$23,355

Professor C. J. Johnston (Medicine) \$9,298

Professor B. G. Firkin (Medicine) \$7,350

Dr I. G. S. Alexander (Anatomy) \$6,707

Australian Welding Research Association, further pay-
ment on research project "Reheat Cracking in Low
Alloy Steels" (Materials Engineering) \$1,625

Australian Wool Corporation \$19,789

Dr D. StC. Black for continued research on Macro-
cyclin Metal Complexes based on Amino Acids
\$13,440

Dr H. G. Burger for research on Measurement of
Gonadotrophin (Medicine) \$6,349

Bayer Pharmaceutical Company, further payments on
grant for research on drug Trasylol by Associate
Professor J. C. McNeur (Surgery) \$15,000

Blackwood, Sir Robert, to Robert Blackwood Hall	\$2,000
Broken Hill Proprietary Company Ltd, as follows:	\$7,025
B.H.P. Postgraduate Scholarship (Materials Engineering)	\$5,625
Towards attendance of Professor O. E. Potter at international conference on Fluidization (Chemical Engineering)	\$400
Towards N.S.V. 1974 Conference speakers' expenses (Mechanical Engineering)	\$1,000
Buckland, William, Foundation, as follows:	\$20,000
Electrotypes of ancient coins (Classical Studies)	\$2,000
Audio-visual equipment (HERU)	\$2,000
Equipment for emergency vehicle (Safety Committee)	\$1,000
Frequency response analyser (Electrical Engineering)	\$4,000
Computer hardware (Medicine)	\$2,500
Sample oxidizer (Surgery)	\$2,500
Observatory accommodation (faculty of Science)	\$5,000
Oscilloscope (Geophysical Fluid Dynamics Laboratory, Mathematics)	\$1,000
Cambridge Instrument Company (Australia) Pty Ltd towards travelling expenses Dr B. A. Parker (Materials Engineering)	\$50
Carlton and United Breweries Ltd in continued support of research project on yeast genetics being conducted by Professor A. Linnane (Biochemistry)	\$4,000
Carnation Co. Ltd: 1972 Carnation Award in Neonatal Paediatrics	\$50
Casa d'Italia, to finance 1973 scholarships	\$600
Ciba-Geigy Australia Ltd, in support of clinical trials (Obstetrics and Gynaecology)	\$750
Clark Rubber Stores Ltd, in support of a research project on plastic pipes by Mr D. F. Kinder (Civil Engineering); \$3,268 received in 1972 and \$2,434 in 1973.	\$5,702
Colgate-Palmolive Pty Ltd, balance of scholarship to encourage research into the effects of phosphates on biological systems in inland water (Zoology)	\$900
Collier Charitable Fund, to assist in purchase of an instrument laboratory machine (Obstetrics and Gynaecology)	\$4,000
Colonial Sugar Refining Co. Ltd, towards speakers' expenses at N.S.V. 1974 Conference (Mechanical Engineering)	\$250

Comalco Aluminium (Bell Bay) Ltd, to postgraduate research scholarship (Materials Engineering)	\$3,500	\$7,450
Research into fracture mechanics, Dr B. A. Parker and Dr J. R. Griffiths (Materials Engineering)	\$3,950	
Comalco Ltd, as follows:		\$5,700
Towards purchase of a servo-hydraulic testing machine (Materials Engineering)	\$5,000	
For student travel to Japan (Japanese)	\$700	
Commercial Bank of Australia Ltd, for annual prize in Psychology 101		\$40
Commonwealth Immigration Department: research project on migrant health (Social and Preventive Medicine)		\$8,000
Community Aid Abroad to Dr D. P. Mitchell who is working in Indonesia (Southeast Asian Studies)		\$500
Consolidated Electronics (Sales) Pty Ltd: annual Reuben Medding Prize in Electrical Engineering		\$50
C.S.I.R.O. Further support of Dr L. J. Gleeson's research on "Induced polarization technique of exploration" (faculty of Science)		\$2,600
C.S.R. Chemicals Pty Ltd, annual prize in chemistry		\$100
Conzinc Riotinto of Australia Ltd, scholarships and allowances (Chemical Engineering)		\$3,350
Crawford Productions Pty Ltd, to Zoology		\$50
Davies and Collison, to Pro-Vice-Chancellor's research unit		\$2,000
Department of Foreign Affairs, towards costs of providing gamelan teacher (Music)		\$1,000
Electrical Research Board, research projects as follows:		\$5,250
Control and optimization of large power systems: Professor K. Morsztyn (Electrical Engineering)	\$4,500	
Asynchronous high voltage direct transmission links: Mr W. J. Bonwick (Electrical Engineering)	\$750	
Electricity Commission of N.S.W., towards expansion of the transient network analyser facility (Electrical Engineering)		\$1,000
Environment and Conservation, Department of, first payment of \$35,000 grant from Australian Water Resources Council to fund research project being conducted by Professor E. Laurenson, Civil Engineering, on "Efficiency in industrial, domestic and municipal water use"		\$8,000
Esso Australia Ltd, to assist the advancement of engineering research and studies		\$2,000
Ethnor Pty Ltd, to assist drug trials (Obstetrics and Gynaecology)		\$100

Felton Bequests Committee, to research projects:	\$13,850
Suicidal behaviour, Professor B. S. Hetzel (Social and Preventive Medicine)	\$3,000
Technique of normal delivery, Professor E. C. Wood (Obstetrics and Gynaecology)	\$1,900
Cell enzyme defects, Professor A. C. L. Clark (Paediatrics)	\$2,000
Virology, Dr Kathleen Hayes (Paediatrics)	\$6,950
Fluor Australia Pty Ltd, to careers and appointments office	\$50
Forelanders Trust, to facilitate student travel to Japan	\$1,000
General Motors—Holden's Pty Ltd, as follows:	\$8,075
G.M.H. Research Fellowships	\$8,000
To careers and appointments office	\$75
Gowrie, Lady, Child Centre, to assist the work of Dr P. Scott (Education)	\$6,023
Hardie, James and Co. Pty Ltd, engineering prize	\$100
Hardman Chemicals Pty Ltd, for application to research projects (Biochemistry)	\$5,500
Harper, Mrs Edith E., for purchase of books in memory of son, Ian (Hargrave library)	\$50
Hecht, H. and L., Trust, to assist in purchase of the servo-hydraulic testing machine (Engineering)	\$10,000
Herald, The, Proceeds from Wealth Words to Union for benefit of youth	\$50
Hicks George, Foundation, the Applied Chemicals Scholarships (Chemistry)	\$8,419.11
Hoechst Australia Ltd, to support clinical trials with Streptokinase (Medicine)	\$3,615
Hungerford, Spooner and Kirkhope, prizes in commercial law, financial control and administrative policy	\$150
Hy-Q Electronics Pty Ltd, research scholarship in electrical engineering	\$3,000
I.C.I. Australia Ltd, as follows:	\$2,623.34
Extension of research grant to Mr P. J. A. Ritchies (Materials Engineering), "The adhesion of polyethylene to glass"	\$2,083.34
Prize for vacation work report (Chemical Engineering)	\$40
N.S.V. 1974 Conference, speakers' expenses	\$500
Institute of Chartered Accountants in Australia, the annual accounting prize (Economics)	\$40
Institute of Chartered Secretaries and Administrators, towards 1973 Monash Economics Lecture	\$400
Jennings, A. V., Industries (Australia) Ltd, donation to library	\$1,000

