

**DEVELOPMENT OF
THE UNIVERSITY OF WOLLONGONG
1973 - 1981**

**L. Michael Birt,
Vice-Chancellor.**

June 1981.

DEVELOPMENT OF THE UNIVERSITY OF WOLLONGONG 1973 - 1981

CONTENTS

	PAGE
1. Introductory	2
2. The Responsibilities of a Vice-Chancellor	4
3. The University College in 1973	8
4. Some Perspectives on the Years Since 1973	12
5. Academic Structure and Staff	15
6. Students and Student Services	28
7. Academic Development - Research & Scholarship	32
8. Academic Services & Academic Support	36
9. The Physical Environment	42
10. The University & The Community:	45
Community Involvement - The University's Information Structure	45
Involvement With The Wider Academic Community	47
Community Involvement With Our Educational Neighbours	48
Schools	52
Involvement With The Local Community	52
The Friends of The University of Wollongong Limited	54
11. Planning	58
12. Summary	63
13. Attachments:	
Table 1A - Student Load Other Than Higher Degree 1973-1981	
Table 1B - Student Load Higher Degree 1973-1981	
Table 1C - Student Load Total 1973-1981	
Table 2 - Research Funds 1973-1981	
Table 3 - Recurrent Budget 1974-1981	
Table 4 - Space 1973-1981	
Table 5 - Staff 1973-1981	
Table 6 - Some Significant Dates	

INTRODUCTORY

1. Before I conclude my period of service as Vice-Chancellor to the University of Wollongong, it has seemed to me that it may be of some interest and value if I set down a brief account of the significant changes and events of the last eight years in the University, together with an indication of my own reaction to at least some of these events, and some reflections on their implications for the future of the University. That I do in this brief Report on the Development of the University, 1973 to 1981.¹
 2. I emphasize that this is an account of what has happened, rather than an account of personal achievement. Many of the developments have had very little to do with me directly; the pattern of change which I describe is that of a vigorous young institution, finding its own way into fuller life. Along with every other member of the University - whether Council member, staff member or student - I have simply made my own individual contribution to this growth which has involved us all in a community of effort.
 3. Before I address this matter, I wish to place on record my deep appreciation for the support, guidance and advice which I have received from the Council of the University College and the Councils of the University; especially that offered by Dr. Parry (as Chairman of the College Council and the first University Council and subsequently as Deputy Chancellor); by the Honourable Laurie Kelly (as Deputy Chancellor); and by the Honourable Mr. Justice Hope (as Chancellor). I name them specifically, as I have perforce worked most closely with them; but my thanks are due to all members of the successive Councils which I have served. They have helped to ensure that my years in Wollongong have been happy and fulfilling, and that the University has been established securely.
 4. I stress that in this account there is an element of constructing the pattern after the event. There are, indeed, special features that mark out the true university, both before my arrival and in the early months of my time at Wollongong. I had given much thought to these features and to the way in which we might proceed in creating the University at Wollongong, and set down my views, chiefly in private notes. Circumstances have changed dramatically since 1973, and I have gained greater insights into what is possible and practicable, so in many respects things have happened differently to what I expected, or hoped, in 1973. Further, it is inevitable that in human affairs patterns emerge and develop, even where the participants are only dimly aware of what they are about. I hope that the patterns that I now see as having emerged and developed at this University are at least to a significant degree the product of my own initial fundamental thinking about the objectives and needs of the University and of my own responses to changing circumstances and to the appropriate way to balance various institutional objectives and needs; but they certainly do not represent a grand predetermined plan.
1. I want to acknowledge an immense debt to Ben Meek in making the preparation of this document possible. He has done all the collection of detailed information, most of the drafting, and the supervision of the typing and printing. For all this, I thank him most sincerely - it has for me been a most enjoyable exercise, and I can only hope that he has shared my own pleasure in the task.

5. This document is a personal account and, as Vice-Chancellor, I believe that it will be seen in its proper perspective if I start by setting down my views on the role of a Vice-Chancellor and how he fits into the complex of individuals and groups that makes up a University.

THE RESPONSIBILITIES OF A VICE-CHANCELLOR

6. *The Vice-Chancellor shall be the Chief Executive Officer of the University and shall have and may exercise and discharge such powers, authorities, duties and functions as may be prescribed by the By-laws and, subject to the By-laws, as the Council determines. (University of Wollongong Act, 20(4)).*

The Vice-Chancellor shall

- (a) promote and further the development and interests of the University including ... the welfare of staff and students*
- (b) be responsible to the Council for the general academic, administrative, financial and other business of the University*
- (c) exercise a general supervision over all staff and students of the University; and*
- (d) do all things ancillary to those referred to in paragraphs (a), (b) and (c).*

22. The Vice-Chancellor shall ... be a member of any board, committee or faculty within the University ... (By-laws of the University of Wollongong, Part (vi)).

7. These formal statements, together with a number of resolutions of Council made pursuant to these legislative statements, define the responsibilities of the Vice-Chancellor to the Council and the University. But how, in more general terms, might the role of the Vice-Chancellor be described? I venture to make a few observations on this question now.

8. I remember very vividly being asked the same question by Sir John Crawford, Chairman of the Selection Committee for the Vice-Chancellor Designate at the Wollongong University College, in mid-June, 1973. I found it a somewhat unnerving enquiry, coming as it did from the man under whom I had served at the Australian National University, and who was known throughout the world as an extremely effective and deeply respected Vice-Chancellor! My reply centred around the proposition that a Vice-Chancellor's fundamental responsibility is to create, within the resources available to the University, the best possible environment for teaching, research and postgraduate training; he was, I suggested, an "environment creator". I

went on to point out that he must, like Janus, face two ways (not, I hastened to add, be two faced!); he must look outward, representing the University to the world outside its walls, and informing that world about its responsibilities, activities, aspirations and difficulties; and he must face inward, reflecting the outside world into the University, which must remain sensitive to the needs of that world, and responsive to them in so far as it can, consistent with its fundamental commitment to preserving, extending and transmitting knowledge.

9. I do not think I would want to change anything significantly in that statement; but some amplification may be warranted in this document, especially as it is couched in such general terms that it can be acted upon in many different ways.
10. I see the Vice-Chancellor of the University at the centre of a complex network of interacting groups, some within and others without the University. Externally, these groups comprise governments (State and Federal); government educational authorities; relatives and friends of students; primary and secondary schools; the "public" generally; those responsible for the conduct of industrial, commercial and other social enterprises; and the media. Internally, they comprise the Council, the academic staff, the general staff, and the students. A Vice-Chancellor must attempt to keep some balance within the institution between the often conflicting needs and aspirations of all these groups - and in so doing, must not lose sight of the primacy of the teaching and research functions carried on by the academic staff (on whose quality and commitment the success of the entire enterprise finally rests) and the students.
11. In external relationships, the main responsibilities of the Vice-Chancellor, as I see them, are to inform the groups described above about the University's activities and plans for development and to enlist understanding of and support for the University's work in whatever ways are appropriate. In the early life of the University of Wollongong, it seemed to me especially important to build good working relationships with the region's schools, with the Wollongong Institute of Education and Wollongong Technical College, with the Australian Universities Commission and its successor the Universities Council and Tertiary Education Commission, with local government, local industry and commerce, and with other Australian universities. While those needs continue, it has seemed to me more recently that, with the University well enough established to feel confident about its capacity to widen its influence and its provision of "community services", more emphasis needed to be placed on informing

the public at large about its activities. This change in emphasis has been marked most clearly by the formation of the Friends organisation, in all its aspects. In brief, I have seen my responsibility as to "ensure that the University is aware of the views of the (external) world, where they are relevant to its own work", and progressively to help the University move into a more active role in which it not only hears these views, but begins to act on them, with and for that external world.

12. The Vice-Chancellor as "environment creator" has in my view, therefore, a responsibility for helping to create a favourable set of external attitudes to the University, based on up-to-date information about its affairs. In times such as the present, when there is persistent and often ill-informed questioning of the nature and role of universities in our society, this task assumes a particular and perhaps crucial importance. Of course, no Vice-Chancellor can deal with this questioning all on his own. He needs, and must actively seek out, the support of many members of the University - especially, perhaps, of the Council - but he should accept a central responsibility for helping his University to find the appropriate answers!

13. Internally, the Vice-Chancellor is responsible to the Council for the effective operation of teaching and research, and the development and maintenance of an efficient organisation for supporting these activities. He is, I suppose, a "manager" of the University's resources; but I ask you to note a very significant mark of Vice-Chancellorships in the English University system. By long standing practice Vice-Chancellors are usually academics, not highly trained "professional managers". Why is this? I think the answer reflects a very important truth about universities. They are institutions concerned with a most delicate undertaking - that of offering opportunities for the less experienced to learn about the stock of knowledge obtained by mankind, right up to its limits, from the more experienced; and for the more experienced to expand and deepen man's knowledge of himself and the world he lives in. A difficult task! - Progress is inevitably erratic and uncertain, the partners in the enterprise are highly individualistic, intelligent, often impatient and contemptuous of anything that smacks of "bureaucracy" or formalism. Consequently, the Councils of our Universities have generally asked a member of the academic group to ensure that an effective balance is maintained between the needs of scholars and researchers for freedom to pursue their individual studies; of students, for guidance and instruction leading to growing independence of mind and increasing intellectual skill; and of the institution, as a centre for effective collection action in teaching and research - action which, because it is necessarily "collective", requires "administration" and "regulation". It is in this sense that I say a Vice-Chancellor is an environment creator internally within the

institution. He cannot be a manager in any narrow sense; one cannot require members of a University to teach centrally designed courses, no matter how intelligently these have been devised; or conduct centrally determined research programmes, no matter how relevant or worthy; or to "learn" centrally defined bodies of knowledge, no matter how important or vocationally valuable. A university is a delicate and sensitive organism, constantly adjusting itself to changing internal and external stimuli; and the Vice-Chancellor must try to act as an effective sensor for the whole organism, sensitive to those stimuli and to keeping the university's responses in balance.

14. It follows from what I have said that I believe that a Vice-Chancellor needs the support of a highly qualified administrative team. He must always be alert to ensure that the pressure from that team for regularity and economy of operation does not damage or distort the academic programmes of the University; but, equally, that its advice is listened to, and heeded, whenever the effective operation of the University demands it. As ever, it is a question of striking and maintaining the best possible balance!
15. Thus it is that I have described my approach to the job of Vice-Chancellor as that of being a "persuader, pusher, prodger". A persuader, because the only authority that a Vice-Chancellor can exercise effectively, if he wishes to see healthy development in the University, is that of persuasion; "pusher", because there is often a need to exert some pressure on one of the internal groups within the University, in the interests of achieving what is sensed as a common good; "prodger", because often a change that is clearly desirable in terms of (say) altered external circumstances can be brought about only if an internal group is alerted to the need for action. Occasionally, but in my experience only very rarely, does this last need for "prodding" grow into the need to give overt "leadership" in a new direction; but when that does happen, a Vice-Chancellor must of course be willing to use all his persuasive powers, and his moral authority, to move the University into new paths. Most frequently, this he will have to do without being able to demonstrate that the course which has been chartered for the University is without any possible shadow of doubt the correct one. But, as Sir Eric Ashby remarks, the success of a Vice-Chancellor "in decision making does not depend on his vast and exact knowledge but on his skill at navigating areas of ignorance." In the words of the English poet, Robert Bridges: "wisdom lies in the masterful administration of the unforeseen".

THE UNIVERSITY COLLEGE IN 1973

16. When I took up duty as Vice-Chancellor Designate on 15th November, 1973, there had already been a University presence at Wollongong for over 20 years.
17. In 1951, the New South Wales University of Technology (in 1958 renamed the University of New South Wales) established a Division at Wollongong, operating in part of the Technical College buildings in Gladstone Avenue, and providing some of the courses in the early part of degree structures from which students could proceed on to complete their degrees at the main University site at Kensington. A small number of our present academic staff taught within that Division, and have now achieved over a quarter of a century of University teaching in Wollongong.
18. A decade later, in 1961, the Division became the Wollongong University College, and in 1962 the College began teaching on the present University site. Professor C.A.M. Gray, previously Professor of Civil Engineering at the University of Singapore and the University of Malaya was appointed Warden of the College, as well as Professor of Civil Engineering and continued to guide the College for nearly 12 years, until my arrival.
19. The development of the College was steady. In 1962, the Wollongong University College Advisory Committee was established to advise the Council of the University on the operation and development of the College; in 1969 it was replaced by the Wollongong University College Council. An Academic Advisory Committee was established in March 1965; it was replaced by a Board of Studies in July 1968. In 1964, the first Professor, other than Professor Gray, was appointed and by 1973 there were nine.
20. In the early 1970's, the pace increased. It was announced in May 1970 that the College would become an autonomous University in 1975; senior administrative staff were appointed, a College Secretary in February 1970, a College Bursar in February 1972, and a College Librarian in March 1972; and five new Chairs were established (although there was delay in filling them, mainly because of financial problems at the end of the triennium 1970 - 1972).
21. On the advice of the Australian Universities Commission, the Governments in 1973 for the first time provided grants (recurrent, equipment and capital) specifically for the purposes of the Wollongong University College.

22. In October 1973, the State Minister for Education announced that the College and the then Wollongong Teachers College would merge in 1975. Although this decision, was revoked in June 1974, the College therefore moved into its final pre-autonomy phase with that amalgamation as a further prospective development.
23. Meanwhile, the College had been giving detailed consideration to the way in which it might operate when it gained control of its own affairs. The Wollongong Planning Committee had developed detailed and innovative proposals for the academic and administrative management of the new University, which differed most significantly from the arrangements of the University of New South Wales. Its proposals had been endorsed by the Wollongong University College Council and by the Board of Studies; the University of New South Wales had received them, but with wise parental restraint took the view that consideration of the implementations of the new arrangements should be deferred till the Vice-Chancellor Designate was appointed and on duty.
24. The institution to which I came in November, 1973, had, therefore, detailed proposals for academic and administrative arrangements ready for implementation.
25. It had 1618 students - 736 full- time and 882 part- time. Of these, 114 were undertaking higher degrees - 46 PhD studies, 40 master degrees by research and 28 masters degrees by course work. There were 102 academic staff, nine of them professors, with 50 academic support staff and five research posts filled with outside funding. The Library had 25 staff, 56,000 books and a further 24,000 periodicals. The whole University had 271 staff and a grant for the year for recurrent purposes of \$2,834,000 (in June 1973 prices). It had \$1,160,000 for equipment for the 1973-75 triennium (compared with only \$61,684 for the previous triennium, with an unbelievable all-time low of \$1,822 in 1972). There were capital funds for the 1973-75 triennium totalling \$4,435,000 for extending the Library and the Union, completing the Science Building, building a Lecture Theatre Block and a Social Sciences Building, and for other works.
26. On my arrival, it was made clear to me by the Vice-Chancellor of the University of New South Wales that, although formal responsibility still lay for a little over a year with the University of New South Wales, I could regard the College as being free for nearly all practical purposes to proceed as it wished. In some ways the College was ready to cope with autonomy, in others it was not; in physical terms a lot had been achieved, but it was a long way from conforming to any definition I had of what a University should be.

27. It seemed to me on my arrival that there were three major tasks:

- (i) above all, developing an intellectual and physical environment within which the academic and intellectual activity of the University could flourish. That environment must, above all, provide special support for academic excellence - excellence in scholarship underlying excellence in teaching and research, the hallmarks of every successful University. As I conceived it, this task demanded attention to building up a suitable internal structure of academic units, academic support services, administration and student services, each designed to identify, foster, and promote excellence.
- (ii) preparing the University for dealing with the problem of change - initially, that involved in the effective metamorphosis of Wollongong University College into the University of Wollongong. This required, as I saw it:
 - (a) building up an appropriate internal structure for academic and intellectual activity;
 - (b) encouraging self confidence in the academic community, and esteem for the new University;
 - (c) establishing a particular identity for the new institution, distinguishing it from the University of New South Wales (from which it sprang) and, indeed, marking it out from other Australian universities by its style of operation and its acceptance of particular responsibilities;
 - (d) establishing an accepted place for the new institution in the Australian and the world community of universities.
- (iii) strengthening and deepening the new institution's relationships and contacts with the local community, to which its whole existence was due.

28. Nonetheless, I recognised that there was an inevitable degree of tension in the objectives of community involvement and of developing excellence in academic and intellectual activity. It was clear to me that the University of Wollongong had to be active in the "market place", and not become an "ivory tower". Some such tension is, I think, an inevitable part of any healthy university. In such an institution there should always be various internal pressures for different and often incompatible development, which are only "resolved" in action; and the constant need to bring

about this resolution should be accepted as a most important driving force helping the University to adapt to its changing circumstances. In this way, the "divine discontent" which Professor Leonie Kramer commended to us in her Graduation Address in May 1981 can be transmuted into "creative tension". A striking example of such an element of "creative tension", which has remained throughout the period - although in 1973 it was by no means clear to me that this would be the case - is the forging of closer relationships between the new University and the Wollongong Institute of Education.