Krongold, Mr and Mrs Henry, part of gift of \$100,000 to establish the Dinah and Henry Krongold Child Training Centre (Education)	\$60,000
Leighton Irwin and Company, to Robert Blackwood Hall	\$100
Lever and Kitchen Pty Ltd, final contribution to scholarship to encourage research into the effects of phosphates on biological systems in inland waters (Zoology)	\$900
Life Insurance Medical Research Fund of Australia and New Zealand, the first instalments of research awards to department of Medicine, as follows:	\$17,555
Professor C. I. Johnson, for project "Humoral Mechanisms in Hypertension"	\$7,000
Professor B. G. Firkin, for project on the study of platelet function and coagulation in patients with thrombotic disorders	\$4,783
Dr B. C. Ritchie, for continued research on the development of the pulmonary circulation in the foetus and new born	\$4,200
Salary increases	\$1,572
Lombard, Miss M., towards purchase of a gamelan (Music)	\$3
Marett, Mr G. J., gift to student loan fund	\$50
M.D. Research Company Ltd, adjustment of salary, post-doctoral fellowship (Chemical Engineering)	\$559
Mead Johnson Pty Ltd, provision of annual Mead Johnson Award in Paediatrics	\$52.50
Melocco Bros Pty Ltd, to Robert Blackwood Hall	\$100
Merck, Sharp and Dohme (Australia) Pty Ltd, as follows:	\$3,250
To support research on pituitary polypeptides by Professor J. Bornstein (Biochemistry)	\$3,000
To support work of Dr D. StC. Black (Chemistry)	\$250
M.I.M. Holdings Ltd, to careers and appointments office	\$100
Mobil Oil Australia Ltd:	\$3,326.50
To careers and appointments office	\$200
Mobil Graduate Research Scholarship	\$3,126.50
Monash University Parents' Group	\$4,760
Screen—Union Theatre	\$1,000
Robert Blackwood Hall—equipment	\$1,000
1973 bursary	\$1,060
Library	\$1,700
Monsanto (Australia) Ltd, to departments of Chemical Engineering, Materials Engineering and Chemistry, \$500 each; to careers and appointments office	\$100
	\$1,600

Moore, Mrs V., to library fund and department of Music, \$100 each	\$200
Muscular Dystrophy Associations of America Incorporated, continued support of Dr L. Austin's research on neural factors involved in muscle development and maintenance (Biochemistry)	\$6,206.16
Myer Foundation, as follows:	\$971
Research in Malaysia (Linguistics)	\$311
First payment of grant to Mrs Ione Fett to continue her research on medical graduates (Anthropology and Sociology)	\$660
Myer Melbourne Ltd, to department of Japanese for student travel	\$700
National Health and Medical Research Council, grants and postgraduate research scholarships as listed at conclusion of this Report	\$395,130
National Heart Foundation of Australia, grants as follows:	\$37,816.33
<i>Physiology</i>	
Drs J. B. Chapman and C. L. Gibbs (2 projects)	\$17,144.69
Dr B. Jarrott (2 projects)	\$4,943.68
Dr L. B. Geffen	\$904.96
<i>Electrical Engineering</i>	
Professor D. G. Lampard	\$2,000
<i>Medicine</i>	
Professor K. N. McLean	\$1,000
Professor C. I. Johnston	\$11,123
Dr E. Dax	\$700
National Mutual Life Association of Australasia Ltd, to careers and appointments office	\$50
Oldham, Mr Gordon, for purchase of trees	\$200
O'Shea and Bennett Pty Ltd, to establish the W. P. and H. E. O'Shea Library Fund	\$1,000
Petroleum Refineries (Australia) Pty Ltd, to the careers and appointments office	\$200
Philip Morris Pty Ltd, towards purchase of a gamelan (Music)	\$500
Philips Industries Limited, to defray expenses during visit to Europe of Dr N. Parker (Materials Engineering)	\$50
Pond, Mr S. A. F., to purchase books for the law library	\$50
Potter, Ian, Foundation:	\$1,750
Three scholarships (Japanese)	\$1,050
Work on project "Recovery of mercury from waste	

residues" by Dr G. B. Deacon (Chemistry)	\$700
Radio Research Board, payments on 1972-73-74 grants as follows:	\$16,375
Professor K. Morsztyn: Electronic telephone handset (Electrical Engineering)	\$750
Dr J. L. Francey: Millimeter wave generation in semi-conductors (Physics)	\$2,150
Mr G. K. Cambrell: Electromagnetic field investigation of optical fibres (Electrical Engineering)	\$2,750
Dr L. Gruner: Investigation of active and passive networks (Electrical Engineering)	\$1,125
Associate Professor B. W. Cherry: Electrical resistance of polymeric insulants (Materials Engineering)	\$3,700
Dr R. J. Fleming: Charge trapping and charge transfer in poly-teflon foils (Physics)	\$3,000
Dr K. K. Pang: A user filter design programme (Electrical Engineering)	\$2,000
Dr J. M. Badcock: Noise immunity in phased locked loops and optimum frequency demodulators (Electrical Engineering)	\$900
Ramaciotti, Clive and Vera, Foundations, to Dr W. A. W. Walters' research project "A study of the action of prostaglandins in human reproduction"	\$4,250
Ramsay Surgical Ltd: Ramsay Prize for Proficiency (Zoology)	\$50
Repco Ltd, to department of Mechanical Engineering as follows:	\$1,500
Towards cost of making film on Professor Hunt's new coupling	\$500
Towards speakers' expenses at the N.S.V. Conference	\$1,000
Reserve Bank of Australia, The, grant to Professor J. E. Isaac for research on industrial relations at the place of work (Economics)	\$10,700
Roche Products Pty Ltd, to assist Dr J. S. Hutchinson's visit to Heidelberg (Medicine)	\$250
Ross, R. E., Trust, the first payment of a \$40,000 grant to mathematics development project to be conducted jointly with the Papua and New Guinea University of Technology (Education)	\$10,000
Rothman's University Endowment Fund stipend and expenses for Junior Rothman's Fellow (Mathematics)	\$8,095
Rural Credits Development Fund to Professor J. M. Swan, Dr D. J. Collins and Dr F. W. Eastwood	

(Chemistry), first payment of grant for research on sex hormones derived from solanum alkaloids	\$7,245
Schering Pty Ltd, to research projects:	\$1,255.69
Dr D. de Kretser: Endocrinology (Medicine: Alfred Hospital)	\$1,205.69
Drs J. F. Leeton and J. Backwell: Artificial Insemination Bank (Obstetrics and Gynaecology)	\$50
School of Power Systems (Ninth Residential), to department of Electrical Engineering for the purchase of books	\$100
Scott, W. D., and Co. Pty Ltd, annual prize for proficiency in Psychology II	\$40
Shell Company of Australia Ltd, prizes for administration and chemical engineering	\$100
Siemens Industries Ltd, to enable Dr B. A. Parker to visit Berlin and Karlsruhe	\$250
(Materials Engineering)	\$10
Sigma (Pharmaceuticals) Pty Ltd, second annual grant to support research by Professor A. W. Linnane: The development of new antibiotics (Biochemistry)	\$18,000
Social Security, Department of, Research by Professor R. Baxt into "Consumer credit, poverty and the law" on behalf of Commonwealth Commission of Enquiry into Poverty (Law)	\$8,000
Spina Bifida Association of Victoria, to research by Professor Marie Neale into the education of physically handicapped children (Education)	\$300
Stock Exchange of Melbourne Ltd, The, towards 1973 Monash Economics Lecture	\$400
Stuart Simson Educational Trust, to be applied to fees	\$460
Sunshine Foundation, towards cost of bringing visitors from overseas to Australian Mathematical Society's 14th Summer Research Institute (Mathematics)	\$1,000
Swan, Professor J. M., to chaplaincy fund	\$50
Territory of Papua and New Guinea, extension of grant to Dr L. D. Mackay (Education)	\$500
Tileman (Australasia) Pty Ltd, Tileman Prize for Civil Engineering	\$40
University of Melbourne, for Professor C. Johnston, balance of Plasma Digoxin Fund (Medicine)	\$2,361.26
U.S. Public Health Service, supply allowance to Mr H. R. Klyce (Biochemistry)	\$700.77
Vangelista, Mrs Diane and group, donation to special education fund	\$37.20
V.D.O. Instruments (Australia) Pty Ltd, to Electrical Engineering	\$10

Victoria Law Foundation, for books on criminology (Law)	\$20,000
Victorian Medical Women's Society: computer fees for Mrs Ione Fett's research project on women medical graduates (Anthropology and Sociology)	\$200
Victorian Public Interest Research Group, research on study of dieldrin spraying (Chemistry)	\$850
Water Research Foundation of Australia:	\$1,620
Continuation of research by Dr G. A. Holder (Chemical Engineering)	\$1,200
Continuation of research by Dr T. A. McMahon (Civil Engineering)	\$420
Westfold, Professor K. C., to chaplaincy fund	\$10
Wheat Industry Research Council to Dr A. Holland, first instalment of 1973-74 grant for his project "The application of immunifluorescent staining of ophiobolus graminis to studies in the ecology of soil micro-organisms" (Botany)	\$1,972
White, Estate of the late Joe, to the library	\$1,000
Williams, Truby and Florence, Charitable Trust: videotape camera-recorder (Education)	\$1,400
Wilms, Estate of the late H. E., final distribution from the estate	\$2,000
Wilson Electric Transformer Co., prizes in electrical engineering	\$200
Wood, Professor E. C., to department of Obstetrics and Gynaecology	\$1,500
World Health Organization research grants, as follows:	\$11,692.66
To department of Microbiology to assist bacteriologic studies on leptospirosis	\$700.72
To department of medicine in conjunction with Prince Henry's Medical Research Centre and University of Melbourne: "Clinical study of effects of gestagen-androgen combinations on testicular function in men" (Full grant \$US68,200)	\$10,991.94
Bradford Insulation (Vic.) Pty Ltd: Fibertex wedges for use in anechoic chamber (Mechanical Engineering)	
Dr Richard Schmidt of Ohio, U.S.A.: TSP-Schmidt category 2 coupling (Mechanical Engineering)	
Mr R. Prijoprajitno: four records of Indonesian music (Music)	
Godfrey Engineering (Australia) Pty Ltd: sectioned Rootes-type blower (Mechanical Engineering)	
Australian Broadcasting Commission: film <i>Everybody's Baby</i> (Genetics)	

The appeal by the churches and Jewish community for the building of the religious centre reached a total of \$240,431 by 31 December

1973. The library fund appeal reached a total of \$89,972 and the development fund \$13,097 by this date. The special education fund stands at \$3,537.

The following research grants, recommended by the National Health and Medical Research Council, were approved by the Commonwealth Government.

<i>Investigator</i>	<i>Project Title</i>	<i>Grant \$</i>
<i>Anatomy</i>		
Professor G. C. Schofield	Gastrointestinal secretion and motility	4,500
	Cell membrane involvement in hydrogen ion release	23,560
	Analysis of cell fluorescence	5,500
Dr P. J. M. Tutton	Cell proliferation in normal and neo-plastic gastrointestinal tissues	650
<i>Biochemistry</i>		
Professor J. Bornstein	Role of pituitary polypeptides in Diabetes mellitus	34,169
Professor D. A. Lowther	The role of lysosomal enzymes in connective tissue degradation in arthropathy	16,160
Dr P. Ghosh		
Dr G. C. Gillard		
<i>Medicine</i>		
Professor B. G. Firkin	Pharmacological effects of drugs on erythropoiesis with particular reference to megaloblastic maturation and D.N.A. synthesis	7,445
(share with Dr R. M. Fox)	Platelet physiology and pathology in man	17,876
Dr D. J. B. St John	Study of the physiology and pathophysiology of the mucosa of the gastrointestinal tract	5,000
Dr I. M. Williams	The study of microcirculatory events in the retina and of their significance in damage to the central nervous system during open heart surgery	10,586
Dr G. Brodie	A study of the platelet membranes in myeloproliferative diseases and qualitative platelet defects	6,800
Dr F. J. Dudley	Immunological mechanisms of liver cell damage	6,000