SOME PERSPECTIVES ON THE YEARS SINCE 1973

29. I think that all of us have learned a great deal since 1973. The University would hardly have been a success if its members had not learnt during their time in it; and times have changed since 1973 - in some ways, dramatically. Nevertheless, the three fundamental issues confronting us in 1973 remain, that is, establishing and maintaining the most effective possible academic environment, dealing with change, and maintaining the best balance between the University and its various "communities". Indeed, it seems to me to be the case that these matters will always need the close attention of the University. When it ceases to be concerned about them, it will also have ceased to be a vigorous and effective institution.
30. Certainly, over the years, it has become increasingly clear that the new institution has to be made more and more prepared for change. Since 1973, many of our external circumstances have been transformed - the Borrie Report changed all expectations about demographic trends; financial expectations have dropped dramatically; public acceptance of and regard for tertiary education has declined; student preferences for courses have swung dramatically more than once. The University has had to maintain continuity of purpose through these changes. Hence, since 1978, the heavy emphasis I have placed on planning and development, and more recently the change in administrative arrangements to allow increased stress on planning. Hence, also, many other more detailed changes - for example, in 1973 I would have resisted proposals to establish limited term lectureships as an item of policy except to meet specific exigencies; in 1981, it would be irresponsible not to encourage them.
31. Another general change has been in the extent of individual interaction within the University. When I came to Wollongong, I believed that there was a pressing need for close individual contact with as many staff as possible, in the interests of a direct responsiveness to individual problems of adjustment. We now all have to recognise that our circumstances have changed - the University is very much larger; we have to remove individual complacency about academic performance, to emphasise more strongly the need for staff to be fully committed to their tasks, and, with academic values so heavily threatened, to stress more and more the need for excellence in all areas of the University's activity, even if this is at the expense of (at least) criticism of individual staff members who are not performing adequately.
32. Another gradual change which I have noted over the years has been the need for more stress on the entrepreneurial activities of the University. I have found it necessary for me to spend more and more time outside the University. Firstly, the need to

give expression to the University's own particular needs has forced me to spend much time particularly in Canberra and Sydney. Secondly, the need to establish the University as a fully accepted part of the Australian university system has led me more and more to engage in activities outside the University which have (I hope) brought the University into the public eye and have helped to make it more readily acceptable as a vigorous member of the Australian academic community. I quote figures derived from my 1979 diary: 78% of the time at the University; 9% away on specific University of Wollongong business; 5% away on absences more or less inevitable (Australian Vice-Chancellors' Committee, New South Wales Vice-Chancellors' Committee, New South Wales Higher Education Board, Tertiary Education Commission, etc.) and 8% on such matters as the New South Wales Science and Technology Council and C.S.I.R.O.

33. We have also had to spend much more effort in attracting students. They no longer automatically come to universities - many of them have to be encouraged to do so. Similarly, the Australian public no longer automatically regards universities as worthy of support - it now has to be informed about university activities and encouraged to support them. Hence, the greater emphasis on public relations activities by the University - and the production of our "prospectus" and "Way Ahead", for example. I venture to suggest that in 1973 none of us would have supposed that a Australian university would have found it necessary to explain itself to the external world in such detail.
34. Finally, in setting the scene for my report on my years at Wollongong, I would like to touch on what seems to me to be the fundamental issue which confronts those who are responsible for governing (as a University Council) or managing (as the executive officers and academic administrators) a university in these days. It is, I believe, the tension which arises between the legitimate desire to exercise independence and autonomy (whether of individual members of staff or students, or of individual academic units such as our departments) on the one hand, and the desire to produce coordinated and effective action by the institution as a whole, so that its activities have a coherence and institutional purpose related to identifiable institutional goals. Achieving this balance is not a problem confined to universities - it may indeed be a general problem of all social organisations. Bertrand Russell began his first lecture on "Authority and the Individual" with the remark "The fundamental problem I propose to consider in these lectures is this: how can we combine that degree of individual initiative which is necessary for progress with a degree of social cohesion that is necessary for survival?" That is the question which has confronted me constantly throughout my period of office as Vice-Chancellor - and I am certain it will continue to confront every

academic administrator in the foreseeable future. For, as Newman remarks in his 'Apologia', this is a problem faced by all institutions, whether ecclesiastical or social. ... "As in a civil polity the state endures and exists by means of the rivalry and collision, the encroachments and defeats of its constituent parts, so ... Catholic Christendom ... presents a continuous picture of authority and private judgement alternately advancing and retreating as the ebb and flow of the tide - it is a vast assemblage of human beings with wilful intellects and wild passions, brought together into one ...". In that sense, at least, a University is a microcosm of society at large!

35. What follows is a brief review of what seem to me the main developments, events and issues of the years since 1973, with my personal comments on the directions the University might take in the future in particular areas; and finally my more general reflections on the future, in which I try to indicate what seem to me to be the broad areas in which the University will, I believe, concentrate its future efforts.

ACADEMIC STRUCTURE AND STAFF

36. When I arrived, consideration of the academic structure for the new University was perhaps the most important and most pressing issue requiring my attention.
37. An academic structure had been proposed by the Wollongong Planning Committee, chaired by Professor Rex Vowels, Pro Vice-Chancellor of the University of New South Wales, and generally endorsed by the Wollongong Board of Studies, by the Wollongong College Council and by the Professorial Board of the University of New South Wales. During a brief visit before formally taking up duty, I had established the "Transitional Advisory Committee" at the College, and its Report of October 1973 recommended immediate action to implement the main features of the proposed new structure. The authorising body, the Council of the University of New South Wales, which was about to devolve extensive authority to the incoming Vice-Chancellor Designate, deferred action to approve or to implement it. I thus had, in a formal sense, the capacity to influence the shape of the new academic structure, but in practical terms did not see this as being so: there was a significant time pressure, with autonomy only a year away, and I believed that the proposed structure represented too much effort and reflected too strongly the aspirations and needs of the staff and of the College, as the authors saw them, for a newcomer to be justified in proposing change or even in proposing a delay in implementation.
38. Therefore, we proceeded as fast as possible and, within a few weeks of my arrival, we had a new structure in operation. At the risk of oversimplifying, I will describe the main features:-
 - (i) the departments: to be the basic academic and administrative units of the University and the main centres of academic authority. Each to have a Departmental Committee, with student representation, to advise its Chairman on the Department's teaching and research activities.
 - (ii) the faculties: to advise the Academic Senate on academic policies, and to consist of all the academic staff of the member Departments, two student members from each member Department, and also one representative from each of the associate departments of the Faculty.
 - (iii) the Senate: to be elective rather than a traditional professional board and to include seven members of the professoriate; eight members of the Academic Assembly; three students; and the Vice-Chancellor. The expectation was that

the members would free themselves from departmental self-interest and address problems from the perspective of the wider needs of the University. There was also an expectation that the Senate, having these wider perspectives, would be able to take a significant part in matters that are normally in a University the concern of the Council and/or the Administration. The Report of the Transitional Advisory Committee November, 1973 (page 12) shows the kind of Senate that was hoped for:-

"The Committee gave considerable time to discussing the role of the Academic Senate in the system of government. The Academic Senate could have the traditional functions of a Professorial Board; if such a position is accepted, the Academic Senate would act largely in an advisory capacity and confine itself to "academic" matters. The Academic Senate in the Wollongong Planning Committee Report is essentially an advisory body but has the competence to deal with any matter. It "may submit through the Vice-Chancellor recommendations to Council with respect to any other matter".

"There was support for a system in which the Academic Senate is the key management body of the University. This arrangement, while recognising the University Council's position as the supreme governing body, emphasises its policy making role. In support of this view, it was suggested that a division of university business into academic and non-academic categories was unreal and artificial. Besides, the effectiveness of the Academic Senate's recommendations and decisions would depend largely on the availability of information relating to resources. If this view of the Academic Senate is accepted, its membership will need to be re-examined; in particular, provision should be made for Council members to serve on this body. The existence of committees consisting of Council and staff members would encourage Council members to participate more closely in the working of the University and would stimulate effective deliberations in the formulation of policy."

- (iv) - the Academic Assembly: all members of the academic staff and the University Librarian, plus twenty elected student members. To be a forum for open discussion on matters referred to it by the Academic Senate or raised by 10 or more of its own members. (One view was that the Academic Senate could in fact be responsible to the Academic Assembly.)

It would be unwise to try to interpret the reasoning and trace the events that led to that particular proposed structure. I think however it is reasonable to see several important strands. First, a degree of optimism and expectation of rapid growth, within which the academic departments would grow rapidly in staffing and in funding, and therefore in capacity to be effective. Secondly, a revulsion against the remoteness of decision making and authority from the academic staff and the lack of an adequate information flow that were, perhaps, almost inevitable in a College 50 miles from the University that controlled it. Thirdly, a view that the right way to run a University was through wide consultation and the involvement of all in the decision making process, a feeling deriving in part from the nature of the staff themselves, in part from the atmosphere of an industrial and in some senses a "company" town, and in part I think from the kind of over-reaction that occurs in colonial situations where whatever the outgoing "imperial power" did is often seen as wrong. Essentially, I think, the new structure depended on the view that the departments represented the appropriate working units; that an elected Senate could divorce itself from sectional pressure and interests; and that in a small University such a Senate could undertake a managerial role.

39. In my own view, there were certain basic flaws in the structure. In particular, there was a special problem in that the legislation under which the University was established and operated gave to the Council and to the Vice-Chancellor as its chief executive officer responsibility and authority that could not be given to the Academic Senate. The structure was framed also against some perhaps unrealistic expectations as to human impartiality.
40. Whatever flaws there may have been in the structure may have been resolved if external circumstances had not changed. As it happened, the first year of the new Interim Academic Senate, 1974, was also the last of what now appear to have been 'golden' years. With the heavy costs of autonomy and of running a dual academic system in 1975, we had to be very careful about academic expenditures in our first year of autonomy; 1976 was an extra-triennial year, with funding much less generous than we had hoped (or than provisions for other small new universities in recent years had led us to expect). There was, therefore, not the expansion we had expected, and this had three important effects relevant to the new structure:-
 - (i) the departments did not get the increases in funds necessary to build them into larger and more powerful units.

- (ii) the seven elected professors (first elected in April, 1975) were not representatives of a large professoriate, and the small number of professors not elected were understandably unhappy to be excluded. (In passing, I note that the Resources Committee, with only four or five of the 21 Chairmen on it seems to have been widely accepted by the academic community and it has had a significant influence on managerial decisions).
- (iii) the less generous funding available to the University made it essential in the eyes of most professors and chairmen to be able to fight in all forums for resources for their own disciplines, and thus to be members of the Senate.

41. Together with these external problems, came internal difficulties - those professors who had been excluded from the Senate naturally tended to oppose the new arrangements; and electoral manoeuvring showed that the structure could be manipulated to give undue representation to particular areas of academic activity.
42. In due course, a change in structure became inevitable, and on 25th May, 1977, the Academic Senate met for the first time with a new, and more conventional structure:- the Chancellor and Vice-Chancellor - ex officio; the Chairmen of all Departments and all Faculties; the University Librarian; and one staff member and one student member elected from each of the five faculties.
43. In any live institution, there will be growth and change, and this applies to the Academic Senate, whose methods of operating have continued to change within the framework of the revised structure. More recently, change has been most evident in the Senate Committee system.
44. The Standing Committee of Senate, established early in 1980 has in my view proved itself one of the most effective units of the whole University. It works with vigor; by and large it refuses to be deflected into irrelevancies or into issues of lesser importance; discussion is frank; and overall it is proving a very effective part of the system of governance.
45. The Resources Committee has, I believe, been accepted widely and is regarded with respect. In this most difficult area, I must admit to being surprised that there has been so little criticism of a committee whose advice to the Vice-Chancellor must often have been unpalatable to departments and groups of departments. The Resources Committee has also, I believe, provided very useful experience for members of the

academic community in the ways in which resources can or should be allocated - and the experience that many members of the academic community have had on the Resources Committee will, I believe, be of great value as the University moves more and more into a time when detailed and effective planning and careful consideration of resource allocation will increasingly determine the strength and success of the Institution.

46. The Buildings and Site Committee similarly has proved an effective body. It deals with one of the least expandable resources - space; and with one of the most intractable problems, that of coping with changing academic needs within the restraints of the space available.
47. Some of the other Senate Committees have, I believe, allowed themselves to get bogged down in too much routine administrative activity, and have not yet developed the strength and self-confidence to confine themselves to making policy decisions and continuing policy reviews, and to leave routine administrative functions to the administrative staff of the University. My comments in this respect refer in particular to the committees which are concerned with student enrolment and progression.
48. The Faculties at the University are not powerful bodies and I believe that the size of the University, its complexity, and our present circumstances mean that it is now time to strengthen them. This may not require change in the formal academic structure of the University, although it certainly needs a change in the way in which the faculties are used. I believe that the right decision was made in the early 1970s, given the circumstances then, to strengthen the academic departments as the main functional units of the University. At that time there was a need to develop a feeling of self-confidence in each of the academic areas; I believe that this was best done through the traditional disciplinary groupings; and in any case we expected rapid growth of the University which would, we thought, mean that the academic departments become larger. What I would hope to see now, in response to these changed circumstances, is the faculties becoming more heavily involved as "management units" and, if I were staying as Vice-Chancellor, one of the main developments that I would be pressing for would be the strengthening of the faculties. Thus, I would move towards using the chairmen of the faculties as the base for the Budget Advisers Committee, the main source of advice to the Vice-Chancellor on framing the annual budget; the chairmen of faculties would therefore have a major role in the forward planning function; and, the University would move towards a faculty-based resource allocation system for the use of funds available for academic purposes.

49. The Academic Assembly provides a good example of the way in which changes have occurred during the period I have been Vice-Chancellor. As I have said elsewhere, when I came to the University it was clear that there was a need for much personal contact and opportunity for personal comment on the whole range of University affairs. We needed a forum for expressing all points of view, which might then be taken into account in developing the new University; and particularly there was some pent-up feeling (justified or not) that in the days when the Institution has been controlled from Kensington, there had been a lack of consideration of the needs of individuals at Wollongong and of the contribution they could make to the new Institution. To use the jargon of the early 1970's, it seemed desirable at Wollongong at that time to "let it all hang out". This was achieved partly through the Academic Assembly - one of the many wise innovations of the Wollongong Planning Committee. The Academic Assembly provided an opportunity for full expression of staff and student problems of all kinds; and brought them - sometimes in fairly strong terms, at times not unassisted with placards and demonstrations - to the attention of the more formal parts of the University structure. As the University matured and became more adept at using its regular committee structure, the need for the Academic Assembly decreased. Indeed, it had not met for a long time, even though its Constitution allows it to meet on petitioning by twenty members, until, in February 1981, it served as an electoral grouping for selection of two members of the committee to choose a new Vice-Chancellor. At that time, the elected members from the student body had left; and an attempt to elect new student members was largely aborted by lack of nominations. The structure nevertheless remains and can be revived if at some future date it is deemed necessary. At the risk of exaggerating its importance, perhaps the Academic Assembly has similarities with the Estates General of France which remained in abeyance for 175 years!

Department Structure

50. The University started with the academic department as the basic and the most important unit. This is still the situation, and, despite what I have said about the need to strengthen the faculty structure, I believe our array of departments still represents the most appropriate set of academic boundaries within which research and teaching can be carried on at this University.
51. Within the total structure, there have been changes in the number of departments since 1973, and greater changes in the number of departments headed by professors (Table 1 gives details). Our work in technology was strengthened through the setting up of separate departments of Civil Engineering and Mechanical Engineering and the

separation of the Department of Computing Science from the Department of Mathematics; and a Department of Biology was established. But the main thrust of changes was towards strengthening the Humanities and Social Sciences in keeping with the Australian Universities Commission's Fifth Report, which in May, 1972 (page 91) referred to Wollongong's need to "concentrate on consolidating its existing commitments with perhaps some diversification in its Faculty of Arts."

52. Outside the departmental structure lies the General Studies programme. At the University of New South Wales it was a requirement of all undergraduate courses, except those for the Bachelor of Arts degree, that students undertake "subjects of a general nature" as well as those in which a student proposed to specialise. There is no such requirement in the University of Wollongong courses, but our General Studies area has developed as a place for courses that in other universities might be represented by a full department (e.g. fine arts); for courses that, if student demand developed, might move into a department (e.g. industrial relations); and for interdisciplinary courses (e.g. Women's studies and Australian studies). It is an area in which the University has not yet, in my view, worked out the most appropriate structural arrangements.
53. There are, I think, two specific important issues within the departmental structure with which the University still has to grapple.
54. The first is the role of the chairman of department. Originally, the foundation professors of the University were appointed as academic administrators as well as outstanding academics. But of course there is no essential relationship between distinction in scholarly work and excellence as an administrator.
55. A second problem within the departmental structure is that of the coordination of teaching programmes. Somehow the University has to achieve a proper balance between the effective organisation of the entire educational programme, and the provision of freedom for individual academics and departments in teaching. I have already quoted Bertrand Russell in my introduction to this statement - "how can we combine that degree of individual initiative which is necessary for progress with a degree of social cohesion that is necessary for survival?" This defines neatly the real problem of coordinating our teaching programmes - we need to have programmes that provide a proper introduction to and conspectus of the particular discipline (which perhaps implies having a highly structured set of course offerings in each department, particularly in the first year); and on the other hand, we need to encourage, and make use

of, the particular special interests of individual academic staff in departments. I have no doubt that in some departments we have not achieved the right balance and that individual academic interests have been given excessive strength against those of the discipline itself. But some departments at least are moving, or trying to move, away from this position.

56. All in all I still hold to my view that the departmental structure is the right one for the University of Wollongong but that it contains problems within it which I hope can steadily be resolved in a more satisfactory way.

57. At this point, I refer to one particular departmental development - the filling of the Chair in History and Philosophy of Science - which exemplifies many important points about academic development and the University in general: the role of the Vice-Chancellor, the role of the Council, and the conflict between differing needs of the University. I refer to the great "Duckpond Debate".

58. At the risk of distortion by abbreviation, I summarise the circumstances thus. Council had in June 1975 approved a Chair in History and Philosophy of Science but, for budgetary reasons, although advertised twice the Chair had not been filled, and pressure from a section of the academic community for action had mounted. I had no doubt that, with increasing financial difficulty, the University should not further increase the number of separate departments headed by professors: already there was difficulty in meeting the aspirations of the existing 20 departments headed by professors, there had been restrictions on development, and some other desirable (or even necessary) posts - that of Internal Auditor for one - had been left vacant or, in the language of that time, "frozen". Meanwhile, with superb irrelevance and imprecision, the more irresponsible protagonists for the filling of the Chair developed a public relations campaign extending to the level of questions in the Federal Senate (our first appearance, I think, in Hansard!); petitions circulated in other universities that did not themselves offer the discipline, and in local supermarkets; and a march on the Vice-Chancellor's office by perhaps a dozen slogan-chanting students. The argument was that the University was spending money on building a pond near the Library that should have been used to fund the Chair of History and Philosophy of Science. The matter was one for Council decision, as it centred on the appointment of a professor, and because there were both financial and academic issues involved. Council's decision in June 1978 was to proceed with the filling of the Chair.