<i>Investigator</i>	<i>Project Title</i>	<i>Grant \$</i>
Professor C. I. Johnston	Storage and release of vasoactive polypeptide hormones	7,000
Dr D. M. de Kretser	Ultrastructural and hormonal studies on the human and rat testis	4,400
Dr R. M. Fox (share with Professor B. G. Firkin: part)	Mechanisms of D.N.A. replication in normal and malignant human cells	7,075
Dr J. Hansky	Radioimmunoassay of gastrin in blood and other biological fluids	5,000
<i>Microbiology</i>		
Professor S. Faine	Microbiological and immunological studies of pathogenesis and virulence in leptospirosis	7,645
Dr A. Ferris	Antigens associated with viral hepatitis	5,535
Dr N. J. Hayward	Gas-liquid chromatography in rapid diagnosis of coliform infections	1,135
Dr E. G. Westaway	Biochemical and immunochemical studies of arboviruses	4,250
	Translation of arboviruses proteins in animal cells	11,698
<i>Obstetrics and Gynaecology</i>		
Professor E. C. Wood	The influence of maternal posture at birth upon foetal condition	4,820
<i>Paediatrics</i>		
Dr T. M. Adamson	Lung liquid in the foetal lamb. Its composition at different gestational ages, its rate of formation, factors affecting its formation	7,690
Dr K. Hayes	The significance of prenatal infection with viruses and toxoplasma	5,914
<i>Pathology</i>		
Professor R. C. Nairn	Lymphocyte aggression against living cells and tissues	17,575
Dr D. J. Davis	The pathogenesis of the local renal graft versus host reaction	3,500
<i>Physiology</i>		
Professor A. K. McIntyre	Central actions of impulses from somatic receptors	12,575

<i>Investigator</i>	<i>Project Title</i>	<i>Grant \$</i>
Professor M. E. Holman	Biophysics of smooth muscle and its innervation	12,005
Professor R. Porter	Central nervous mechanisms controlling limb movement	7,251
Associate Professor G. A. Bentley	A pharmacological and electrophysical study of vascular adrenoreceptors	10,048
	The effects of antihypertensive drugs on various cardiovascular reflexes	3,500
	Behavioural studies on drugs of addiction	300
Dr B. G. Cragg	Quantitative study by electron microscopy of structural changes in synapses occurring with use and disuse and in other experimental models in mental retardation	4,328
Dr C. L. Gibbs	Energetics of mammalian muscle contractions	12,484
Dr J. B. Chapman		
Dr H. Kranz	Discharge characteristics of single human motoneurons	8,746
Dr J. N. O'Neil	Determinants of tissue sensitivity to sympathomimetic amines	1,060
Dr I. McCance	Testing multiple sclerosis serum on nerve cells	2,307
Dr R. A. Westerman	Pharmacology of tracheal smooth muscle	6,140
<i>Social and Preventive Medicine</i>		
Dr R. F. Southby	Evaluation of a community health centre	8,995
<i>Surgery</i>		
Professor J. M. Watts	Bile formation in the developing and adult liver	20,508

MEDICAL POSTGRADUATE RESEARCH SCHOLARSHIPS

Medicine

Dr P. G. Matthews	\$8,200
Dr T. N. Cutter	\$7,200
Dr M. A. Schwarz	\$7,200
Dr J. Dent	\$7,200

Physiology

Dr P. T. Yeo \$7,700

Social and Preventive Medicine

Dr L. W. Osbourne \$8,200

Surgery

Dr J. Toouli \$7,700

The following research grants, recommended by the Australian Research Grants Committee, were approved by the Commonwealth Government:

<i>Investigator</i>	<i>Project Title</i>	<i>Grant \$</i>
ARTS		
<i>Geography</i>		
Mr A. P. Kershaw	The vegetation history of north-east Queensland	1,420
Dr C. A. Maher	Process and structure in urban evolution—aspects of residential change in Melbourne	600
Professor R. H. T. Smith and Mr J. McKay	Supply areas, market channels, and distribution areas for indigenous local produce markets in Papua New Guinea (Lae, Madang, and Wewak)	7,180
<i>Geography and Anthropology & Sociology</i>		
Professor M. I. Logan and Professor M. G. Swift	Policy implications of population migration in West Malaysia	14,200
<i>German</i>		
Associate Professor M. G. Clyne	Migrant German and migrant Dutch in Australia	2,100
<i>History</i>		
Mr W. A. Ellem	A study of southern white Republican voters after the Civil War in America	2,900
Dr B. E. Kennedy	A social history of Broken Hill from 1883	265
Dr L. Li	The place of the military in the politics of modern Japan 1868–1945	500
Dr A. G. Serle	History of Victoria 1851–1900	200

<i>Investigator</i>	<i>Project Title</i>	<i>Grant \$</i>
<i>Linguistics</i>		
Associate Professor J. T. Platt	A syntactic-semantic investigation of Singapore and Malaysian English with particular reference to problems in the acquisition of "standard" English by speakers of it	1,335
<i>Music</i>		
Dr M. J. Kartomi and Mr H. Kartomi	Traditional music of Sumatra	12,327
COMPUTER CENTRE		
Dr C. J. Bellamy Mr L. G. Whitehouse Mr B. J. Treloar	Development of an educational computing system	6,787
ECONOMICS AND POLITICS		
<i>Economics</i>		
Dr I. R. Wills	Effects of modern agricultural inputs on agricultural production, employment and incomes in a development block in Northern India	2,034
<i>Politics</i>		
Dr A. Davidson	An intellectual biography of Antonio Gramsci, the Italian political theorist	1,000
Dr H. G. Gelber	Australia, the United States alliance and Great Power relationships in the Pacific	5,024
EDUCATION		
Dr R. T. White	Learning hierarchies and skill acquisition	1,486
ENGINEERING		
<i>Chemical Engineering</i>		
Dr D. V. Boger and Dr C. Tiu	Accelerating and deaccelerating flows of viscoelastic fluids in conduits of arbitrary cross sections (particularly circular and annular ducts)	5,735

<i>Investigator</i>	<i>Project Title</i>	<i>Grant \$</i>
Dr K. N. Han	Dissolution behaviour of cobalt oxides	750
Dr F. Lawson	Study of the kinetics and mechanism of cementation reactions	3,022
Professor O. E. Potter	Fluidized bed reactors—behaviour and design	5,203
<i>Electrical Engineering</i>		
Professor D. G. Lampard and Dr W. A. Brown	Computer control of respiration and anaesthesia	7,134
Professor D. G. Lampard and Dr S. J. Redman	The application and electrical circuit representations in the analysis of intra-cellular potentials in neurones and of muscle mechanics	7,694
Professor K. Morsztyn	Modelling, control and optimization of large dynamic power systems (power system simulator studies)	7,900
<i>Materials Engineering</i>		
Dr P. F. Thomson	An elastic/plastic finite-element solution to the mechanics of sheet and strip rolling (including deformation of rolls)	2,000
<i>Mechanical Engineering</i>		
Dr W. H. Melbourne	Aerodynamic loading and response of bluff bodies in a turbulent flow	18,450
LAW		
Dr E. M. Eggleston Mr P. J. Hanks Dr H. J. Glasbook	Legal aid in Australia: a study of community access to and use of legal services with particular reference to state-sponsored legal aid schemes	5,700
MEDICINE		
<i>Biochemistry</i>		
Dr L. Austin	The origin of axonal protein	7,079
Dr L. Austin and Dr P. L. Jeffrey	Synaptosomal protein synthesis	5,764

<i>Investigator</i>	<i>Project Title</i>	<i>Grant \$</i>
Professor A. W. Linnane and Associate Professor G. M. Kellerman	Effect of antibiotics on mammalian tissues and on human cells in tissue culture	8,364
Professor A. W. Linnane and Dr P. Nagley	Informational macromolecules in nucleo-cytoplasmic interactions	7,628
Professor A. W. Linnane and Dr H. B. Lukins	Biogenesis of mitochondria	15,127
Professor A. W. Linnane and Dr P. D. Crowfoot	The effects of altered biochemical composition on the structure and function of mitochondrial mem- brane	6,606
Professor D. A. Lowther, Dr M. Okayama and Dr C. J. Handley	Regulation of matrix formation as an expression of the differenti- ated state of chondrocytes cul- tured <i>in vitro</i>	3,375
Professor D. A. Lowther and Dr H. C. Robinson	Structural studies of connective tissues including factors involved in the maintenance of cartilage	7,491
Dr I. C. Parsons	Oxygen effects on chick embryonic erythropoiesis	4,268
Dr B. N. Preston	Physico-chemical and mechanical studies on model connective tissue systems	4,490
<i>Microbiology</i>		
Dr R. C. Bayly	Regulation of the enzymes of the metafission pathway in <i>Pseudo-</i> <i>monas</i>	5,735
<i>Pathology</i>		
Professor R. C. Nairn and Associate Professor E. P. G. Guli	Immunological studies of bio- logical specificity	6,325
<i>Physiology</i>		
Dr L. M. Aitken	Central nervous mechanisms in sound localization	9,204
Dr W. R. Gibson	Endocrine factors which influence lipid deposition in chickens	1,500
Dr B. Jarrott	Molecular basis of synaptic plas- ticity	800
Dr I. R. McDonald	Adrenal function in the Australian monotremes and marsupials	7,103

<i>Investigator</i>	<i>Project Title</i>	<i>Grant \$</i>
Professor A. K. McIntyre	Properties of somatic receptors in monotremes and sub-mammalian vertebrates	1,450
Dr R. F. Mark	The function of regenerated synaptic connections in the nervous system	13,757
Dr R. F. Mark and Dr L. J. Rogers	The mechanism of vision and memory in lower vertebrates	1,635
Professor R. Porter	Factors involved in dynamic control of movement	11,623
Dr M. Weiss	Biogenesis of steroids by the adrenal tissue of the Australian monotremes and marsupials	1,500
Dr R. A. Westerman	Communication between cells in nervous system	18,824
SCIENCE		
<i>Botany</i>		
Professor M. J. P. Canny	Physiological and structural studies of phloem	5,441
Dr M. N. Clayton	Studies of the variability and taxonomy of the dictyosiphonales	7,144
Dr D. F. Gaff	Desiccation tolerant plants, particularly grasses	4,325
Dr N. D. Hallam	The fine structure of plants adapted to desiccation	5,627
Dr T. P. O'Brien	Cell biology of grasses with special emphasis on cereals	7,809
<i>Chemistry</i>		
Professor R. D. Brown and Dr P. Godfrey	Molecules in space	88,795
Dr R. F. C. Brown	Pyrolysis and mass spectrometry of organic compounds	5,986
Dr F. R. Burden and Dr F. P. Larkins	Molecular orbital studies of electronic structures of molecules	5,400
(Research unit of Professor J. M. Swan) Dr D. J. Collins	Studies of the relation between stereo-chemistry and biological activity of oestrogens: synthesis of 6,7-Bisnor-1,11 ethano-oest-radiol	7,486
Dr G. B. Deacon	Lanthanide and actinide organo-metallics	6,362

<i>Investigator</i>	<i>Project Title</i>	<i>Grant \$</i>
Dr G. B. Deacon	Main group element organometallics	7,086
Dr R. S. Dickson	Organometallic intermediates in the transition metal assisted reactions of substituted alkynes	7,806
Dr F. W. Eastwood	Intramolecular addition of an hydroxyl group to an amide assisted by neighbouring groups: models for enzymic hydrolysis	6,662
Dr B. M. K. C. Gatehouse	Crystal chemistry of the solid state	2,040
Professor W. R. Jackson	Metal catalysed rearrangements of cyclic hydrocarbons	12,043
Dr K. S. Murray	Single crystal magnetic and spectral studies of inorganic and bio-inorganic compounds	7,820
Dr M. F. O'Dwyer and Dr J. E. Kent	Perturbations in the lowest excited singlet state of sulphur dioxide	7,612
Professor B. O. West	The reactions of cyclic arsines and phosphines	7,360
Professor B. O. West and Dr K. S. Murray	Synthesis, chemistry and electrochemistry of some organometallic and metallo derivatives of transition elements	10,875
Dr I. R. Wilson and Dr M. W. Fuller	Metal ion catalysis in thiol oxidations and other systems of biological interest	1,460
Dr J. K. Yandell	Mechanisms of the reactions of electron transfer enzymes	6,148
Dr J. Youatt	Organic chemical aspects of cell differentiation	6,717
<i>Information Science</i>		
Dr C. J. Van Rijsbergen	Cluster-based information retrieval	16,578
<i>Genetics</i>		
Dr R. G. Camfield	Analysis of development in Eucaryotes using temperature-sensitive mutations of possible structural and regulatory genes in <i>Drosophila Melanogaster</i>	1,728
Professor B. W. Holloway, Dr V. Krishnapillai, and Dr V. A. Stanisich	Genetic control of enzyme regulation in <i>Pseudomonas Aeruginosa</i>	13,505