59. I had undoubtedly lost the debate! But that (unimportantly) was the only "loss": the University through its system of committees had examined the issue and come to a conclusion with which I disagreed, but it was essentially a judgement, balancing academic needs and financial circumstances, not a resolution of a matter of principle.

60. The whole series of episodes shows how decisions are at times made; it shows the limits within which a Vice-Chancellor works; it shows the creative tension between different interest groups in the University, most of them defensible from their own points of view. It shows that issues that in their time generated great heat and even some bitterness can, if satisfactorily resolved, be soon completely forgotten. Finally, although the events somewhat increased our financial difficulties, the University did gain a professor who serves it well, and we also pressed on with the construction of a water feature that adds significantly to the attractions of our campus!

Academic Staff

61. The three main matters that have been the focus of my own attention, as far as academic staff are concerned, are:-

- (i) numbers and allocation of academic staff
- (ii) academic staff conditions of appointment, and
- (iii) the nature of the professoriate.

62. In the years since 1973, the number of full-time academic staff has more than doubled to over 190, and in constant prices the funds provided for part-time staff have expanded similarly. Through the years we have progressed well, I believe, in our approach to allocation of academic staff. In November 1973, the Interim Resources Committee had been advised that 13 or perhaps more new posts could be created, it recommended 7 specific posts, but left the rest "against other possible needs". Gradually, we developed a formula approach and refined it, noting always however, that the formulae were only a starting point and that special circumstances would always be taken into account in making allocations of staff.

63. Concurrently, procedures were developed for disestablishing posts in areas where student load has fallen away, but on a time-scale that allowed departments to prepare over a period for the reduction in teaching capacity. The disestablishment procedures proved their practical value in 1981, a year of almost no growth, when the disestablishment of three posts allowed the creation of three new posts in other departments with rapid growth in student numbers. We have developed other arrangements that have allowed flexibility - a proportion of limited term lectureships that cannot be renewed directly; and provision of funds to allow temporary appointments to cover such eventualities as the absence of regular staff on leave without pay. Further, we have built in a formula factor under which departments are assured of appropriate part-time teaching funds if their enrolments exceed given levels.

64. I now turn at some greater length to academic conditions of appointment, and particularly about what I see as a threatened but fundamental requirement, namely, the freedom of each University to develop its own "conditions of service" to meet its particular circumstances and needs.
65. Our conditions of service were developed with extensive consultation and discussion with the academic community, and with detailed contributions from the Interim Academic Senate, an Ad Hoc Working Party of that body, the Academic Staff Association, the Staff Committee of Council, and many individuals. The conditions were of course finally determined by Council itself, in the light of the consultation and decisions, but not until as late as June 1977, two and a half years after autonomy.
66. The University of Wollongong on its establishment on 1st January 1975 inherited conditions of appointment for academic staff from the University of New South Wales which were developed over a long period, (about one-quarter of a century) to meet the particular needs of that University.
67. In the early 1970s at Wollongong there was what seemed to me an understandable but excessive enthusiasm to change every part of the academic conditions. It seemed to me to be a modest over-reaction, representing the same view that I took of a University. I saw the University as a community of scholars and masters which should regulate its own conditions and adjust them to community expectations and demands through its own governing body, the Council. While necessarily subject to the law of the land, these conditions should reflect the particular needs of the University of Wollongong and of the community that it served, and provide the best possible framework for its academic staff to achieve the University's objectives. Each University community has distinctive circumstances; and has, or should have, distinctive aims. It follows that each university should have distinctive features in its academic conditions.
68. Within the University's academic conditions, finally approved by Council in June 1977, I identify four particular features which reflected the special needs of our own institution:
- (i) Study leave provisions were made as generous as those of any other university in Australia. Council accepted the strongly held view that the particular circumstances of Wollongong required that staff be encouraged to undertake study leave frequently and to make the best possible use of it, in pursuit of scholarly excellence.

- (ii) Provision was made for detailed specification of the processes of selection of academic staff - again in the pursuit of scholarly excellence.
- (iii) Tutors were afforded a special place, quite different from that held by them within the University of New South Wales, where they were indeed not regarded formally as members of the academic staff. In particular, a group of longer serving tutors were promoted to the level of senior tutor and given tenure, against the traditional Australian pattern, again to meet special Wollongong circumstances and needs.
- (iv) Provision was made for limited term lectureships initially to meet the need for flexibility and innovation (e.g. to fill medium-term vacancies, or to test the demand for new academic offerings) but also, by the time the conditions were approved, to provide flexibility for academic development in times of static or even declining resources, when too great a proportion of tenured staff might prevent response to changing academic needs and changing student preferences.

69. As long as the University is relatively autonomous and able to determine its own academic conditions, it will be able to respond to changing circumstances in ways that will best meet its own needs. Indeed, I see as one of the main reasons why the University has flourished, and one of the main reasons that it has been able to get excellent academic staff, its freedom to establish its own academic conditions of employment. This is why I am personally so unhappy that universities seem to face the prospect of losing an important element of their autonomy.

70. Perhaps I can best express my view of how we can now operate by an example. We have surmounted what appeared to be a serious problem of management - the constraints imposed on study leave - through having freedom to manage our own academic conditions. We have been able to so arrange matters that our primary objectives - recognized at least as early as 1973 - of encouraging effective use of study leave by academic staff can still be met within a framework of action that harmonises our internal needs with the external constraints. Indeed, no member of the academic staff who has put forward a coherent and satisfactory proposal for study leave has been refused leave, and very few have ever had to delay taking it.

71. Increasing unionisation of our staff may reduce the University's capacity to respond to its needs in this way, and if we reach that stage the University will have lost a great deal. There is an ever-present and increasing danger of intense polarisation (of

Council against staff; of academic staff against administrative staff; of academic staff undertaking administrative functions against those who do not; of tenured staff against untenured staff) which finally can destroy any sense of community, or of "common purpose". A university which becomes a collection of unrelated and unrelating groups or, worse, of antagonistic groups, can no longer share the great academic heritage of "scholarly community" to which we are all said to aspire. If this destruction of the ethos of the University occurs, the responsibility will lie with three groups - the universities themselves, for failing to make the community generally aware of their nature and purposes and to convince their staff that they are willing and able to preserve appropriate conditions for academic work; politicians and others outside the universities who take action without adequate consideration of the consequences; and those people within the university who have fostered the development of demoralisingly partisan activities within the academic community.

72. I finally refer to the role of professors in the University. The institution to which I came in 1973 had a firm view that professors should be the heads of the departments, that the departments should be powerful units, and hence that professors should be selected, at least in part, on the basis of ability to carry out departmental managerial or administrative duties. This remains a feature of the University and of its conditions and of the prescription for selection of professors, despite some chinks in practice - for a time we had two professors in the one department, until that department was split into two; and there have been occasions when, for varying periods and varying reasons, professors have stood down from chairmanship of their departments. My own response to a recent departmental review was that a new professor need not necessarily be appointed as Chairman of the department also. My own view has, therefore, changed somewhat since 1973; I thought then that the matter did not require much debate and that the relationship should remain. But now, I think, our circumstances have changed sufficiently for the reconsideration to be warranted: our departments are all small; the administrative and managerial problems have become much more complex and time-consuming; and the need for strictly academic leadership and for promoting academic excellence has increased as academic life has become more complex and as the outside world has become less tolerant of universities. There will now, I suggest, be many cases where the University and its specific disciplines will be better served by professors who provide academic leadership and engage in scholarly activity but who leave administrative detail to others.

73. If we are really serious about seeking excellence in this University at the professorial level we should be looking first and foremost for the outstanding scholar as both teacher and researcher, to "profess" the discipline, and only secondarily with finding a professor who will be a competent administrator of the mechanics of his department.

74. The chairman of the department is a very important link in the University's academic administration; the chairman must be seen as part of the University's management structure, accepting the responsibility for effective use of departmental resources, for management of departmental staff, and for the development and management of teaching programmes and research. In one important sense, we must accept that the chairman is part of the University's administration!
75. It is now my personal view that we should give professorial selection committees the freedom to explore in each case whether or not the most appropriate appointment requires the linking of the professorship and the chairmanship.

STUDENTS AND STUDENT SERVICES

76. Table 1 gives enrolment details, and shows the growth and changing preferences of the years since 1973.
77. Within the overall growth, I would like to refer to some specific items. Firstly, mature age students; the University, because of its large numbers of part-time students, always had a comparatively old student population. The numbers of mature age students increased with the establishment in 1975 of our mature age student scheme (the Special Admissions Programme - SAP) under which non-matriculants aged 21 or over could gain entry to the University on the results of a test of developed aptitudes and the writing of an essay. Wollongong was a pioneer in this area, at least in relation to allowing entry to non-matriculants as young as 21 years. We saw this as a need emerging from the special features of our region, one of its characteristics being a large population of migrants and others with no family tradition of proceeding on from school to tertiary education. It has been a remarkable success. Our "SAP's" by and large have achieved results much better than students coming straight from school; many of them have outstanding records; many of them have moved into useful jobs in the community; one or two have become academics within the University itself. Quite apart from its social value and the help that it has given to the mature age students themselves, the scheme has clearly led to great advantage for the wider community. It has also helped create a distinctive academic community at Wollongong - the presence of our mature age students may be likened to the situation in all Australian universities in the second half of the 1940's, one of the most stimulating and productive periods for Australian universities, when the traditional student body of school leavers was joined and strengthened by adults returning from war service.
78. Secondly, I refer to the University's special provision for part-time students. Its timetable is specifically geared to their needs - I discovered recently that it is not possible to undertake evening part-time studies in economics at the University of Sydney, despite its age, size and comparative wealth, because its timetable does not allow for classes after the usual daytime teaching hours. Our own peak teaching (and traffic!) period is from 5.30 p.m. onwards. We keep our Student Enquiries Office open so that part-timers can get advice outside regular working hours. Many of our departments tape lectures and other material for the benefit of part-timers (one of the first departments at Wollongong to do this was the Department of Philosophy, which one might have thought would be the last department to make use of modern technology!).

79. This leads me to another point. Big is not always beautiful, and the small size of the University of Wollongong in many ways is a great advantage for its students. Although the wide range of courses of big universities is not available here, this is offset by the personal attention given to students, by small classes and by the responsiveness of academic staff to student needs. This personal attention is not restricted to attention to teaching: many of our departments assist students in ways that help them to employment, and the University of Wollongong regularly appears with the highest employment rate of new graduates in New South Wales in the surveys of the Graduate Careers Council of Australia.

80. Two other characteristics of the student body are for the future rather than the past and the present. Our proportion of higher degree students at 14.7% of the total student load in 1981 is nearly 25% lower than the Australian average despite our efforts (to which I refer later) in relation to research: I hope that we will continue to increase the proportion of higher degree students. Also, our proportion of overseas students is much lower than the Australian average. In the last few years, the Student Services Section has developed a valuable working relationship with a group of colleges in New Jersey and the resultant student exchange system has proved valuable; we have arranged formal visits by senior administrators and academics to neighbouring countries (Singapore, Hong Kong, Malaya, to begin with) with a view to making better known the facilities available at Wollongong, and are already getting more students from these areas. This is not a desperate effort by the University of Wollongong to increase its numbers: it is an effort to strengthen the University by widening access to get an increasing number of high quality students.

International House

81. In December 1979, the University and the Y.M.C.A. of Wollongong agreed that the University would take over International House. Although the formalities were not fully completed until 1981, the University in practical terms has been responsible since the beginning of 1980 for the operation. This has ended a period of many years during which the Y.M.C.A. of Wollongong has generously provided facilities for accommodation in Wollongong, for many students, including University students, specifically since 1971 in International House. Given the many other concerns of the Y.M.C.A., it was inevitable that at some stage it must withdraw from the substantial work and cost involved in running International House. The continued growth of the University and its desire to attract more students from outside the Illawarra region and also from within the region but beyond the reach of daily travel meant that 1980 was the appropriate time.

82. There are problems associated with International House. The main one is that its location is remote from the University and, by reason of the noisy road and transport systems around it, unsuitable in some respects for students. Nevertheless it is there; and it is unrealistic for the University to expect to get government funds for construction of significant amounts of student housing elsewhere - although efforts continue to be made to seek alternatives for student accommodation.

The University Union

83. We have developed a Union which is (I think) unique in Australia in that it is a University Union, not a Students' Union. Most universities have separate club facilities for staff, many have separate club facilities for academic staff. The University of Wollongong has developed at a time when funds to allow the more elaborate provisions of the past have not been forthcoming; and we have therefore had to think in terms of more effective use of the more limited funds available. The decision to have a University Union rather than a Students' Union was not made however purely on cost grounds. To my great pleasure, I found on my arrival that the Union itself had developed the view that it should be a University Union. A further extension of this approach is that all full-time members of staff of the University (apart from those who are enrolled as students also) are automatically members of the Union. They do not pay fees (a circumstance which has been the subject of some contention in the past, although the reasons and off-setting advantages are now, I believe, generally accepted) and the University provides financial and other assistance to the Union which has always been significantly more than the cost to University staff of paying fees to the Union. The Union Board of Management has consistently through the years adopted the view that all members of the Union should be treated equally - whether they are students or staff, or both - and the Board's adherence to this view and approach has led I believe to the development of one of the most important and distinguishing features of the campus life of this Institution.
84. During the years the Union has expanded. A major capital grant allowed a large building extension in 1975; this has since been added to with extensions to the catering areas and more recently the completion of a colonnade to make the main hall more useable in wet weather.

Sports Association

85. The Sports Association has also developed significantly during the past few years. It is a well run separate entity. The main features of development in the past few years have been the transferring of one groundsman staff post from the main University Administration area to the Sports Association; the building of the Sports Centre; the extension of the Sports Centre by building an indoor multi-purpose hall for basketball, badminton, etc. (also serving since 1980 as an examination hall); the construction in 1978 of two squash courts within the Union Building Complex; and finally the construction of two further squash courts in 1980 using an interest free loan of \$80,000 from the University.

Counselling and Medical Services

86. The University first appointed a Counsellor in 1973, and from the beginning took the view that he was the University Counsellor, not the Student Counsellor. For a time the University had two Counsellors, but has now reverted to one. The service was expanded in 1978 by the introduction of a medical service - doctors in private practice visit the University at agreed times, occupy surgery facilities provided by the University, and provide a service available to members of the University community. The University provides the facilities and it is the responsibility of the users to pay the visiting medical practitioners.

Kids' Uni

87. This child care centre - a prominent feature on the University site - warrants particular comment. It has been developed through the Union, to which a "Parents' Club" is affiliated. It was originally housed, as the result of energetic work by potential users, in the old Hockey Hut. This structure - in some ways, fortunately - burnt down in October 1979 and has now been replaced by a small but highly suitable new building. Kids' Uni is pre-eminently an example of something where the drive and basic support has come from the users, and as Vice-Chancellor I have been very happy to provide a substantial recurrent grant, which has increased over the years; some of the capital funds needed for the new building; the services of skilled Estate Division staff in supervising the construction of the new building; and what I hope has been regarded as useful moral support.
88. This support is a good example of a pattern which I have tried to develop of providing help to those who 'help themselves'. Within the area of student services, this has been exemplified apart from the help for Kids' Uni by such things as the interest free loan to the Sports Association for squash courts; the arrangements by which staff are automatically members of the University of Wollongong Union; and the building of the colonnades at the Union which was the result of a cost sharing arrangement between the University and the Union.

ACADEMIC DEVELOPMENT - RESEARCH AND SCHOLARSHIP

89. When I came to Wollongong I was concerned to find that, despite some outstanding exceptions, the achievement in research was limited, and that the College simply had not had opportunities to develop vigorous research programmes. One measure of the weakness of the base for research was that in the year 1972 the entire expenditure for the whole College on equipment was \$1,722, and most of even that unbelievably low sum was spent on buying two electric typewriters for senior administrative staff secretaries. There can be little surprise that one of the first things I did on arrival was to decide that the annual research report of the College should cease to be prepared and printed.
90. Consequently, when, in 1979 I set up three working parties to report to the Vice-Chancellor's Planning Committee on the three areas that I saw as basic to the development of the University, it was inevitable that one of those three was "the development of University research and postgraduate training".
91. This working party put forward the following view on the state of research at the University in its report "The Development of University Research and Postgraduate Training":-

"The University has been fully independent only since 1975. Prior to that it was a college, a regional campus of a large metropolitan university. It can be argued that for these reasons of age and history the environment for research and scholarship associated with established universities is not strongly established in Wollongong. As a college, it was considered primarily as a teaching institution, a perception of the University's role which is still held by some both inside and outside the University. In our first five years, the major preoccupation has been with the establishment of courses, the recruitment of students, the development of an academic and administrative structure and the expansion of buildings and facilities.

"This is, of course, not to suggest that research has been discouraged, or indeed to deny that a significant amount of high quality research has been performed. However, what has been achieved has largely been a consequence of the strenuous efforts of a relatively small handful of individuals, committed to building up their own research programmes. The responsibility of the university to increase knowledge and promote scholarship has largely been discharged by giving all academics the right to engage in research, and by providing relatively small amounts of funding through

the Research and Resources Committees. Indeed, it is only in Committees concerned with selection, tenure and promotion that attention, some have argued to an excessive extent, is paid to the evaluation of research performance.

"In short, the policy of the University towards research has been on of laissez-faire - recruit good people, give them some resources and hope they get on with the job."