<i>Investigator</i>	<i>Project Title</i>	<i>Grant \$</i>
<i>Mathematics</i>		
Professor J. N. Crossley	Recursive equivalence and combinatorial functors	3,674
Professor J. B. Miller	Partially ordered topological structures	2,630
Professor B. R. Morton	Dynamics of convective clouds	12,108
Professor R. Van der Borgh	Finite amplitude convection in compressible fluids and its application to astronomical problems	16,223
<i>Dean of Science</i>		
Professor K. C. Westfold and Dr L. J. Gleeson	Synchrotron radiation from planetary atmospheres	2,236
<i>Physics</i>		
Dr T. R. Finlayson	Superconductivity in niobium-zirconium alloys	
Dr R. J. Fleming	The effects of ionizing radiation on the electrical conductivity of some common organic polymers	4,750
Dr G. C. Fletcher	Theoretical investigation of electronic and particularly magnetic properties of transition metals and their alloys	8,803
Dr A. C. McLaren	Direct observation and identification of crystal defects and their role in the mechanisms of crystallization and deformation of minerals and rocks	1,260
Associate Professor J. H. Smith	Magnetic properties of some micro-magnetic alloys and the meta-magnetic compound Au_2Mn	27,500
Professor R. Street, Dr J. D. Cashion, Dr J. A. Barclay	Studies of solids at low temperatures in high magnetic fields	28,889
Dr K. Thompson	Measurement of the viscosity of liquid ^3He and of liquid ^3He - ^4He mixtures at temperatures below 0.05 Kelvin	6,308
Dr G. J. Troup and Dr J. R. Pilbrow	Electron spin resonance in ionic crystals, inorganic complexes, metals, low symmetry effects; nuclear magnetic resonance in	

<i>Investigator</i>	<i>Project Title</i>	<i>Grant \$</i>
	simple compounds and crystals; antiferromagnetic resonance; temperature variations	46,572
<i>Psychology</i>		
Professor R. H. Day	Human movement perception: the basis of induced movement	6,937
Dr K. I. Forster	Visual processing of sentences	3,675
Dr R. F. Irvine	Studies of acoustic input to single cells in non-specific polysensory cortical and sub-cortical areas	2,175
Dr D. M. Thomson	Studies in episodic memory	3,466
Dr W. R. Webster	Single unit studies of the cochlear nucleus of the awake cat	8,570
Dr W. R. Webster and Dr L. M. Aitken	Audio-visual integration in the cen- tral nervous system	14,850
<i>Psychology, Education</i>		
Dr J. L. Bradshaw and Mr N. C. Nettleton	Human information processing: determinants and correlates of performance	7,655
<i>Zoology</i>		
Dr R. S. Seymour	Respiratory physiology of sea and land snakes	4,922

Some of the gifts and grants shown above have payment schedules which extend over two or more years. The following table, which analyses the sources of grants and donations, shows actual funds received during 1973, and is therefore not reconcilable with the list.

<i>Sources of Grants and Donations</i>	<i>\$000</i>	<i>\$000</i>	<i>%</i>
Australian Research Grants Committee	553		31.8
National Health and Medical Research Council	268		15.4
Other Government Sources	340		19.5
		1,161	
Foundations and trusts, corporations, organiza- tions and individuals		580	33.3
		1,741	100.0

For and on behalf of the Council,
D. I. MENZIES
Chancellor

13 May 1974

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ACCOUNTS FOR THE YEAR 1973

The audited accounts of the University for the year 1973 follow this introduction, in which the salient features are set out for ready reference.

1. *Capital Funds*

Since the incorporation of Monash University on 30 May 1958, the following funds have been provided for the acquisition of physical facilities of a permanent nature—

	\$000	%
State Government Grants	29,516	50.4
Commonwealth Government Grants	28,997	49.6
	<u>58,513</u>	<u>100.0</u>

These funds have been expended as follows:

	\$000	%
Land	416	0.8
Site Development	3,854	7.2
Buildings	44,330	82.8
Equipment	2,695	5.0
Furniture	2,265	4.2
	<u>53,560</u>	<u>100.0</u>

2. *Recurrent Funds*

A brief summary of the income and expenditure for recurrent purposes of the University for the year ended 31 December 1973 is given hereunder—

Income:

	\$000	%
State Government Grants	12,752	50.0
Commonwealth Government Grants	8,963	35.1
Academic Fees	3,803	14.9
	<u>25,518</u>	<u>100.0</u>

Expenditure:

	\$000	%
Academic Activities	18,306	70.8
Academic Services	2,380	9.2
Student Services	845	3.3
General Services	4,297	16.6
Public Services	19	0.1
	<u>25,847</u>	<u>100.0</u>

The following accounts, which have been prepared in the form prescribed by the Auditor-General, provide further details of the year's activities.

MONASH UNIVERSITY
(I) STATEMENT SHOWING INCOME AND EXPENDITURE FOR ALL GENERAL PURPOSES
YEAR ENDED 31 DECEMBER 1973

	DIRECT GOVERNMENT GRANTS AND ACADEMIC FEES					INDIRECT GOVERNMENT GRANTS AND OTHER FUNDS			TOTAL
	Recurrent	Research Projects	Buildings, Equipment and Furniture	Recurrent (Teaching Hospitals)	Buildings, Equipment and Furniture (Hospitals)	Grants and Donations	Union Development	Other Items	
INCOME	\$	\$	\$	\$	\$	\$	\$	\$	\$
State Grants:									
Received this year	12,752,102	113,333	1,465,834	115,500					14,446,769
Commonwealth Grants:									
Received this year	8,963,000	666,401	2,168,500	62,500					11,860,401
Add Accrual at 31 December 1973		1	1,751,834		69,126				1,820,961
Deduct Accrual at 1 January 1973			2,454,500 Dr		69,126 Dr				2,523,626 Dr
Academic Fees	3,802,898								3,802,898
Fees for Special Short Courses								16,566	16,566
Union:									
Fees								431,366	431,366
Other Income								48,531	48,531
Union Development Fees							148,379		148,379
Grants and Donations:									
Government-financed Bodies						608,130			608,130
Student Assistance Fund						515			515
Other						579,307			579,307
Appeals:									
Library Fund						40,369			40,369
Robert Blackwood Hall						2,100			2,100
Religious Centre						952			952
Other						2,319			2,319
Outside Earnings							59,239	669,607	728,846
University Bookshop								32,960	32,960
Other Income						21,638	5,000	300,069	326,707
TOTAL INCOME	25,518,000	779,735	2,931,668	178,000	—	1,255,330	212,618	1,499,099	32,374,450