92. I agree with the general tenor of these comments but as I see it, the achievements of the past seven and a half years cannot be seen simply as a fortunate response to a laissez-faire approach.
93. Although much remains to be done, our research effort has strengthened considerably since 1973. Table 2 attached to this Report illustrates the changes that have occurred, with detail on some of the elements of research activity that lend themselves to quantitative measurement.
94. The table shows that there has been a massive increase in external research grants received by our staff (an encouraging indication of excellence; and, I hope, an indication that we have had some success in achieving an academic and physical environment conducive to excellence in research).
95. It shows also that, starting from nothing in 1976, the University has steadily built up the internal resources set aside for research to well over \$200,000 this year. The distribution of these annual sums was made the responsibility of the Research Committee. This Committee was established so that experienced academics could assess the requests from staff members and make allocations to those proposals which, in the academic view, most warranted support from the University; and was intended also quite deliberately to provide a training ground for junior academic staff in how to go about seeking external research grants. To this end, the forms on which our academic staff were required to seek funds from the internal committee were closely modelled on the forms of application to the Australian Research Grants Committee for funds. Our Research Committee gradually established criteria for recommending allocations and, while encouragement of junior academics was always a significant feature, the pursuit of scholarly excellence was a major part of the Committee's role. We have now moved to a stage where it is appropriate to have a Research Grants Committee with a rather more restricted charter, i.e. to allocate the grants available, rather than determine the criteria on which grants might be made. This determination will now be done by the Senate on the advice of the Standing Committee.

96. Again to encourage excellence in research, the University in 1980 decided that departments whose members gained external research grants should in future get 5% of the total value of those grants for use by the department itself. This basically was designed to cover the inevitable costs involved for the department itself in servicing, seeking and encouraging external research grants, but it also represented some level of recognition for, and encouragement to, the staff themselves.
97. Higher degree enrolments are closely related to the whole question of research. The University has had increasing success in gaining Commonwealth Postgraduate Awards, and we have increased the number of University awards. In 1980, we began to offer Postdoctoral Fellowships. Other interesting developments in this area of support for postgraduate work included the current offers of postgraduate scholarships by several trade unions for the preparation of accounts of their own department. They have, of course, been taken up by students in History.
98. When the University became autonomous in 1975, Unisearch Limited, the University of N.S.W.'s research company offered to continue to provide facilities and services for members of the staff of the new university at Wollongong, as it did for staff of the University of N.S.W. We eagerly accepted their offer. Some members of staff have also made use of TUNRA, the University of Newcastle's similar organisation. At the time of autonomy, the University considered establishing its own company for applied research, but concluded that the level of research at the University made this quite impracticable. Circumstances have changed, and in 1981 we are in the process of getting into effective functioning order a new organisation called Uni-advice. This is a branch of the Friends of the University of Wollongong Limited and is one of the most important parts of that important development. It will be the means whereby external needs as perceived by the University's Friends can be met by using the expertise of the academic staff of the University of Wollongong, and of others.
99. Another and rather different type of research has developed through the University's Centre for Multicultural Studies. In this area, research has been what is known as "action research". There is, I think, always tension within a university between the demands of pure scholarship on the one hand, and the demands for and needs of project-oriented practical investigations and research on the other hand. The Centre for Multicultural Studies was set up as a specific "line item" in our annual global budgets because it represented a different kind of approach to academic work and research - a specific response by the University to specific community needs (and indeed it appears in our budget, quite properly, in the same major section of "community

services" as do such things as adult education programmes and the Workers' Educational Association in the budgets of other universities). This is an area, however, in which I am not satisfied that we have yet settled on the right arrangements. We have freed the Centre for Multicultural Studies from the normal scrutiny to which other academic activities are subjected (by, for example, the Research Grants Committee, the Resources Committee of the Academic Senate and so on); and, while it has been very effective in attracting support from outside bodies for research and investigation, in my own view, more attention is needed to the structure and the activities of the Centre. It seems to me that the kind of "action research" undertaken at the Centre may create too great a polarization between the University's necessarily scholarly stance, on the one hand, and the directly political pressures for action in relation to specific projects on the other.

ACADEMIC SERVICES AND ACADEMIC SUPPORT

The Library

100. When I came, the Library was a small unbalanced three-storey building, known by the students as "Fort Knox", standing in isolation at the west end of what was then a bare paddock. It had only 24 staff and 56,000 books, but there was an enthusiastic staff and good service was provided for the users within the difficult circumstances. Even these circumstances were an improvement: until the previous year the Library had had 13 staff and operated in a small section of the Administrative Building.
101. In physical terms, there has been significant growth. The building has been extended to three times its original size; it has been adequately furnished, fitted and equipped; and stocks of books and bound monographs have risen to 179,000. The Archives, one of the important innovations of the early 1970's have moved from temporary quarters in the City Council carpark basement into the Library Building.
102. A major impetus came with a special library earmarked grant during 1976-1978, totalling just over \$500,000, as the result of the Universities Council recognition of the special needs of our Library. Each year since then, the University has from its general recurrent grants provided additional funds for books and serials purchases, to maintain the real value of the earlier earmarked grant.
103. I believe that the next decade will see the most far-reaching changes in the way that universities hold and process information. In one way, we have been fortunate that the Library was still small when we began to identify the changes in library methods that were inevitable, and that, therefore, we could move relatively along the new lines that I believe we must continue to follow. Thus, the Library has developed good banks of micro-film and microfiche readers; has specialized areas for use of electronic equipment; and is building up a significant collection of non-book materials. The cataloguing section has been changed out of recognition: 70% of cataloguing is now done merely by getting a Commonwealth National Library record (the "MARC record") by telephone at the cost of a few cents an enquiry. The cataloguing of new acquisitions (by now the bulk of our total holdings) has been computerised since 1976; we are well advanced with a retrospective cataloguing programme under which, at an estimated cost of \$250,000, it will be possible to have all our pre-1976 acquisitions in the computerised catalogue by the end of the next year.

104. The University of Wollongong Library has also been in the forefront of cooperation with other libraries. Both economies and improved service has resulted from expanded inter-library loans, and from joint arrangements with the libraries of our two educational neighbours; and we have a particularly close and mutually valuable association with Macquarie University Library in computer applications.
105. I think however that, despite the significant achievements of the period, we must identify the Library as constituting an as yet unresolved problem. Despite massive effort, and substantial injection of funds, at a level that is not far short of twice the proportion that most universities spend on their libraries, we still have after many years of effort only a modest collection.
106. The future of the Library does not lie in a constantly increasing stock of books, periodicals and other materials, so much as in increasingly sophisticated means of making those materials accessible, and of making use of the resources of other libraries. This, too, will be expensive, as are books; and it seems unlikely that the University will be able, or willing, to maintain indefinitely the high proportion of its funds that it allocates for Library use. Use of resources will not only become increasingly costly, but increasingly impeded by legal restraints. New legislation regulating the use of printed, telecast or broadcast material covered by copyright will, I think, bring about major changes in the way in which staff and students assemble information for teaching, learning or research. Among the difficulties of the new legislation, I see one positive gain emerging: the lost art of creative and selective abstraction of information and concepts may be revived, replacing what seems to me too often to be an unthinking and ineffective copying of material that "might come in useful some day!".

The Computer Centre

107. The University's Computer Centre was established by the purchase in late 1973 of a Univac 1100 computing facility with peripheral equipment, and the appointment on 29th April, 1974, of a Computer Manager.
108. The Computer Centre has developed steadily and effectively from that time. It now has a total staff of 19 and a total equipment stock worth approximately \$2,000,000. There have been other developments in computing throughout the University, notably of course the establishment of the Department of Computing Science, and the development also of computing facilities in some other departments.
109. The main features that should be noted (and which are all developments since 1974) are:-

- (i) Outside Users. From the beginning, the University adopted a policy that a proportion (originally 10%, and in 1979 increased to 12½%) of the computing capacity should be available for appropriate outside users (other educational institutions, government and semi-government authorities, the City Council). This has served two main purposes:
 - (a) it has allowed the University to make a significant resource available to appropriate organisations within the region that might otherwise have not been able to get such a service, and has thus strengthened our links with the community;
 - (b) it has provided revenue which has been ploughed back into the Computer Centre, chiefly for additional equipment purchases and for staffing, with the result that the Computer Centre has been able to provide an improved service to the University community itself.
- (ii) The Centre has tried to keep ahead of developmental needs. One significant example, was the appointment of a Social Sciences Programmer in 1978. This was designed to assist Social Science Departments and academic staff who were coming to grips with what to many of them was a completely new and strange tool for their research activities.
- (iii) The Centre's computer trainee scheme has been another valuable innovation. Up to eight trainees at any one time are undergoing programmes which extend up to two years (depending on the previous education of the individual trainee). During the training period, the trainees work within the Computer Centre, within the Administrative Data Processing Unit of the University Administration, and with outside users. They gain valuable experience and mostly proceed to full-time employment - sometimes with the University itself, in which case the University gains directly; sometimes in the community outside, in which case the University has helped the community.

Computer Aided Instruction

110. The University has been grappling for some time with the problems of computer aided instruction and its implication for the future. In 1981, we have moved a significant step forward by hiring for 12 months a terminal to the PLATO system. (PLATO is a computer aided instruction system developed in the United States, providing a wide range of instruction packages and available now for the first time in Australia.) We have also appointed a full-time staff member within the Education Resources Centre for a year to assist in evaluating the system in its application to Wollongong.

Education Resources Centre

111. This Centre has developed in part from the audio-visual services of the University which have steadily built up in the years starting in 1973, when we first had a reasonable grant for equipment. Early in 1980, a member of the academic staff accepted responsibility as Acting Head of the Centre, with a wider range of duties.

Academic Support Staff

112. The 1970s saw a widening of the needs of academic departments for technical and other support. Traditionally, departments in Science and Engineering have needed technical support staff and in this University we have tried to match more or less the average support staff pattern of Australian universities, personified in the loveable character "Aussie Norm", created by our Professor of English. Other departments have also come to rely on, or have identified the need for, technical staff: examples are the Department of European Languages where teaching is based heavily on language laboratory methods; the Department of Accountancy which now is involved in computing activity in its teaching; and most recently the Department of English whose drama strand involves staff support needs of a kind that previously would not have been thought of in a Faculty of Humanities.
113. Apart from workshops in a number of appropriate departments, a central electronics workshop has been developed; the science departments have set up a Science Workshop; the University's previous Estate Division developed a large maintenance service which to a substantial extent provided services directly for academic departments; and our information on workshop and support staff facilities has been deepened and organised in a detailed report recently prepared by the Deputy Vice-Chancellor.
114. Mention should also be made of the development of a group of faculty secretaries within the University's Central Administration. While our Central Administration is small, a significant amount of its activity is directed to specific academic support - the main area is the provision of faculty secretaries. I will refer elsewhere to possible developments and strengthening of faculties and this may be one area in which further academic support staff may be desirable in the future.
115. Let me make a final comment on support staff. One of the most rapid areas of growth in University costs during the 1970's was in the area of general staffing. In the chillier financial climate of today, I suggest that the University will find it necessary to decrease the numbers of such staff (by a process of natural wastage) rather than increase it. This conclusion must follow from the fact that 84% of our budget is spent

in salaries; that academic staff are the core of the University structure; and that our real disposable income is likely to shrink each year. Consequently, there will need to be an adjustment of the expectations held by departments about the continued availability of such support

Central Administration

116. While the administration of any university is large, expensive and important, I do not propose to say much about it in this review. The real concern of the University is its academic activity and the way it interacts with the community; the other parts of the University are "service" areas - they can play a creative role, but it must be a subordinate one, and perhaps their greatest success is when they operate effectively and are not noticed.
117. In one sense, the period 1973 - 1981 could be described as that of the "rise and fall" of the administration.
118. Initially, we had to take over increasing numbers of functions from the University of N.S.W., and to operate for a time a dual academic programme leading to the degrees of the University of N.S.W. and of the University of Wollongong. Moreover, we expected enrolments to increase rapidly and continuously; we expected funding to increase much faster than enrolments; and had some unrealistic post-autonomy hopes of new ventures. Again, the demands of the academic community for service, and particularly for secretarial service for committees, were substantial.
119. After 1975, once the dual system gave way to our own single system, and as our expectations for growth and prosperity diminished, I became increasingly concerned at the size and cost of our administration. Progressively I have worked to a budget strategy of reducing the number of administrative staff, and hence the cost of administration. I have had some success: Table 3 attached to these papers shows that the percentage of our funds devoted to administration has steadily declined; and Table 6 shows that, after an initial leap in the years 1973 to 1975, with the dual system, I have more or less stabilised the size of the Administration.
120. This was not easy: some of the tasks of administration are self-imposed ones, but many are due to demands from outside (e.g. governments, regulating bodies, the conciliation and arbitration system, the trade unions). Many more are due directly to demands of academic staff who have often failed to recognise that activities requested by them have heavy administrative costs. I fear that acceptance or recognition of this

fact is still not adequate; nevertheless, it seems to me certain that in the next few years we will have to accommodate to a different style and lesser range of administrative support. In other words, I expect Administration staffing will also be decreased, along with other academic support staffs.

121. As from 1st March 1981 Council approved a new, and simplified, structure for the Central Administration, which replaces the previous three Divisions under a Deputy Vice-Chancellor with a wide range of other duties with one unified administrative structure under a University Secretary. I believe that the new arrangements, which are the result of much thought, and some experimentation, will serve the University well, although that still has to be demonstrated, and that in due course they will lead to some reduction in total cost and complexity.
122. While recognising the need for economizing in Central Administration, I have also recognised the increasing need for planning; and, further, that the kind of planning necessary for a University cannot be carried out as a part-time activity of academic staff or others - no matter how experienced and competent they might be. To this end, I have now freed from line administrative duties a group of senior administrative staff so that they can advise the Vice-Chancellor on planning issues. This will allow the work of the Standing Committee, and of the departmental review committees, and all other elements of our planning process, to be developed into more efficient mechanisms for improving the performance of the University within limited resources.

THE PHYSICAL ENVIRONMENT

123. Table 4 shows graphically the way in which building space in the University has increased over the past few years.
124. In one sense, the amount of building has been largely determined outside the University, by Government granting funds on the advice of the Tertiary Education Commission and its predecessors. Those decisions have, however, taken account of the advice and requests from the University itself, its demonstration in precise and practical terms of its needs, and its demonstrated capacity to spend capital moneys quickly and effectively (the last, in particular, being a factor not always found in universities!).
125. The establishment of an appropriate development plan was an essential early need. One of my earliest acts was to move towards the establishment of a buildings and grounds planning team, in April 1974. There had been an earlier Master Plan commissioned by the University of N.S.W. and presented in November 1970. This plan, however, was not adopted in toto by the University of N.S.W.; it was based on an assumption of a proposed total population of 10,000 which was already beginning to seem in 1973 an excessive number; it involved piping the existing creek when there was a strong body of local opinion that the creek provided an attractive natural feature that should be preserved; and it did not concern itself at all with the area occupied by the then Teachers College.
126. The development of the Master Plan proceeded rapidly, but against two major difficulties. The first was that it had to proceed in the absence of an academic plan. The second was the status of the Institute of Education land which filled the middle of the areas that we controlled, or expected to control. In October 1973, the month before I came, the N.S.W. Minister for Education announced that the two institutions would merge in 1975; in June 1974 it was announced that the merger would not occur; in April 1975 Institute plans to move to a new site south of Wollongong were publicly shelved for at least 10 years.
127. Despite these changing circumstances, the planning team produced a draft report in March 1975 and, in December 1976 a final Master Plan which was approved by Council in February 1977. This set the seal of the Council on the plan, and ensures that it will be adhered to strictly, with no changes occurring unless these are specifically approved by Council.

128. The plan has proved valuable in establishing an appropriate physical environment for the University's work. It has allowed the development of defined academic zones, and it has provided an accepted base for triennial submission and future planning and for discussions with the Wollongong Institute of Education on land use.
129. I have referred earlier to the inevitable conflict between various interests within the University and to the need to reconcile these. This kind of problem occurs also in the buildings and grounds area. There is a conflict between the need to use buildings funds so that (for example) each department has the most satisfactory facilities for its own academic work; the need to ensure that the external surroundings of new buildings are harmonious and appropriately connected to the other areas; the continuing need to upgrade main services and roads; the need to provide car parking; and the need to provide pleasant surroundings conducive to the conduct of the informal (but very important) academic and social interaction in the University. In this kind of situation, and with money always inadequate for all the identified needs, there have been many arguments. I am sure that since autonomy we have managed things much better than before: the new buildings have been completed without large unfinished areas, they have footpaths and service connections to existing areas, and funds have been reserved for site reinstatement and improvement.
130. The development of the grounds of the University of Wollongong represent one of the highest points of our achievement in the past eight years. What a few years ago was a largely barren stretch of land with large areas devoted to coal wash car parks has changed into an increasingly attractive tree-covered area.
131. I believe that the development of attractive grounds is of particular importance to the University of Wollongong. The University is located in an areas of great natural beauty, and it is fitting that it should reflect that beauty. Indeed, as it is contiguous to Mt. Keira and the escarpment park areas, we have a public responsibility to see that their natural beauty should flow on in part into the University. Moreover there are many elements of University interest that make the development of attractive grounds important - the South Coast Conservation Society has for many years met at the University and many of the staff of the University have played an important role in conservation work in this area; the University is concerned to develop an understanding of the whole of life, and with the balance between man and nature. Finally, there is, I believe, a growing recognition that it is not merely the things that can be given a cash value, such as the number of square feet of solid brick modern construction buildings

on campus, that determine the total value of the institution. There is a "value" in trees, and in generally attractive and quiet surroundings that cannot be measured in money terms but is increasingly being recognised as important. It is perhaps in those areas that the University's buildings and grounds achievement is most marked.

132. For the future, I see several problems: how to maintain the achievement, particularly in gardens and in general surroundings, against demands for "bricks and mortar" from sectional interests, in a time of financial stringency; how to keep together the expertise in buildings and grounds that the University needs, through the inevitable fluctuations in levels of grants; and how to integrate physical and academic planning.

133. I can attempt an answer only to the third of those questions, and that in outline, for which I direct the reader's attention to my later proposals for University planning.