	DIRECT GOVERNMENT GRANTS AND ACADEMIC FEES					INDIRECT GOVERNMENT GRANTS AND OTHER FUNDS			TOTAL
	<i>Recurrent</i>	<i>Research Projects</i>	<i>Buildings, Equipment and Furniture</i>	<i>Recurrent (Teaching</i>	<i>Buildings, Equipment and Furniture (Hospitals)</i>	<i>Grants and Donations</i>	<i>Union Develop- ment</i>	<i>Other Items</i>	
	\$	\$	\$	\$	\$	\$	\$	\$	\$
EXPENDITURE									
Academic Activities									
Teaching and Research:									
Salaries and Related Items	16,179,340	454,335		78,745		559,754		12,766	17,284,940
Maintenance	1,007,810	128,630		99,255		196,709		16,774	1,449,178
Computing Services	302,422	30,341				2,752			335,515
Equipment	383,128	160,011	383,443		2,384 Cr.	122,714		2,622	1,049,534
Conference and Study Leave Grants	183,126								183,126
New Appointments	114,448								114,448
Other Items	136,398	14,480				64,833		4,599	220,310
Academic Services									
Libraries:									
Salaries and Related Items	1,162,746								1,162,746
Books and Journals	664,198		17,954			2,850			685,002
Maintenance	43,045					1,052			44,097
Computing Services	31,752								31,752
Equipment	5,854					1,300			7,154
Other Items	802								802
Computing:									
Salaries and Related Items	324,499								324,499
Maintenance	214,006	600							214,606
Recoveries	379,396 Cr.								379,396 Cr.
Other Items	3,292	29,153	6,380			6,988			45,813
Other Academic Services:									
Salaries and Related Items	238,728					362			239,090
Other Items	69,669	117	992			12,852			83,630
Student Services:									
Salaries and Related Items	222,388					5,231			227,619
Scholarships	576,523					103,073			679,596
Other Items	12,564					4,221			16,785

<i>General Services</i>									
<i>Administration:</i>									
Salaries and Related Items	2,052,503							2,052,503	
Computing Services	46,091							46,091	
Other Items	57,835							57,835	
<i>Overheads:</i>									
Postage, Telephones and Advertising	238,882							238,882	
Furniture and Furnishings	23,849	49,150		175	224			73,398	
Power, Lighting and Heating	360,800							360,800	
Other Items	214,700				55 Cr.			214,645	
<i>Buildings and Grounds:</i>									
New Buildings		3,142,469		361 Cr.	22,591	71,167	21,702	3,257,568	
Site Acquisition		1,260					536 Cr.	724	
Site Development		73,651						73,651	
Salaries and Related Items	975,794							975,794	
Maintenance	312,932				4,043		1,582	318,557	
Other Items	13,631						3,073 Cr.	10,558	
<i>Public Services</i>									
<i>Continuing Education:</i>									
Salaries and Related Items	17,235							17,235	
Other Items	1,445							1,445	
<i>Other Items</i>									
Union Activities	33,456				1,374	45,273	554,597	634,700	
Halls of Residence					75		27,867 Cr.	27,792	Cr.
Owned Houses and Transit Flats							5,869 Cr.	5,869	Cr.
Outside Earnings							561,795	561,795	
<i>Appeals:</i>									
Robert Blackwood Hall					28,037			28,037	
Library Fund					42,750			42,750	
Other					12,775			12,775	
Other Items							99,789	99,789	
<i>Inter-Fund Transfers</i>	814					750	1,564 Cr.	—	
TOTAL EXPENDITURE	25,847,309	817,667	3,675,299	178,000	2,570 Cr.	1,196,505	117,190	1,237,317	33,066,717
<i>STATE OF FUNDS</i>									
Balance, 1 January 1973	861,401 Cr.	42,770 Cr.	5,529,704 Cr.	—	164,407 Cr.	724,221 Cr.	149,720 Dr	743,005 Cr.	7,915,788 Cr.
Result for Year:									
Deficit	329,309	37,932	743,631						692,267
Surplus					2,570	58,825	95,428	261,782	
Balance, 31 December 1973	532,092 Cr.	4,838 Cr.	4,786,073 Cr.	—	166,977 Cr.	783,046 Cr.	54,292 Dr	1,004,787 Cr.	7,223,521 Cr.

(II) STATEMENT OF SOURCES AND APPLICATION OF FUNDS

	1958-71	1972	1973	Progressive Totals to 31.12.1973
	\$	\$	\$	\$
SOURCES				
(1) State Grants:				
Recurrent:				
General	52,435,994	9,898,496	12,752,102	75,086,592
Teaching Hospitals	388,017	87,676	115,500	591,193
Site, Buildings, Equipment and Furniture:				
General	22,540,468	3,512,070	1,465,834	27,518,372
Teaching Hospitals	1,911,600	85,624		1,997,224
Research Projects	1,008,311	155,000	113,333	1,276,644
Total State	78,284,390	13,738,866	14,446,769	106,470,025
(2) Commonwealth Grants:				
Recurrent:				
General	36,746,500	7,323,000	8,963,000	53,032,500
Teaching Hospitals	209,844	47,379	62,500	319,723
Site, Buildings, Equipment and Furniture:				
General	22,021,960	3,512,070	1,465,834	26,999,864
Teaching Hospitals	1,911,600	85,624		1,997,224
Research Projects	2,223,793	723,078	666,402	3,613,273
Total Commonwealth	63,113,697	11,691,151	11,157,736	85,962,584
Total Government:	141,398,087	25,430,017	25,604,505	192,432,609
(3) Academic Fees and Fees for Special Short Courses	16,024,567	3,689,078	3,819,464	23,533,109
(4) Union:				
Fees	1,695,074	421,857	431,366	2,548,297
Other Income	104,937	35,350	48,531	188,818
(5) Grants and Donations, including Appeals	5,999,331	1,237,326	1,255,330	8,491,987
(6) Union Development	1,086,045	207,376	212,618	1,506,039
(7) Other Income	2,603,615	701,390	1,002,636	4,307,641
TOTAL FUNDS AVAILABLE	168,911,656	31,722,394	32,374,450	233,008,500