THE UNIVERSITY AND THE COMMUNITY

134. Up to this point, I have considered almost exclusively matters internal to the University. At the beginning, however, I referred to the need to strengthen and deepen the new institution's relationships and contacts with the local community, to which its whole existence was due. I will now revert, at some length, to this theme; and will also try to put the University into context as part of the wider community of learning.

Community Involvement - The University's Information Structure

135. On a brief visit in August 1973, before formally taking up duty, I established a committee to advise me on "some of the urgent and important matters which needed consideration before the College became the autonomous University of Wollongong". One of those urgent and important matters was "information flow".
136. While the sub-committee that considered these matters devoted much of its attention to internal information flow (an emphasis which was itself a significant insight into the needs of the College) its first two recommendations identified the strands in the University's relations with the world outside that have continued to develop ever since:
- (i) (a) that the University recognise the essential and urgent need for the flow of information to the Community and take appropriate action to develop this function;
 - (b) that the immediate short term aim be the provision of an adequate service to schools and the local media;
 - (ii) that as part of the University's services to the Community, members of staff should be encouraged to undertake consultative work using University facilities when this activity seems likely to add to the stock of human knowledge.
137. Thus, we identified earlier than most universities that, in a media-dominated society, we needed to tell people outside what we were about. Hence, our first appointment in the information area, in 1974, was of a graded journalist; and in our first few years we had a remarkably good working relationship with the media. That media-directed approach in some aspects of our public and community relationships is now weaker, and I think we need to strengthen it again.

138. At the same time, we needed to build up a broader presentation of information about the University than is provided by an information flow to the media, and a more detailed presentation about particular areas of expertise within the University that might be of value to the outside community. Hence, when the first Information Officer left, we replaced him with an appointee of a different kind, and proceeded with developments that have now culminated in the formation of the Friends of the University of Wollongong Limited, which I will discuss at length a little later.
139. Concurrently, another development in information service has built up, initially based on our computing capacity, and as a cooperative venture between the University and local and State Government authorities. This is IRIS (the Illawarra Regional Information Service) which since late 1980 has been providing regular information bulletins for the Illawarra community.
140. In my introduction, I referred to the tension between the various interests of the institution as a whole and of its constituent parts. The appointment of the Information Officer in 1974 was made against very strong opposition from a large number of members of the academic staff. They saw this at that time as a waste of money - information services and public relations are not only important but they are also very costly! It is interesting that, when the original appointment ended and a replacement was made, there was very little academic opposition indeed. There has been much change indeed in attitudes in the last few years within the University. Some of the change reflects changing student attitudes. For example, as student and community interest in universities has generally waned in the past decade or so, there is need for a different kind of emphasis on our information services for potential students. We now, for example, produce a "prospectus" with a multi-colour cover, something we would not have seen as at all necessary - or perhaps even as desirable - in 1973 or 1974.
141. In the immediate future, we have, I think, two main problems. One is to ensure that the information needs of the University, which now cover several different areas and serve several quite distinct needs, are met in an appropriately coordinated and harmonious way. The other is to ensure that, while we develop new areas of information dissemination, we take care that the earlier and basic information services are maintained.

Involvement With The Wider Academic Community

142. While universities are relatively autonomous, and separate, they are part of the Australian and the world academic community which is committed to the same objectives of conserving, transmitting and extending knowledge.
143. The way in which one small institution interacts with this much wider world community is difficult to comprehend, because it is made up of so many strands. It is the sum of such things as the articles written by its academic staff and read by academics elsewhere, the visits that academics on leave from Wollongong pay to other institutions and those from other institutions pay to Wollongong, the attendance of Vice-Chancellors and others at conferences and meetings, and their contributions to these activities.
144. There are some specific things that we have done, however, that warrant particular mention. The University of Wollongong since 1978 has provided a service for the Asian Institute of Technology in recruiting, appointing and paying academic staff - this has given us a fruitful insight into the working of another institution; I trust that the Asian Institute of Technology finds it an efficient service. I have mentioned elsewhere the exchange system of students with the colleges in New Jersey.
145. Within the Australian academic community, our contacts are close and helpful. Some of the achievements and developments are: close working links on inter-library cooperation with Macquarie University; close computing links with Macquarie University and the Australian National University; one of our staff has been a regular member of the Australian Vice-Chancellors Committee's Computerization Committee; and another is taking a major role in the N.S.W. Industrial Officers Group. I have been a member of many committees: perhaps I could mention the Western Australian Government's inquiry into the future of Murdoch University; the New South Wales Science and Technology Council; and the CSIRO Advisory Committee. We have maintained close academic contacts with the University of New South Wales; with the University of Newcastle in joint geology programmes; and with the University of Sydney in legal and philosophic studies.
146. Perhaps a better measure of our involvement with the wider academic community, and our acceptance in it, comes from more personal things. A good test is whether members of staff of the University of Wollongong are sufficiently well regarded to get senior posts elsewhere. For example, for a small University, we have an impressive

number of staff who have moved to chairs elsewhere - Dr. Brian Hill to the Foundation Chair at Murdoch; Associate Professor Alan Roberts to the Chair in Mechanical Engineering at Newcastle; Mr. Terry Heazlewood to the Chair in Accountancy at Waikato; Professor Peter Elkin to the Chair in English at the University of New England; Dr. John Kontoleon to the Chair in Electronics at the University of Thessaloniki in Greece, and Professor Lauchlan Chipman has been invited to become visiting part-time Professor of Jurisprudence at the University of Sydney. Associate Professor Colm Kiernan is at present absent for two years taking the Chair in Australian History at the University of Dublin endowed by the Australian Government.

147. Another measure of academic acceptance is the number of students who come here from other universities to undertake higher degrees. If we leave out full-time staff, and all graduates from the University of New South Wales the numbers are small, but the pattern is clear: 1976 - Nil (in that year, with one exception, our higher degree graduates chose the option of taking out University of New South Wales degrees); 1977 - 4; 1978 - 5; 1978 - 5; 1979 - 6; 1980 - 10; 1981 - 12.

Community Involvement With Our Educational Neighbours

148. Our relationships with the Wollongong Technical College and the Wollongong Institute of Education are now formalized in IRACTE (Illawarra Regional Advisory Committee on Tertiary Education). The genesis of this formal group was a report that the University made to a working party set up by the State Government to investigate the possibility of establishing an education commission in New South Wales (a working party which itself was chaired by a member of our academic staff on secondment to the State Government). The University's document reflected the satisfaction of the executive heads of the three educational institutions with the way in which informal lunch meetings operating since 1976 had led to useful exchanges of views and useful forms of cooperation and mutual understanding. Consequently, we formalized these arrangements by setting up IRACTE.
149. Consequently we have established close and cordial relationships with the Wollongong Technical College, and I hope that these will continue and expand. It is however, with the Wollongong Institute of Education that the University of Wollongong's relationships have inevitably been closer - we are not separated physically by a busy motorway, there are many similarities in our academic activities, and the question of our amalgamation has always been under consideration. The month before I took up duty as Vice-Chancellor Designate, the New South Wales Minister for Education announced that, following the Government's consideration of the Dougherty Report,

the complete integration of the then Wollongong Teachers College with the then Wollongong University College would take place in 1975. In June 1974, however, it was announced that the merger would not proceed. After this collapse of expectation, a period of somewhat strained relationships occurred (perhaps inevitably) between the two institutions. It was my own judgement, because of this inter-institutional tension, and because at that time there were opportunities for both institutions to work towards new developments, that it was not appropriate to pursue the question of closer relationships. In the succeeding years, there were changes in financial prospects, social and demographic circumstances, and student preferences; and by 1976 there was an interruption to triennial funding, uncertainty in the wake of the Borrie Report on future teacher education needs, and an imposed cessation of growth on the University system (but not at that time on the C.A.E. system). Meanwhile interest was being expressed within the University and outside it in diversification of sub-degree courses in Wollongong.

150. Gradually, and more importantly, there emerged clear evidence of a changing attitude towards each other on the part of the two institutions and of their staff. This was particularly apparent when the University was invited by the Institute to play a part in the selection of a new Director, and on the other side when the University recognised the new Director's academic qualities and offered him a professorship within the University. We had also begun to cooperate in many activities - there were joint committees on site planning, joint library use, a cooperative venture in building and using the Drama Hut, and we were given access to the Institute's excellent audio-visual aids.

151. The relationships between the Institute and the University were therefore by the end of 1979 appropriate for the reopening of detailed discussions; and my own thinking had led me to the view that it was important to move at that time:-

- (i) I recognised that between central Sydney and Wagga in southern N.S.W. there was no institution able to offer a variety of advanced education programmes. In particular, such programmes were unavailable within the entire region around Wollongong, despite its relatively large population (in total, approaching 350,000) and its enormous concentration of heavy industry, and associated light industries and commercial activities. It was also clear that Riverina College of Advanced Education, and some of the smaller Colleges of Advanced Education in Sydney saw, as I do, the need for presentation of sub-degree programmes in this region.

- (ii) I was concerned about the size and growth prospects of both institutions of higher education in Wollongong. The University has for some time remained below its funded target (about 150 student load below, equivalent in funding terms to something like three-quarters of a million dollars). Its growth in recent years has been slow. Similarly, the Institute (which had a student load of about 1,000 some years ago) has now declined to about 800; and prospects for teacher education in the State of N.S.W. are not such as to suggest a rapid growth therein. Moreover, it is still almost entirely centred on teacher education and training programmes. Thus, in my view, neither institution is at a size at which full educational efficiency is possible (for a discussion of some of the problems of "smallness", see "Vestes", Vol.24,p.3-10, 1981).

- (iii) I was aware that the University and the Institute were in danger of duplicating facilities and perhaps even some educational programmes (for example in Diploma of Education and Multicultural Studies work), and indeed that direct competition between the two could emerge. There is certainly an element of duplication already in our libraries, computing facilities, catering facilities and administration. As for competition, it is clear and only to be expected that the Institute sees good reason for diversifying its sub-degree programmes. It has made surveys of local opinion about the needs for such programmes, and has information about the interest in development of diplomas or associate diplomas in such fields as business and management studies, computing, librarianship, and aspects of multicultural studies. On the other hand, some of the academic departments within the University have shown an awareness of the same interests in the city and region, and have asked whether it would be possible for the University to offer sub-degree programmes. The prospects of increasing competition for the same pool of students, between two small institutions each anxious and able to expand their academic activities, seemed to me to be a very unhappy one.

- (iv) Moreover, our present position was, and still is, one in which the growth of both institutions is inhibited. The Institute is unable to get permission to diversify while the question of its relationship with the University remains unresolved. This is probably particularly true in the fields of "business studies and technologies" in which the government has expressed a direct interest - though as I have remarked above it extends to other fields also.

On the other hand, I believe that there is little prospect of the University being allowed to engage in sub-degree work, while it has alongside it a small effectively single-purpose college of advanced education - it is entirely reasonable and proper to see good sense in allowing that institution to expand and diversify. Consequently, until we come to some agreement between ourselves as to the best form of association, both exist in a state of developmental paralysis. I believe that we have been fortunate to have the time to work out quietly and with repeated consultation how best to proceed in this matter of drawing together.

152. Overall therefore I came to the view that the development of higher education in the city and the region would proceed most effectively if it came under the control of a single governing body, a single Council. This would ensure that local needs and opportunities are given the fullest possible weight in planning for the future; and, at the same time, if the new institution remained and was accepted as a university, it would also give the fullest possible measure of institutional autonomy and academic standing.
153. There followed a round of detailed discussions. I must say that throughout them, I was able to reach complete agreement with the Director of the Institute on all fundamental issues, and a very large measure of agreement on matters of detail. This made it relatively easy to reach the stage where I was able to put to Council in October 1980 a proposal for amalgamation. Council gave its conditional agreement to the proposal, and asked for further advice on the detailed arrangements necessary and their implications, to be considered at a special meeting of Council.
154. Following this support for amalgamation, which was echoed by the Academic Senate, and by the Council and Academic Board of the Institute, further discussions on matters of detail between myself and the Director led to a point at which much of the necessary action had been worked out. The Federal Government's announcement in April 1981 that inter alia the Wollongong Institute of Education should merge with the University, or there would not be further Federal funding available for it, therefore presented few problems to us.
155. It is my firm personal conviction that this is the right time to take this step, to ensure the most effective development of the University and of higher education in the south of New South Wales.

Schools

156. The University of Wollongong realized very early the need for establishing close working relationships with the schools in the area. The appointment of a Schools Liaison Officer was a very important element of our relationships with the community. We were in fact the first university to recognise the need. The schools liaison service has certainly achieved a large fund of regional goodwill towards the University and of understanding of what it is about. In metropolitan areas, it is of course not possible to operate in the same way - there is no definable "region" in the metropolitan areas that identifies in any way with a particular university.

Involvement With The Local Community

157. In considering the role that the University has developed and should develop within the local community, we must start by considering the local community itself. That community is non-metropolitan, industrial and of very diverse and culturally fragmented nature.
158. In such circumstances, it seems to me that the mere fact that the University is here is something that helps the community. The University, through its internal forums and societies, and its individual staff members raises matters for discussion, makes public statements on local, national and international issues, expresses in practical form enthusiasm for and interest in cultural activities, the study of languages, conservation, and so on. Among the non-metropolitan universities we are perhaps most like the Australian National University, which has always had a significant impact on the large, diverse and lively community of Canberra, rather than (say) the University of New England which, when the total of its staff and students is reckoned, is disproportionately large compared with the more homogeneous city of Armidale to which it is adjacent, and on which, therefore, it has quite a different impact.
159. I do not want to single out individual members of staff, or particular groups, or particular activities as representing specially worthy examples of University cultural interaction with the local community. But to give some indication of the kinds of relationship that I believe are important, I mention at random the University Singers, Theatre South (already achieving audiences of 1% or more of the Wollongong community), the series of art exhibitions held by the University Union in times before the city had an Art Gallery, the Language Societies (the Alliance Francaise and the Dante Alighieri Society), the Film Society, and the Public Questions Forum which meets "under the fig trees" to consider issues of public importance.
160. Regionally, the University has made vigorous efforts to develop schemes for a university presence at Campbelltown. Failure to achieve in these areas has not, I think, been entirely our fault - rather it has been due to caution on the part of the funding

authorities about developments outside our campus. This caution is not restricted to Wollongong; and it may be related to the general problem of raising hopes in areas at present not serviced by universities, and which can have no expectation of developing their own facilities in the foreseeable future.

161. With the City Council, we have developed and extended close links. Some of these are of a personal kind - the Lord Mayor is preeminently a "friend" of the University of Wollongong, and this friendship has survived the successes and failures of the annual "town versus gown cricket" match. The City Council has been a major user of the University's computer service right from its inception. Since this Report is a personal account, I can note here that one of the most moving single episodes of my time at Wollongong was the Civic Farewell given by the Lord Mayor and Aldermen to mark my departure, and the warmth of feeling that was evident to me personally and to the University.
162. Particular connections with the large ethnic communities of Wollongong come from the Centre for Multicultural Studies. I have referred to this elsewhere but note here that the University's commitment has been substantial. We have bought a house at North Wollongong to house the activities of the Centre; and for several years have provided funds of the order of \$80,000 per annum for its operation.
163. All of us have seen an important role for the University of Wollongong in contributing to the cultural life of the local community. The University is almost exclusively publicly funded, and we have to be careful how we spend our money not only because it is a limited resource, but because we do not believe that it is proper to use public funds except for such things as are very closely related to the objects of the University. In cultural areas, I have gone as far as I believe is proper. This has included supporting the Wollongong Art Purchase with a small annual donation and helping both it and the University by small purchases; supporting the Gallery Ball, noting that the first Chairman of the Gallery Society in Wollongong was the University Librarian; lending support to a group which worked for the purchase of a grand piano for the Union; finding a home for most of Mr. Bill Peascod's art collection (this great enhancement of the walls of the University has cost something in framing, mounting and insuring the works of art); providing limited financial support for some publications in which University staff have been involved - "Blacksmith" and "Poems in Public Places"; underwriting several activities - the work of the Planetarium Society, the publication "Wollongong's Native Trees" by Leon Fuller, who until recently was our Landscape Supervisor; and the operations of Theatre South in 1980 and again in 1981.

164. What I have tried to do in these areas has been to recognise that they are activities that are very closely related to the objects of the University; that they have in each case been "self help" activities in which the University's contribution has been only a comparatively small part, the bulk of the benefits having come from the work or the funds of others; and that, in some cases, once the assistance has been provided, the body involved has been able to proceed independently.

The Friends of The University of Wollongong Limited

165. The development of the Friends of the University of Wollongong is an example of the way in which various purposes of the University have been brought together into a coherent and appropriate structure. I will refer to it at length, because I see it as one of the most significant developments of my period as Vice-Chancellor.
166. The genesis of the Friends was twofold - firstly, there was concern at the prospect that the University, together with the whole of the tertiary education sector in Australia, would have to cope with continuing decreases in funds, and it was thought that the possibility of fund raising should be examined in detail; secondly, it was felt that the University had "come of age", was soundly based, with a sizeable academic staff possessing competences and skills needed by the outside community, and therefore that we needed a mechanism for telling the community what the University could do and how the community could make use of our skills.
167. Our initial proposal was basically for a fund-raising drive, but our advisors moved us away from this approach to the concept of the "Friends" which embraces other important aspects of the University's interaction with the world outside our walls.
168. The aim of the organisation, determined after canvassing the views of a broad cross-section of the local community and obtaining guidance from Sir Roderick Carnegie and Mr. R.J. L. Hawke, has been formally stated as:
- "... to achieve, on a continuing basis, broadly based community support for the University by demonstrating the value of the University to the community in the form of practical examples of the University assisting the community to solve identified problems for reward. It is intended that the reward will be sufficient to operate the organisation (Friends of the University of Wollongong Limited and Uniadvice) without cost to the University and each year to contribute a "profit" to the University."
169. The form of the organisation springs from our conviction that its structure should reflect that of the community around us. Perhaps the main relevant feature of our "local" community is the importance of two quite separate groups, organised labour

on the one hand, and management, industry and capital on the other. The University sees itself as having valuable and necessary links with both those groups, and being able to assist both of them. The structure of the Friends ensures that people and organisations concerned with both these sectors of our local community, and also those who are not so identified, can be part of the organisation. Membership can come either from a financial contribution of \$1,000 over a five-year period or from an equivalent contribution of service to the University, or from using the services provided by the Friends to the extent of \$1,000. The structure establishes the circumstances in which a broad cross-section of the community can establish close contact with the University; can become both knowledgeable about and supportive of it; and can find assistance in solving specific community, business or personal problems.

170. The Friends organisation represents the formal way in which we are strengthening the University's interaction with the community, and is the basis for our assistance to the community. Great care has therefore necessarily gone into establishing a proper structure - the community groups with which we interact will in all cases have primary aims and purposes that are different to the primary aims and purposes of the University, and indeed in some cases their primary aims and purposes may in some respects be irrelevant to those of the University. Consequently, we have set the Friends organisation "at a distance", as it were, from the University. The method devised as most appropriate for this purpose is the establishment of a public company which has been incorporated under the New South Wales Companies Act. The Friends of the University of Wollongong Limited is controlled in law not by the University but by the members of the Company. The Directors are in the first place the Chancellor, the Deputy Chancellor, the Vice-Chancellor and the Chairman of Senate, and they will be joined when the organisation is fully functional by four members of the Company drawn from amongst the Friends themselves. The Memorandum and Articles Association of the Company are so drafted as to eliminate, as far as is practicable, any intrusion by the Company into the academic province of the University, and to provide the Company with commercial flexibility of a scope that is not normally available to a University. The Company is a non-profit company, and any profits will be paid to the University. An important advantage is that the Company provides an effective legal protection to both the University and its staff in the event of professional negligence.
171. The relationship between the University and the Company is, therefore, that either party may recommend courses of action or make requests to the other, but neither can bind the other. The University cannot make the Friends do anything: the Friends cannot make the University do anything. Consequently, both sides are free to pursue their own objectives.

172. The Company has four main arms:

- (i) Uniadvice - the income-earning activity of the Company which arranges and enters into contracts for services provided to the community by the University and its staff, and charges for these at commercial rates;
- (ii) the Membership Committee, responsible for enlisting members and involving them in the activities of the Friends.
- (iii) the Projects Committee, responsible for identifying projects on which University staff might work to the benefit of the community. If a project of this kind is approved by the University Council and there is University staff support for it, the Projects Committee may then seek from the community the funds necessary to carry out the project;
- (iv) a general information, publicity and public relations function.

173. We cannot of course yet evaluate the success of the Friends. It is still in the process of establishment, although with 107 Friends recruited by the end of May 1981 it had already moved more than half way to achieving its initial target of 200 Friends, including a wide range of individuals, companies, and other interest groups. In evaluating its success, we will need to look to see whether it is leading to:

- (i) increasing numbers of members of the academic staff becoming aware of the opportunities to use their expertise in solving community problems through the Friends organisation;
- (ii) increasing confidence on the part of the academic staff that the Friends organisation is the most effective way of doing this;
- (iii) the establishment of a large, well informed, supportive group of people and organisations outside the University contributing ideas to the University itself, speaking up in local state and national forums, assisting it financially or with the provision of services;
- (iv) an increasing number of people outside the University coming to a realistic sense of where the University might help them.

174. It is possible - perhaps almost certain - that as the Friends develops, it will change in some respects; but I am certain that something very like it is necessary for the University, not only to ensure close and effective interaction between the University and the community, but for the University's very existence. I must reaffirm my personal conviction that the University of Wollongong must be active in the market place, and not attempt to be in an ivory tower.

PLANNING

175. In the last few years, it has become increasingly necessary to engage in planning, and in a more complex way, if the University is to continue to survive and prosper. We must indeed "plan our way into the future!"
176. In 1973, our planning needs seemed comparatively simple. We believed that there would be a steady increase in the number of students and a steady increase in real grants per student; hence there would be each year a much larger grant and we could leave much of the detailed planning and action to the departments and other budgetary units, making central decisions only on larger issues. At that time, there was little thought that there would be continued pressure on financial (and other) resources from competing sectors of the University. We did of course engage in some planning, although it was rudimentary: I think my first formal meeting with my new senior academic colleagues in 1973 was one in which, aided by blackboard and chalk, we listed the proposed new departments (five of them), the staffing (academic and other) that they needed, the cost of library and other materials, and examined what would still be left over after we met those needs!
177. If we really thought in 1973 that there would be no financial problems, we were soon disillusioned. The Universities Commission recognised the special problems of Wollongong in changing from a College to a University, and it and its successors have through the years recommended grants that took our special problems into account. We have had special help with equipment and library needs, and significant improvement of recurrent funds in terms of real dollars per student, but this has been in a context of difficulty for the whole University system and therefore of relatively modest response to our needs. Indeed, as early as 1975, we had to plan on a \$250,000 budgetary deficit in order to allow in that year, our first year of full autonomy, even the minimum extra staffing that the new departments needed to start teaching the later years of their courses. Steadily, year by year since then, it has become clearer that planning is the key to the success of the University.
178. Steadily, too, the planning mechanisms of the University have been developed and, I believe, we have now reached a stage where our planning structure is becoming adequate for the future.
179. The planning process as I see it is a complex and integral part of the whole management of the University, which requires:-

- (i) the identification of broad general "objectives" for the University;
- (ii) the identification of "targets" to be achieved in attaining those objectives, i.e. specific outcomes of action, defined in such a way as to permit assessment of the extent of achievement;
- (iii) the development of "programmes" of action for achieving those targets;
- (iv) the establishment of a satisfactory stock of information about the University;
- (v) the development of expertise within the staff of the University in assessing, ordering, and ranking targets and programmes;
- (vi) the development of a body of policies and practices for resource allocation, ordering of priorities, etc.;
- (vii) the establishment of mechanisms (in a University this generally means committee structures) for operating the process.

180. Looked at from a different perspective, the planning process requires the organising of the University into working units that adequately reflect the functions of the University, are manageable, and can be treated effectively in a general planning process. It requires the involvement of those responsible for managing the working units (in particular, in a University, involvement of Chairmen of Departments is essential); a mechanism that permits the identification of financial and other resource constraints, and of options and priorities for action; and means of ensuring debate, and ultimately something like consensus. Finally, it requires a centralised secretariat, whose members are not engaged in, or responsible for, the day to day activity of working units, to ensure that the whole process keeps operating and does so to a proper timetable.

181. As a result particularly of the work of a Planning Committee I set up in 1978, Council in December 1980 agreed on three objectives, namely to:-

- (i) attract more students to the University through improvement in the academic programmes offered by the University;
- (ii) foster the development of more effective research and postgraduate teaching in the University;

- (iii) identify what needs to be done by the University to give positive encouragement to the development of closer links between the University and the community through "service" activities.

These are of course very general, and will need to be made more precise, but they form at least a useful framework.

182. We have not yet established targets - except for the target of achieving a student load of 2,500 by 1984 - and the stated objectives are difficult to translate into specific targets. As a result of the Planning Committee's work we do, however, have a number of suggested "programmes" and proposals. As a first step I have asked the Standing Committee of Senate to advise me on the relative priorities that should be given to these programmes and proposals.
183. The University has gradually, as a matter of deliberate policy, developed a base of information which is now available to assist in the planning process. I would particularly mention the following:-
 - (i) In 1979 I visited each academic department more than once and from those visits and departmental discussions have come detailed reports from each department setting out the department's hopes, plans and expectations.
 - (ii) A mechanism has been established for formal reviews of academic departments. Reviews of Civil Engineering and Geology have been completed and reviews of several other departments are well advanced.
 - (iii) A number of committees have developed a great deal of background information - the Resources Committee and the Research Committee (now replaced by the Research Grants Committee) are two such examples.
 - (iv) The Deputy Vice-Chancellor has made detailed reviews of the operations of the Library and of workshop facilities within the University.
 - (v) Management Consultants in 1981 reported on the University's Administration.
 - (vi) Three valuable reports were made in July 1980 by working parties set up to advise me on the Admissions of Students and Academic Programmes; the University and Its Region; and the Development of University Research and Postgraduate Training.

184. Further, within the recent reorganisation of the University Administration, there is now provision for a management information service unit, which will provide information on a systematic basis.
185. I have tried ever since coming to the University to involve as many people as possible, and particularly members of the academic staff, in planning matters. I particularly refer to the developed expertise of all those members of the academic staff who have served on the three working parties of 1980, the Resources Committee, the Research Committee, the Budget Advisers Committee, the Planning Committee, the Senate Agenda Committee, and many other committees.
186. Policies and practices have been developed, to provide a basis for our forward planning. I draw particular attention to the work of our committees, e.g. the Buildings and Site and Buildings and Grounds Committees between them have established sound approaches to the allocation of space, which is scarce and non-expandable and in some respects is inevitably our most heavily fought-over resource; and the decisions emanating from the work of the Resources Committee covering not merely ways of distributing the available resources of academic staff, support staff, equipment and housekeeping funds, but also such matters as the rapidity of response to changes in student load, disestablishment of posts, and minimum needs for the maintenance of particular disciplines.
187. I also note that the budgetary process within the University, while retaining the Council's authority in determining the annual budgets of the University and the central role of the Vice-Chancellor, who has the responsibility of developing budgets for consideration by the Council, has allowed the appropriate working areas of the University to contribute to the decision making process.
188. Finally, I have recently moved towards establishing a planning secretariat through the recent administrative re-arrangements. These free some senior staff from line administrative responsibilities so as to make them able to carry out planning functions. This group will have the responsibility for ensuring that the whole planning process operates effectively - that the necessary information is available for the planners, that alternatives are evaluated and costed for the consideration of the planners, that all the implications for resources (financial, staffing and space) of planning proposals are analysed, that the working units (academic departments, etc.) are assisted to provide comment and advice in a form that best allows evaluation of them, and that the whole planning process proceeds within the necessary time scale. It has become clear to me that it is now necessary to commit senior and experienced staff - academic, admin-

istrative and professional - full-time to the planning process. If these staff are to be effective in a planning role, in the way that the University's circumstances now demand, they must be able to devote their full attention to it, and consequently must be freed from responsibility for day to day management of the University's present activities.

SUMMARY

189. In my introductory comments, I stressed that in this account of developments in the years that I have been Vice-Chancellor there is an element of constructing the pattern after the event. I also commented that it is inevitable that, in human affairs, patterns emerge and develop, even where the participants are only dimly aware of what they are about. In thinking about the events of the years since 1973, as I have been doing during the preparation of this account, I have come to the conclusion that there are indeed certain objectives and principles that have remained firm and unchanged throughout the whole period: that, while the means and the particular targets have in many areas varied in the last few years, those means and targets have formed part of a consistent set of purposes; and that the institution that we have all served has shown a high degree of fundamental consistency throughout the period. I think indeed that we can apply to ourselves the motto of the oldest university in Australia - "*sidere mens eadem mutato*" - though the stars (or in the case of Wollongong the circumstances or prospects) are changed, our fundamental purposes are the same.
190. The two consistent objectives of the institution have continued to be academic development and academic excellence on the one hand and community involvement on the other.
191. The energies of the institution have been directed chiefly at improving its academic quality. Year by year, we have tried to ensure that an increasing percentage of the University's resources go to the directly academic activities of the University - teaching, research and other scholarly activity and to the Library and other service areas. In those respects, our achievements in the last few years have I think been outstanding and unquestionable. It seems to me, however, that one criticism can be made - and with at least some superficial validity: that the University has talked a great deal about "academic excellence" but really has done very little about promoting it or rewarding it. It is because I think there is an element of truth in this comment that I wish to dwell on it at some length.
192. In retrospect, it seems to me that the Wollongong University College when I joined it in November 1973 was an institution that had not developed sufficient academic self-confidence and was marked by significant internal divisions. I recall, as many of my readers will do, the names of particular members of staff who displayed - and continue to display - excellence in all aspects of their work. Nevertheless it seemed to

me that the first objective, if the new University was to achieve academic excellence, was to create an environment in which good scholarly work could flourish more readily. I judged that this meant providing a relatively even spread of resources throughout all the departments, and in this way to offer direct encouragement to all academic staff to prove themselves as "scholars".

193. I am confident that I am right about the depth of the divisions that appeared to exist within the Wollongong University College - reading old files and papers makes this clear. I quote at length from the Minutes of the Academic Assembly adjourned meeting (!) of 8th November, 1974, just under a year after I became Vice-Chancellor Designate, and just under eight weeks before the College became the University of Wollongong, as an example of tension and division:

At this stage the Pro-tem Chairman accepted a motion concerning Senate's performance to date.

In discussing the motion members expressed the opinion that deep divisions exist in the University, and that an attempt should be made to create an atmosphere of goodwill. Several amendments were moved to the motion as members submitted that the Senate could not be said to have completely failed in its task. In discussing the responsibility of senators to inform members of the Assembly of developments the point was made that members of the Assembly have a responsibility to make themselves acquainted with what is happening.

Opposition was expressed to the motion on the grounds that it was a very general one based on conjecture and unfair to those elected to Senate and to those who elected them. It was stated that the motion was also unfair in that it did not explain where Senate has failed nor whether the alleged bad feeling was due to fact or suspicion. It was held that Senate could well be more representative but that the motion was negative. It was suggested that information flow in the University should be improved and members of the Assembly fully acquainted with the reasons for decisions taken.

It was further stated that the problem was not only one of communication but that interdisciplinary effort and activity is needed to overcome the divisions. Subsequently it was

RESOLVED (74/11):

- (a) that, in the light of its apparent failure to convince a considerable number of members of the Academic Assembly that it has acted and will act in their interests, Senate has failed in an essential task;*
- (b) that Senate, the Assembly, each Faculty and each Department must now give the highest priority to the task of bringing together the different sectional interests of the University;*
- (c) that they must proceed to create a climate of good feeling in the University that will ultimately lead to a true academic community;*
- (d) that the Senate must do this initially by convincing the Academic Assembly that the Senate not only places a high value on the interests of the University as a whole, but that it fully understands the special needs of each Faculty and each Department;*
- (e) that independence is meaningless to this University if we remain a deeply divided community.*

194. I have quoted at length because those comments to me signal the main difficulty faced by the new University in 1975. I have no doubt that the way to deal with it was to stress even-handed treatment of all staff and of all departments - and to make it obvious that even-handed treatment was being provided. This approach was expensive of time, and did not overtly do anything to encourage academic excellence.

195. I believe however that in the life of any organisation particular attitudes and approaches need to be adopted at particular times to permit latent purposes to unfold and be realised in due course. This is one such case, in my view.

196. In one sense then, I think it is proper to look on the years 1973 to 1981 as "phase one" in the development of the University's academic activity. The two basic elements have been the establishment of our own academic organisation for conducting teaching, post-graduate training and research, and provision of even-handed support for all academic staff and departments so that all would have an opportunity to give evidence of, and develop, scholarly excellence. We have started now to move away from this

even-handed approach - in 1980, the University provided grants to departments equal to 5% of all external research grants that their staff had attracted which action was designed to ensure that at least the departments did not suffer for the academic excellence of their staff. In 1981, the internal Research Committee has again moved back to the approach of offering special support for excellence rather than spreading its funds evenly to all applicants. I think, therefore, that the University is clearly on the threshold of a new period in which the stress will be on encouraging and rewarding specific academic excellence; if we are serious now about the pursuit of scholarly excellence, we must concentrate our resources on defined areas of activity, inevitably, at a time of shrinking prospects, at the expense of others. "Tensions" there certainly will be; we must use them creatively.

197. In our involvement with the community also, it is possible to identify different phases of appropriate development. When I came to Wollongong, there were already close links with the city and the region - the work of the Founders of 1959/60 had demonstrated that our "local" community was ready to work for the establishment of tertiary education in its midst; local people served on the Wollongong University College Council and other bodies; the Chair in Metallurgy had been funded for the first five years by Australian Iron and Steel Limited; and the examples could be multiplied. During most of the period I have been here, I have seen the University's prime objective in its role of serving the community as building up effective academic activity "within the walls" and of preparing for an increasing amount of community involvement outside them. In order to move from the earlier, less formal community links, we had to give a great deal of thought to contriving a suitable "structure" for promoting University - community interests. The structure that we have evolved now - the Friends of the University Limited and Uniadvice, its operational arm - can, I am confident, meet these needs well.

198. Again, therefore, I think that we can look on our community involvement as having moved through one phase and being about to move into a new phase of extensive and more tightly organised "service" to our region.

199. The University has thus recently recognised formally its responsibility to provide "community service", and to develop a special relationship with its local ("regional") community. These actions were contemplated in my first "planning document", in a reference to the University as a "regional university". The phrase caused - quite properly - some concern; it uncovered yet another of the "creative tensions" to which I

have referred elsewhere.

200. I should, therefore, indicate the nature of the community service and community relationship that I see as appropriate particularly to the University of Wollongong and that marks it as different to many other universities.
201. I have always accepted, as a basic premise, that all Australian universities should see themselves as part of that great international family of like-minded institutions which derive from the medieval universities (formed to provide vocational education in medicine, law, theology, and "humanities"), and the "traditional" universities of 18th and 19th centuries (where knowledge was pursued in the natural sciences and the arts "for its own sake", as well as for vocational purposes). All universities have served their communities (national, state or city) in a variety of ways; and my notion of a "regional university" was simply that some had an additional opportunity, and responsibility, for offering special services to a definable local region. In my view, we are one such - unlike (say) the University of Sydney or the University of New South Wales, we can relate to a "region" with its own characteristic range of peoples, industrial, commercial and civic activities. But, of course, this opportunity produces a new tension, and demands the fine adjustment of the balance between the activities we carry out as members of the worldwide family of universities, and those that give expression to our regional aspirations and service. I believe that it is very important to give the fullest possible weight to the latter; much of the strength of the University of Wollongong will come from its work for our region, and from the support (moral, political and financial) which it will strive to obtain from that region. I welcome therefore the expression of this balance in the recently approved statement of general aims and objectives for the University, in the following terms "... positive encouragement to the development of closer links between the University and the community, through "service" activities".
202. The "federation" of the Wollongong Institute of Education with the University can very properly be seen as part of this new phase. The Advanced Education sector of higher education was established to give particular emphasis to education and training for vocational and applied purposes. The federation will permit the Council of the University of Wollongong to operate new sets of vocational courses, primarily for this region, and without the risk of distorting "University" teaching and research activities; and at the same time those vocational courses can gain strength and assistance from internal links to related university disciplines. I see the federation as offering us, with our colleagues in the Advanced Education sector, important new opportunities for widening "community service" in a completely acceptable fashion.