	1958-71	1972	1973	Progressive Totals to 31.12.1973
	\$	\$	\$	\$
APPLICATION				
(1) Recurrent Purposes:				
General:				
Salaries and other operating expenses	93,787,935	19,603,033	24,685,668	138,076,636
Equipment and Furniture	6,324,886	377,712	464,106	7,166,704
Books and Journals	4,381,798	699,168	697,535	5,778,501
Teaching Hospitals:				
Salaries and other operating expenses	565,561	129,555	171,000	866,116
Books and Journals	32,300	5,500	7,000	44,800
(2) Site Acquisition and Development	4,111,351	83,502	74,911	4,269,764
(3) Building and Equipment Funds:				
General:				
Buildings	35,649,049	2,050,476	3,142,469	40,841,994
Equipment	1,874,913	218,994	390,815	2,484,722
Furniture	1,951,676	116,903	49,150	2,117,729
Books and Journals			17,954	17,954
Teaching Hospitals:				
Buildings	3,458,953	29,097	361 Cr.	3,487,689
Equipment	188,153	6,478	2,384 Cr.	192,247
Furniture	142,237	5,123	175	147,535
(4) Research Projects	3,092,090	975,322	817,667	4,885,079
(5) Grants and Donations, including Appeals:				
Salaries and other operating expenses	3,608,714	881,664	940,951	5,431,329
Equipment and Furniture	823,446	94,992	168,339	1,086,777
Books and Journals	58,321	42,598	52,009	152,928
Buildings and Site Development	845,267	157,434	35,206	1,037,907
(6) Union Development	1,399,174	43,967	117,190	1,560,331
(7) Other Expenditure	3,956,604	944,316	1,237,317	6,138,237
TOTAL FUNDS APPLIED	166,252,428	26,465,834	33,066,717	225,784,979

(III) STATEMENT OF BALANCES AT 31 DECEMBER 1973

	\$		\$
Students' Fees Received in Advance	205,767	Cash on Hand and at Bank	211,804
Sundry Creditors and Accrued Expenses	1,977,897	Investments	
Loans on Mortgage	304,523	Secured Deposits	5,988,047
Superannuation Funds	1,906,902	Fixed-Interest Securities, at lower of par or cost	283,098
		Ordinary Shares, at cost (Market Value: \$315,845)	379,998
Accumulated Funds			<u>6,651,143</u>
Direct Government Grants and Academic Fees:		Sundry Debtors	
Recurrent	532,092	Accrued Government Grants	1,820,961*
Research	4,838	Student Assistance Fund	4,994
Buildings, Equipment and Furniture:		Other	626,210
General	4,786,073		<u>2,452,165</u>
Teaching Hospitals	166,977		
		Stocks on Hand	379,510
Indirect Government Grants and Other Funds:		Payments in Advance	17,086
Grants and Donations	775,388	Superannuation Investments held as Nominee	
Student Assistance Fund	7,658	Secured Deposits	211,953
Union Development Fund .. (Dr.)	54,292	Fixed-Interest Securities, at lower of par or cost	1,063,692
Fire Insurance Reserve	51,362	Ordinary Shares, at cost (Market Value: \$473,371)	631,257
Other Items	953,425		<u>1,906,902</u>
	<u>7,223,521</u>		<u>11,618,610</u>
	<u>11,618,610</u>		<u>11,618,610</u>

* Includes an accrual of \$710,334 Commonwealth grant in relation to the 1973-75 triennium on a \$1 for \$1 basis provided in the *States Grants (Universities) Act 1972-1973* prior to amendment of Section 5 (1) of the Principal Act.

(IV) DONOR-NOMINATED TRUST FUNDS

STATEMENT OF INCOME AND EXPENDITURE FOR YEAR ENDED 31 DECEMBER 1973

			\$
<i>Income</i>			
Income from Investments			4,904
<i>Expenditure</i>			
J. W. Dodds Memorial Scholarship ..		400	
Vallejo Gantner Memorial Travel Fund ..		800	
Oscar Mendelsohn Lecture		656	
Monash University Rowing Club		55	
Hume Turnbull Scholarship		500	
William and Katherine Winter Foundation ..		2,105	
			<u>4,516</u>
Surplus for the Year			<u>388</u>

BALANCE SHEET AS AT 31 DECEMBER 1973

		\$		\$
<i>Trust Funds</i>				
Balance, 1 January 1973	85,805		Cash at Bank	4,338
<i>Add:</i>			<i>Investments</i>	
Endowment received	1,000		Government Securities, at cost	1,000
Surplus for year	388		Semi-Government Securities, at lower of par or cost	60,978
			Fixed-Interest Securities, at lower of par or cost	17,960
			Ordinary Shares, at cost (Market Value: \$1,955)	2,917
Balance, 31 December 1973	87,193			<u>82,855</u>
	<u>87,193</u>			<u>87,193</u>

(VI) GRANTS AND LOANS SCHEME
STATEMENT OF INCOME AND EXPENDITURE FOR YEAR ENDED 31 DECEMBER 1973

<i>Income</i>			
Commonwealth Grant	231,000		\$
Interest on Fixed Deposit	4,290		
		235,290	
<i>Expenditure</i>			
Grants to Students	67,756		
Sundry Expenses	246		
		68,002	
Surplus transferred to Scheme		167,288	

BALANCE SHEET AS AT 31 DECEMBER 1973

	\$		\$
Creditor	246	Cash at Bank	5,255
Grants and Loans Scheme		Loans to Students	33,563
Surplus for year and balance at 31 December 1973	167,288	Fixed Deposit	
		Principal	125,000
		Accrued Interest	3,716
			128,716
	167,534		167,534

CERTIFICATE BY MONASH UNIVERSITY

In our opinion the statements of account herewith, numbered (1) to (VI), correctly record the transactions of Monash University for the year ended 31 December 1973.

29 May 1974

J. A. L. MATHESON
Vice-Chancellor

I. B. TATE
Acting Comptroller

AUDITOR-GENERAL'S CERTIFICATE**PURSUANT TO THE PROVISIONS OF SECTION 36 OF THE MONASH UNIVERSITY ACT 1958**

The books and accounts of Monash University for the year ended 31 December 1973 have been audited. In my opinion the statements of account herewith numbered (1) to (VI) correctly summarize the financial transactions for the year.

30 May 1974

B. HAMILTON
Auditor-General