203. Underpinning the expression of the prime purposes of the University is the whole question of planning. Here again we have moved quite dramatically during the years I have been here. When I came in November 1973, the universities in Australia were in a period of continued prosperity - although there had been a slight decline since 1968 in the average level of funding per student in real terms, the position was still by and large one in which universities were accepted by governments and the community as part of the necessary and inevitable establishment; there was little criticism, and it was essentially on the periphery, of what went on in universities; the universities made submissions at regular three-yearly intervals to the Australian Universities Commission; and that Commission responded in a stately, orderly, and rational way to the universities' requests; and governments, again with limited exceptions, accepted the recommendations of the Commission. All this occurred against an expectation that there would be continued growth in the university system and, particularly at Wollongong, that there would be an increase of a significant kind in the real resources made available to us in the future.

204. We now have a totally different situation. Governments and the public are no longer ready to accept universities and all their works without question: on the contrary, universities are, or at least perceive themselves to be, subject to constant and often ill-informed criticism as to their purposes and their procedures. Students, or potential students, no longer seem to assume that a university education is the best preparation for life and work. The total university system has stabilized in numbers, and is in a process of declining year by year in terms of the real resources available to it. Decisions on university matters are made by governments no longer in the orderly way of the 1960s and earlier 1970s: much of the success of universities now seems to be in their ability to develop and project an "image", to argue for it, to lobby and to use fundamentally "unacademic" techniques and methods for "getting on".

205. Above all, with limited resources and shrinking resources, deliberate and extensive planning becomes even more important. During the period of my service as Vice-Chancellor, I have come to recognise that careful and effective planning is essential. In the early years our planning tended to embrace little more than defining the needs for the "working areas" of the University (such as the academic departments), devising timetables for meeting those needs, and budgeting on an annual basis to continue last year's activities and allocating the additional money to new activities. We now have to think in other terms - I have no doubt that in 1982 there will be no money left over, if we maintain fully our 1981 activities. Therefore we need to think in terms of determining the University's purposes and goals, determining possible targets, and then

determining which of those specific targets have what priority; and at the same time, if we are to have any prospect of achieving them, concentrate almost as much attention on identifying what present activities can be curtailed in order to meet the new targets. I cannot emphasise too strongly the importance of this point; and it reminds us that the pressure of present circumstances places yet another potentially difficult tension on the University. We have no option but to review all our activities, trying to decide (quickly and with general consent) which we should preserve and strengthen, and which we should diminish or eliminate. It is fatal to adopt or maintain the philosophy of "even-handed" treatment in these circumstances. Creative use of this tension will demand planning of a complex kind and is fundamental to the achieving of the University's goals. I therefore have no apology to make for the amount of attention that I have given in this report to the whole question of planning. To revert again to my introduction, planning is needed to resolve "the tension which arises between the legitimate desire to exercise independence and autonomy (whether of individual members of staff or students, or of individual academic units such as our departments) on the one hand, and the desire to produce coordinated and effective action by the institution as a whole, so that its activities have a coherence and institutional purpose related to identifiable institutional goals." As I noted in my introduction, both Bertrand Russell and John Henry Newman have identified the same general problem in all social organisations.

206. It would be foolish to hope that what has happened at Wollongong in the years that I have been here, and to which I have contributed something, will lead to a harmonious university marching through the 1980s towards objectives that are agreed throughout the whole Institution. Universities are just not like that; any good university is always a source of tension and of debate. What I do hope is that the developments of the years 1973 to 1981 have given the University a confidence in itself and an internal strength that will allow it to flourish and develop.

207. It will need the strength! - it, and all of us, for institutions of formal education have for centuries been the object of highly critical and cynical questioning. Thomas Jefferson complained that "they commit their pupils to the theatre of the world, with just enough lack of learning to be alienated from industrious pursuits, and not enough to do service in the realms of science"; Adam Smith defined an English university as "a society in which exploded systems and obsolete prejudices find shelter and protection after they have been hunted out of every corner of the world". It seems that concern about "relevance" and the "social value" of university teaching is not a modern preoccupation - nor is anxiety about the "relevance" of "curiosity

motivated" research: Cicero wrote to his friend Atticus, who was deeply interested in the study of accentuation in Homeric Greek, "... I love a man who takes all learning for his profit; and am delighted to find you so enthusiastic about so rarified a study. Knowledge is your desire, the only fruit of the mind. But pray, what bearing has any of this stuff about grave and acute on the summum bonum?". Perhaps Cicero, too, would have been publicly critical of lists of ARGC-supported research projects!

208. But, despite the long unchanging nature of critical attacks, we must continue to put forward the grounds for accepting that universities are fulfilling a socially important role, casting our arguments in terms appropriate to our times. We must argue that man's continued existence as a species depends on his understanding of himself and the world in which he lives. So, just as all animals maintain a constant surveillance of their world, and in the higher forms try to pass on something of their understanding, and the behavioural patterns which arise from it, to their offspring; so must man express his curiosity in research, learn to apply it in his own behaviour and activity, and in the making of tools which can enhance his physical and mental capacities, and pass on to the next generation what he has learnt.
209. I am suggesting, in brief, that society can, and should, see universities as an essential mechanism for man to examine his world and its changes, and to ensure the preservation and transmission of the understanding gathered in that examination - a mechanism, that is, for the conservation and adaptation of our species.
210. The mechanism operates through research, scholarship and teaching. Research demands the continued exploration of the world of objects within which man acts, primarily through the natural sciences and to some extent in the social sciences. Scholarship provides for the creative analysis, interpretation and exposition of the outcomes of research and of the work of the great creative intellects - those gifted human beings who are able to develop and transmit penetrating insights into the behaviour of human beings and groups of human beings in society. Teaching (yes, I use that old fashion word, for the process by which those less experienced in particular disciplines can learn from those more experienced) permits the transmission from one generation of human beings to another of information and concepts in an orderly fashion, thereby assisting considerably in the personal creative development of patterns of knowledge.
211. The modern university has also accepted an increasing rule in training, by which I mean the specific preparation for a particular professional vocation. In Australia, a common view is that only those professions whose conduct requires a considerable

grasp of basic knowledge and general information ("the learned professions") should be dealt with in universities. Thus it is that we both educate and "train" lawyers, doctors, engineers, and the like. There is, however, no commonly accepted view on which professions should be prepared for in a University; thus, despite the fact that medicine and theology were always vocational courses taught in the first universities, there is still argument about whether they should be now.

212. It is clear that other kinds of training are required for some people who work in, or alongside, the professions, however they are defined; and one of the nice problems for universities in the next decade or so will be to establish suitable patterns of training activity for themselves alongside or with other institutions of higher education. For my own part, I believe that it is simply not possible to make rigid divisions on grounds of high principle; the essence of the university idea is that, within a single body of scholars, research, scholarship, and the education of a new generation of graduates should be conducted. Where these elements are present, and are combined to provide effective scholarly activity, there is a university - whatever it is called, or however it is structured. The "idea of a university" can be expressed in many ways - including some which are administratively or politically inconvenient, or unusual!

213. It is for these socially important - indeed socially essential - purposes that universities exist. They are necessarily "elite" organisations; because there are special talents required for participation in their work, and special enthusiasms and convictions required of staff and students if they are to be in any realistic sense members of a university. Universities must not hesitate to press the case for public support for their activities; but, equally, they must not shrink from taking action themselves to ensure that they come closer to a full expression of the high ideals of academic life - expressed in innovative and original research, profound scholarship and effective and stimulating teaching. Only then can we ask society to accept Newman's conception of a university, which (despite all the changes of the times) is still, I believe, the only finally defensible position for us to adopt. He proposes that "a university training is the great ordinary means to a great but ordinary end; it aims at raising the intellectual tone of society, at cultivating the public mind, ... it teaches (man) to see things as they are, to go right to the point, to disentangle a skein of thought, to detect what is sophisticated, and to discard what is irrelevant." The "practical end" of a university course is "that of training good members of society. Its art is the art of social life, and its end is fitness for the world."

TABLE 1(A): STUDENT LOAD: OTHER THAN HIGHER DEGREE (Brackets show percentage of University, in this category)

Department	Date Established *	Prof. on Duty	1973	1974	1975	1976	1977	1978	1979	1980	1981
<u>Faculty of Engineering</u>											
Civil	1969	23. 2.62	45 (4.0)	58 (4.8)	79 (5.2)	79 (4.9)	93 (5.2)	89.1 (4.5)	88.5 (4.6)	88.9 (4.8)	96.2 (4.9)
Electrical	pre-68	18. 5.70	29 (2.6)	49 (4.1)	44 (2.9)	64 (4.0)	58 (3.3)	58 (2.9)	56.5 (3.0)	56.5 (3.0)	62.5 (3.2)
Mechanical	pre-68	7.10.75	62 (5.5)	44 (3.7)	54 (3.6)	79 (4.9)	64 (3.6)	112.3 (5.7)	76.2 (4.0)	83 (4.5)	94.2 (4.8)
Metallurgy	pre-68	8. 9.69	41 (3.7)	50 (4.2)	46 (3.0)	33 (2.0)	28 (1.6)	34 (1.7)	29 (1.5)	29 (1.6)	31.8 (1.6)
TOTAL			177(15.8)	201(16.7)	223(14.7)	255(15.7)	243(13.7)	293.4(14.8)	250.2(13.8)	257.4(13.1)	284.7(14.5)
<u>Faculty of Humanities</u>											
English	1968	15. 5.68	55 (4.9)	53 (4.4)	82 (5.4)	87 (5.4)	108 (6.1)	122 (6.2)	115 (6.0)	115 (6.2)	111.1 (5.7)
Europ.											
Lang.	1975	28.11.74	-	-	7 (0.5)	15 (0.9)	41 (2.3)	51 (2.6)	63 (3.3)	57 (3.1)	54.1 (2.8)
History	pre-68	16.12.66	72 (6.4)	73 (6.1)	96 (6.3)	117 (7.2)	118 (6.7)	123 (6.2)	107 (5.6)	79 (4.2)	63.8 (3.3)
Hist. & Phil. of											
Science	1968	1. 7.79	48 (4.3)	52 (4.3)	56 (3.7)	56 (3.5)	42 (2.4)	43 (2.2)	37 (1.9)	37 (2.0)	41.0 (2.1)
Philosophy	1975	1.10.75	-	-	-	19 (1.2)	33 (1.9)	73 (3.7)	53 (2.8)	56 (3.0)	49.3 (2.5)
TOTAL			175(15.6)	178(14.8)	241(15.8)	294(18.1)	342(19.3)	412 (20.8)	375 (18.7)	344 (18.5)	319.3(16.3)
<u>Faculty of Mathematics</u>											
Comp.Sci.	1979	1. 5.75	-	-	-	-	-	-	54 (2.8)	73 (3.9)	84.9 (4.3)
Maths.	pre-68	1.10.64	198(17.7)	190(15.8)	196(12.9)	193(11.9)	214(12.1)	211.5(10.7)	175.7 (9.2)	185.2 (9.9)	198.4(10.1)
TOTAL			198(17.7)	190(15.8)	196(12.9)	193(11.9)	214(12.1)	211.5(10.7)	220.7(12.1)	258.2(13.9)	283.3(14.5)

TABLE 1(A): STUDENT LOAD: OTHER THAN HIGHER DEGREE (Brackets show percentage of University, in this category)

Department	Date Estab- * Prof. on Duty	1973	1974	1975	1976	1977	1978	1979	1980	1981
Faculty of Science										
Biology	1975 11.11.74	21 (1.9)	18 (1.5)	24 (1.6)	29 (1.8)	38 (2.1)	54 (2.7)	63 (3.3)	49 (2.6)	49.8 (2.5)
Chemistry	pre-68 14. 9.70	84 (7.5)	72 (6.0)	66 (4.3)	65 (4.0)	70 (3.9)	82.7 (4.2)	80 (4.2)	68 (3.6)	79.3 (4.0)
Geology	1969 22. 1.73	29 (2.6)	25 (2.1)	28 (1.8)	30 (1.9)	32 (1.8)	34 (1.7)	29 (1.5)	25.7 (1.4)	36.9 (1.9)
Physics	pre-68 1. 7.74	52 (4.6)	53 (4.4)	61 (4.0)	66 (4.1)	58 (3.3)	60 (3.0)	57 (3.0)	54 (2.9)	65 (3.3)
TOTAL		186(16.6)	168(14.0)	189(12.4)	190(11.7)	198(11.2)	230.7(11.7)	229 (12.0)	196.7(10.6)	231.4(11.8)
Faculty of Social Sciences										
Accty.	1968 15. 5.73	77 (6.9)	99 (8.2)	149 (9.8)	165(10.2)	189(10.7)	201 (10.2)	199 (10.4)	215.5(11.6)	250.6(12.8)
Economics	1968 21. 1.69	98 (8.8)	112 (9.3)	170(11.2)	153 (9.4)	149 (8.4)	148 (7.5)	140.7 (7.4)	143 (7.7)	158.8 (8.1)
Education	1968 4. 8.75	64 (5.7)	63 (5.2)	101 (6.6)	89 (5.5)	99 (5.6)	113 (5.7)	110 (5.8)	112 (6.0)	111.1 (5.7)
Geography	1968 12.12.73	52 (4.6)	67 (5.6)	84 (5.5)	95 (5.9)	73 (4.1)	81.5 (4.1)	62.5 (3.3)	56 (3.0)	44.8 (2.3)
Psychology	1968 3. 4.73	57 (5.1)	88 (7.3)	92 (6.0)	95 (5.9)	122 (6.9)	147 (7.4)	177 (9.3)	167 (9.0)	174.1 (8.9)
Sociology	1975 19. 8.74	-	-	46 (3.0)	67 (4.1)	103 (5.8)	114.7 (5.8)	87 (4.6)	74 (4.0)	60.3 (3.1)
TOTAL		348(31.1)	428(35.6)	642(42.2)	664(41.0)	735(41.4)	805.2(40.7)	780.2(41.0)	767.5(41.2)	799.7(40.8)
*First Year Department is listed separately in University or College Handbook.										
General Studies		36 (3.2)	36 (3.0)	30 (2.0)	30 (1.9)	42 (2.4)	27 (1.4)	45 (2.4)	40 (2.1)	40.2 (2.1)
UNIVERSITY TOTAL		1120	1201	1521	1626	1774	1979.8	1905	1863.9	1958.5

TABLE 1(B): STUDENT LOAD: HIGHER DEGREE (Brackets show percentage of University Higher Degree) * Shared between Civil & Mech.)

Department	1973	1974	1975	1976	1977	1978	1979	1980	1981
<u>Faculty of Engineering</u>									
Civil	12* (9.4)	* (10.3)	9 (4.6)	10 (4.9)	13 (6.8)	19.9 (9.2)	39.5 (15.5)	46.1 (14.7)	66.8 (18.3)
Electrical	12 (9.4)	11 (7.6)	14 (7.1)	11 (5.3)	15 (7.9)	13 (6.0)	23.5 (9.2)	32.5 (10.3)	27.3 (7.5)
Mechanical	* (9.4)	15* (10.3)	19 (9.7)	22 (10.7)	18 (9.5)	14.7 (6.8)	11.8 (4.6)	23.0 (7.3)	22.6 (6.2)
Metallurgy	15 (11.7)	11 (7.6)	8 (4.1)	9 (4.4)	6 (3.2)	5 (2.3)	8 (3.1)	15 (4.8)	12.3 (3.4)
TOTAL	39 (30.5)	37 (25.5)	50 (25.5)	52 (25.2)	52 (27.4)	52.6 (24.4)	82.8 (32.5)	116.6 (37.1)	129 (35.4)
<u>Faculty of Humanities</u>									
English	1 (0.8)	3 (2.1)	3 (1.5)	7 (3.4)	5 (2.6)	6 (2.8)	5 (2.0)	7 (2.2)	6 (1.6)
European Languages	-	-	-	-	-	-	2 (0.8)	2 (0.6)	2 (0.5)
History	9 (7.0)	8 (5.5)	13 (6.6)	10 (4.9)	8 (4.2)	12 (5.6)	13 (5.1)	14 (4.5)	21 (5.8)
History & Philosophy of Science	-	-	-	-	-	-	-	13 (4.1)	22.5 (6.2)
Philosophy	-	-	-	2 (1.0)	4 (2.1)	4 (1.9)	6 (2.4)	6 (1.9)	6 (1.6)
TOTAL	10 (7.8)	11 (7.6)	16 (8.2)	19 (9.2)	17 (8.9)	22 (10.2)	26 (10.2)	42 (13.4)	57.5 (15.8)
<u>Faculty of Mathematics</u>									
Computing Science	-	-	-	-	-	-	1 (0.4)	2 (0.6)	4 (1.1)
Mathematics	19 (14.8)	20 (13.8)	30 (15.3)	27 (13.1)	23 (12.1)	23.5 (10.9)	24.3 (9.5)	17.8 (5.7)	17 (4.7)
TOTAL	19 (14.8)	20 (13.8)	30 (15.3)	27 (13.1)	23 (12.1)	23.5 (10.9)	25.3 (9.9)	19.8 (6.3)	21 (5.8)
<u>FACULTY OF SCIENCE</u>									
Biology	1 (0.8)	1 (0.7)	3 (1.5)	2 (1.0)	1 (0.5)	5 (2.3)	6 (2.4)	6 (1.9)	10 (2.7)
Chemistry	25 (19.5)	26 (17.9)	35 (17.9)	37 (18.0)	29 (15.3)	33.3 (15.5)	25 (9.8)	34 (10.8)	22 (6.0)
Geology	7 (5.5)	15 (10.3)	21 (10.7)	22 (10.7)	21 (11.1)	24 (11.2)	19 (7.5)	21.3 (6.8)	24 (6.6)
Physics	11 (8.6)	10 (6.9)	12 (6.1)	12 (5.8)	9 (4.7)	14 (6.5)	14 (5.5)	10 (3.2)	13 (3.6)
TOTAL	44 (34.4)	52 (35.9)	71 (36.2)	73 (35.4)	60 (31.6)	76.3 (35.5)	64 (25.1)	71.3 (22.7)	69 (18.9)

TABLE 1(B): STUDENT LOAD: HIGHER DEGREE (Brackets show percentage of University Higher Degree) * Shared between Civil & Mech.)

Department	1973	1974	1975	1976	1977	1978	1979	1980	1981
<u>Faculty of Social Sciences</u>									
Accountancy	-	-	-	-	-	1	1	0.5	1
Economics	14 (10.9)	17 (11.7)	11 (5.6)	12 (5.8)	11 (5.8)	15 (7.0)	15.3 (6.0)	15 (4.8)	15.1 (4.1)
Education	-	-	6 (3.1)	11 (5.3)	17 (8.9)	13 (6.0)	13 (5.1)	20 (6.4)	29.3 (8.0)
Geography	1 (0.8)	3 (2.1)	3 (1.5)	2 (1.0)	1 (0.5)	4.5 (2.1)	12.5 (4.9)	9 (2.9)	10 (2.7)
Psychology	1 (0.8)	5 (3.4)	7 (3.6)	6 (2.9)	4 (2.1)	3 (1.4)	6 (2.4)	12 (3.8)	25.7 (7.1)
Sociology	-	-	2 (1.0)	4 (1.9)	5 (2.6)	4.3 (2.0)	9 (3.5)	8 (2.5)	6.9 (1.9)
TOTAL	16 (12.5)	25 (17.2)	29 (14.8)	35 (17.0)	38 (20.0)	40.8(19.0)	52.8(20.7)	64.5(20.5)	88 (24.1)
General Studies	-	-	-	-	-	-	-	-	-
UNIVERSITY TOTAL	128	145	196	206	190	215.2	255	314.1	364.5

TABLE 1(C): STUDENT LOAD: TOTAL (Brackets show percentage of University Total)

Department	1973	1974	1975	1976	1977	1978	1979	1980	1981
<u>Faculty of Engineering</u>									
Civil	57 (4.6)	58 (4.3)	88 (5.1)	89 (4.9)	106 (5.4)	109 (5.0)	128 (5.9)	135 (6.2)	163 (7.0)
Electrical	41 (3.3)	60 (4.5)	58 (3.4)	75 (4.1)	73 (3.7)	71 (3.2)	80 (3.7)	89 (4.1)	90 (3.9)
Mechanical	62 (5.0)	59 (4.4)	73 (4.3)	101 (5.5)	82 (4.2)	127 (5.8)	88 (4.1)	106 (4.9)	117 (5.0)
Metallurgy	56 (4.5)	61 (4.5)	54 (3.1)	42 (2.3)	34 (1.7)	39 (1.8)	37 (1.7)	44 (2.0)	44 (1.9)
TOTAL	216 (17.3)	238 (17.7)	273 (15.9)	307 (16.8)	295 (15.0)	346 (15.8)	333 (15.4)	374 (17.2)	414 (17.8)
<u>Faculty of Humanities</u>									
English	56 (4.5)	56 (4.2)	85 (5.0)	94 (5.1)	113 (5.7)	128 (5.8)	120 (5.6)	122 (5.6)	117 (5.0)
European Languages	-	-	7 (0.4)	15 (0.8)	41 (2.1)	51 (2.3)	65 (3.0)	59 (2.7)	56 (2.4)
History	81 (6.5)	81 (6.0)	109 (6.3)	127 (6.9)	126 (6.4)	135 (6.2)	120 (5.6)	93 (4.3)	85 (3.6)
History & Philosophy of Science	48 (3.8)	52 (3.9)	56 (3.3)	56 (3.1)	42 (2.1)	43 (2.0)	37 (1.7)	50 (2.3)	64 (2.7)
Philosophy	-	-	-	21 (1.1)	37 (1.9)	77 (3.5)	59 (2.7)	62 (2.8)	55 (2.4)
TOTAL	185 (14.8)	189 (14.0)	257 (15.0)	313 (17.1)	359 (18.3)	434 (19.8)	401 (18.6)	386 (17.7)	377 (16.2)
<u>Faculty of Mathematics</u>									
Computing Science	-	-	-	-	-	-	55 (2.5)	75 (3.4)	89 (3.8)
Mathematics	217 (17.4)	210 (15.6)	226 (13.2)	220 (12.0)	237 (12.1)	235 (10.7)	200 (9.3)	203 (9.3)	215 (9.3)
TOTAL	217 (17.4)	210 (15.6)	226 (13.2)	220 (12.0)	237 (12.1)	235 (10.7)	255 (11.8)	278 (12.8)	304 (13.1)
<u>Faculty of Science</u>									
Biology	22 (1.8)	19 (1.4)	27 (1.6)	31 (1.7)	39 (2.0)	59 (2.7)	69 (3.2)	55 (2.5)	60 (2.6)
Chemistry	109 (8.7)	98 (7.3)	101 (5.9)	102 (5.6)	99 (5.0)	116 (5.3)	105 (4.9)	102 (4.7)	101 (4.4)
Geology	36 (2.9)	40 (3.0)	49 (2.9)	52 (2.8)	53 (2.7)	58 (2.6)	48 (2.2)	47 (2.2)	61 (2.6)
Physics	63 (5.0)	63 (4.7)	83 (4.8)	78 (4.3)	67 (3.4)	74 (3.4)	71 (3.3)	64 (2.9)	78 (3.4)
TOTAL	230 (18.4)	220 (16.3)	260 (15.1)	263 (14.4)	258 (13.1)	307 (14.0)	293 (13.6)	268 (12.3)	300 (12.9)

TABLE 1(C): STUDENT LOAD: TOTAL (Brackets show percentage of University Total)

Department	1973	1974	1975	1976	1977	1978	1979	1980	1981
Faculty of Social Sciences									
Accountancy	77 (6.2)	99 (7.4)	149 (8.7)	165 (9.0)	189 (9.6)	202 (9.2)	200 (9.3)	216 (9.9)	252 (10.8)
Economics	112 (9.0)	128 (9.5)	181 (10.5)	165 (9.0)	160 (8.1)	163 (7.4)	156 (7.2)	158 (7.3)	174 (7.5)
Education	64 (5.1)	63 (4.7)	107 (6.2)	100 (5.5)	116 (5.9)	126 (5.7)	123 (5.7)	132 (6.1)	140 (6.0)
Geography	53 (4.2)	70 (5.2)	87 (5.1)	97 (5.3)	74 (3.8)	86 (3.9)	75 (3.5)	65 (3.0)	55 (2.4)
Psychology	58 (4.6)	93 (6.9)	99 (5.8)	101 (5.5)	126 (6.4)	150 (6.8)	183 (8.5)	179 (8.2)	200 (8.6)
Sociology	-	-	48 (2.8)	71 (3.9)	108 (5.5)	119 (5.4)	96 (4.4)	82 (3.8)	67 (2.9)
TOTAL	364 (29.2)	453 (33.7)	671 (39.1)	699 (38.2)	773 (39.4)	846 (38.5)	833 (38.6)	832 (38.2)	888 (38.2)
General Studies	36 (2.9)	36 (2.7)	30 (1.7)	30 (1.6)	42 (2.1)	27 (1.2)	45 (2.1)	40 (1.8)	40 (1.7)
UNIVERSITY TOTAL	1248	1346	1717	1832	1964	2195	2160	2178	2323

THE UNIVERSITY OF WOLLONGONG
RESEARCH FUNDS 1973 - 1981 (\$)

	1973	1974	1975	1976	1977	1978	1979	1980	1981 (Alloc.)
Special Research	17,400	13,600	56,800	48,600	82,600	66,000	71,000	73,000	85,000
From Recurrent Funds	-	6,500	-	-	31,000	45,000	64,000	180,000	180,000
A.R.G.C.	74,000	40,000	90,900	60,500	40,000	54,000	120,000	103,000	213,800
N.H. & M.R.C. & E.R.D.C.	200	10,800	42,400	39,300	26,600	22,400	28,000	39,000	105,839
Other	31,900	55,600	48,500	56,300	113,200	173,300	240,000	332,000	...
TOTAL	91,600	126,700	238,600	204,700	293,400	361,400	523,000	727,000	...
At 1974-75 prices			238,600	178,100	228,900	263,800	350,410	487,090	
Funds/Staff *									
- at current prices			2,189	1,780	2,257	2,545	3,487	4,516	
- at 1974-75 prices			2,189	1,549	1,760	1,858	2,336	3,025	

* Lecturer and above

TABLE 3

THE UNIVERSITY OF WOLLONGONG
RECURRENT BUDGET 1974 - 1981

	1974	1975	1976	1977	1978	1979	1980	1981
Recurrent grant (actual) (\$)	4,125	5,526	7,114	8,781	9,915	11,686	13,212	14,861
% of grant/budget allocated to:								
(i) academic activities	55.1	57.1	58.3	55.6	57.7	55.3	54.9	56.2
(ii) library	9.7	9.0	8.7	11.4	9.9	12.6	11.6	11.6
(iii) other academic services	1.3	2.3	2.6	3.1	3.6	4.0	3.7	3.9
(iv) student services	1.4	1.3	1.6	1.7	1.9	2.1	1.5	1.5
(v) central administration	13.8	14.2	12.5	11.8	10.6	11.0	9.9	20.6
(vi) buildings and grounds	13.6	12.4	11.9	11.4	11.1	9.8	10.1	
(vii) other services/other	5.1	3.8	4.5	5.0	5.2	5.2	8.3	6.3
(viii) total	100.0	100.1	100.1	100.0	100.0	100.0	100.0	100.1

TABLE 4

THE UNIVERSITY OF WOLLONGONG
SPACE 1973 - 1981

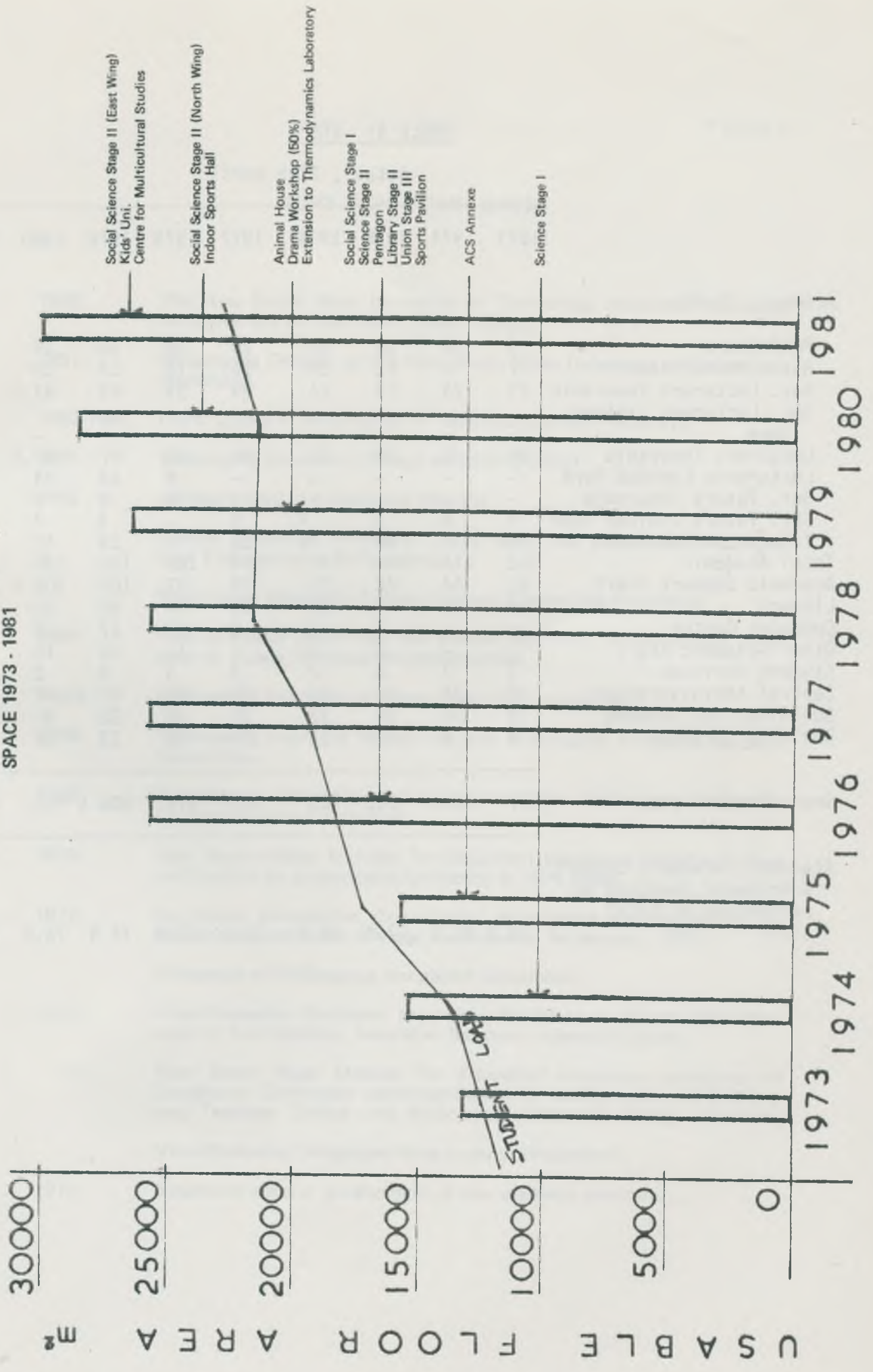


TABLE 5: STAFF

Actual, 30th April

	1973	1974	1975	1976	1977	1978	1979	1980	1981 (prelim)
Academic Staff:									
Professors	9	12	16	20	20	20	18	19	18
Assoc.Profs/Readers	7	8	11	14	16	16	17	19	21
Snr. Lecturers Tenurable	27	25	23	24	29	39	43	47.5	49.5
Snr. Lecturers Limited Term	-	-	-	-	-	-	-	-	1
Lecturers Tenurable	36	45	59	57	65	59	57	51.5	50.5
Lectureres Limited Term	-	-	-	-	-	8	15	24	24
Snr. Tutors Tenurable	-	-	-	-	-	9	9	9	7
Snr. Tutors Limited Term	4	4	3	4	9	-	3	7	8
Tutors Limited Term	19	22	24	21	15	17	19	12	14.5
Total Academic	102	116	136	142	154	168	181	189	191.5
Academic Support Staff	51	64	78	75	79	92	102	109.5	112
Library	24	32	42	38	50	54	62	59	60
Computer Centre	-	-	7	7	8	13	17	17	19
Other Academic Staff	-	-	2	2	7	12	15	14	19.4
Student Services	1	3	3	2	3	3	3	2	2
Central Administration	50	74	66	67	63	67	67.5	67	70.5
Buildings and Grounds	23	29	39	37	38	39	36	35	35
Building Services	6	8	20	13	24	28	23	26	28
Grand Total	257	326	393	383	426	476	506.5	518	547.4
Academic, Academic Support & Academic Services as percentage of total staff									
	68.5	65.0	67.4	68.9	70.0	71.2	74.4	75.0	73.4

TABLE 6

SOME SIGNIFICANT DATES

1948	The New South Wales University of Technology established (renamed the University of New South Wales, 1958).
1951	Wollongong Division of the New South Wales University of Technology established.
1959-1960	Public appeal in Wollongong for establishment of a University.
1961	Wollongong University College established (May).
1962	College moved to present site (March). Warden appointed (Professor C.A.M. Gray, also appointed Professor of Civil Engineering at Wollongong). Wollongong University College Advisory Committee established.
1964	First professor other than the Warden appointed to Wollongong (Professor A. Keane, Professor of Mathematics).
1965	Wollongong Academic Advisory Committee established.
1968	Wollongong Board of Studies replaces Wollongong Academic Advisory Committee.
1969	Wollongong University College replaces the Wollongong University College Advisory Committee.
1970	New South Wales Minister for Education announces that the College will become an autonomous University in 1975 (May).
1972	Australian Universities Commission recommends separate grants for Wollongong University College, commencing 1st January, 1973. University of Wollongong Act passed (December).
1973	Vice-Chancellor Designate appointed (Professor L. Michael Birt, Professor of Biochemistry, Australian National University) (June). New South Wales Minister for Education announces acceptance of Dougherty Committee recommendation for amalgamation of Wollongong Teachers College and Wollongong University College (October). Vice-Chancellor Designates takes up duty (November).
1974	Establishment and development of new academic structure.

1975	University of Wollongong Act in force. Establishment of the University of Wollongong. First meeting of first Council (January 1st). First meeting of elected Senate (April). First meeting of "Chancellor's" Council (August). Mr. Justice R.M. Hope appointed Chancellor (August).
1977	Council approves University Development Plan (February). Reconstituted Senate meets (May). University of Wollongong Conditions of Academic Appointment approved (June).
1978	Vice-Chancellor's Planning Committee established.
1979	First full-time Deputy Vice-Chancellor (Professor A.M. Clarke).
1980	Illawarra Regional Information Service launched officially (October). Friends of the University of Wollongong Limited incorporated (December)
1981	New administrative structure.