



THE AUSTRALIAN NATIONAL UNIVERSITY

THE GRADUATE SCHOOL

**A Report on the Graduate School
(March 1993)**

R.H. Spear

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1. INTRODUCTION

The Council of the ANU resolved in May 1988 to establish a Graduate School. On 11 May 1990 I was appointed as the first Dean of the Graduate School, for a period of 3 years in the first instance. Although from time to time I have talked about the Graduate School to various groups within the University, this is the first general report. It describes the processes leading to the establishment of the Graduate School, reports on the School's development and current operation, including centrally based initiatives and the Graduate Program system, and briefly considers some future possibilities for graduate education at the ANU. Many parts of this report are inevitably concerned with my own involvement and perspectives. Such parts are written in the first person; to do otherwise would be highly artificial. Unless indicated otherwise, all ANU statistics are extracted from official publications.

2. CONCEPTION AND ESTABLISHMENT

It can be fairly claimed that the ANU Graduate School is unique. It is not like the standard North American graduate school. Nor, for that matter, is it likely that graduate schools which may subsequently be developed at other Australian universities will closely resemble the ANU model. The reason for this uniqueness lies in the unique character of the ANU itself, comprising, as it does, the Institute of Advanced Studies and The Faculties.

The Institute has its origins in the four Research Schools set up by the Australian government in 1946 to form the then ANU. The Faculties has grown out of the old Canberra University College, which operated in association with the University of Melbourne. The Faculties and the Institute were married by the Federal government in 1960 to form the present ANU, with separate Academic Boards but a single Council. The Graduate School spans both parts of the University.

Some people believe that the Graduate School was set up as a political ploy in the battle to avoid amalgamation with the University of Canberra. Probably there is an element of truth in this, but the idea of a Graduate School at the ANU predates by more than a decade the amalgamation battle of 1989.

In 1977 the Vice-Chancellor, Tony Low, commissioned Professor Wang Gungwu (now Vice-Chancellor of the University of Hong Kong) to set up a working party to review graduate education at the ANU. Among other things, the Wang Gungwu report recommended that "graduate education be organised around University-wide graduate fields independent of traditional school, faculty and department structures" and that "each student be enrolled in a graduate field but continue to be a member of the department to which his or her supervisor belongs".

Wang Gungwu saw the following as some of the academic benefits accruing from this framework:

- "(i) With staff from several departments contributing to a single graduate field, the University would have, instead of two or three competing departments, one strong unit more likely to attract the best applicants from Australia and overseas.
- (ii) As the graduate fields are likely to have larger pools of academic staff, students would be able to select the most appropriate supervisors and advisers available in the University.
- (iii) The pooling of staff and students within graduate fields would create wider opportunities in the formulation of integrated coursework programs, graduate seminar series, workshop sessions, etc.

- (iv) Students would have greater opportunity for interaction with their peers and with a wider range of academic staff having interests in the same research field.
- (v) The flexibility which the new framework allows would make it easier to adjust to new and changing academic and community needs during a period when further expansion of the University is likely to be at best gradual.

The Working Party believes that these academic benefits will greatly strengthen the quality of graduate education within the University, and that this will lead to improvements both in teaching and research. The new framework also emphasises the concept of a University as a community of scholars, with the implication that the interaction between staff is as valuable as the interaction between students and staff."

The Wang Gungwu committee made many other recommendations, some of which have since been adopted by the University, e.g. that each Ph.D. student have a supervisory committee (R14). However, the report as a whole was not adopted, and it appears that one of the main sticking points was R6, that all ANU graduate scholarships be pooled with Commonwealth Awards and competed for on a University-wide basis.

The idea of a graduate school at the ANU was revived by a committee chaired by Professor D. Aitkin in its 1985 report on the management of research resources in the IAS (2264/1985), and in February 1987 the then Vice-Chancellor, Professor Peter Karmel, established a working group "to examine the advantages and disadvantages of the introduction of university-wide graduate school(s) having regard to the need to make the best use of the University's resources". In September 1987 a paper prepared by the working group, entitled "A Graduate School at the ANU" (2625/1987) was circulated for discussion throughout the University. In response to comments received, Council appointed (in December 1987) an expanded working group "to develop a detailed proposal for a graduate school...". After further consultation with Research Schools and Faculties, the expanded working group prepared a report (764/1988) which proposed the establishment of a Graduate School. The report was given general support by the Academic Boards (1063/1988 and 767/1988), albeit expressing significant reservations about some aspects of the proposed structure and noting that a great deal of detail remained to be worked out.

In May 1988, Council, on the basis of this report, resolved to establish a Graduate School. The Wang Gungwu concept that graduate students be enrolled in University-wide discipline-based Graduate Programs was central to the proposed organisation, with each Program having a Convenor who would be responsible, inter alia, for monitoring the academic progress of students, and for developing and coordinating coursework and seminar requirements. There was no suggestion that Schools and Faculties should forgo the right to award their own scholarships.

In June 1988, the Vice-Chancellor (Professor Laurie Nichol) appointed Professor Ian Ross, (Deputy Vice-Chancellor) to act as coordinator in developing the detail of the School and to assist with the definition of Graduate Programs. Professor Eric Bachelard, who had chaired the working group, agreed to work closely with Professor Ross in the developmental stage.

Subsequently there was something of a hiatus, largely because the University was preoccupied with the first merger battle, and it was not until December 1989 that Council decided to appoint a Dean of the Graduate School. On 11 May 1990 I was appointed to the position, initially on a fractional 50 per cent basis. My substantive position was Senior Fellow in the Department of Nuclear Physics. The following extract from my letter of appointment defined the task:

The University recognises that the role and responsibilities of the Dean will evolve over time. However, the key elements of your duties will be:

- (i) in consultation with the advisory committee for the School and the Graduate Degrees Committee, to develop the School and to take initiatives in relation to the development of graduate education at the University;
- (ii) to be chairman and executive officer of the Graduate Degrees Committee;
- (iii) to keep in close contact with convenors of graduate programs and to encourage the development of the programs;

(iv) to coordinate the operation of the Graduate School both within Australia and overseas.

- (v) to liaise as appropriate with prescribed authorities, directors and deans and heads of departments, divisions, centres and units on graduate education matters;
- (vi) to be responsible for financial and budgetary matters in relation to the Graduate School.

In the meantime, proposals for 32 Graduate Programs had been approved by a "vetting committee" chaired by Professor Ross, and the 32 Programs had been granted provisional accreditation for 2 years by the Graduate Degrees Committee. Convenors had been tentatively identified for most of the Programs. The situation at the end of 1989 is well described in Professor Ross's paper 2953/1989

3. OBJECTIVES, OPERATING PROCEDURES AND ADMINISTRATIVE ARRANGEMENTS

Although the papers of Professors Bachelard and Ross (764/1988 and 2953/1989) had formulated much of the general structure of the Graduate School, there was at the time of my appointment a need to work out essential details, e.g. the roles and relationships of convenors, supervisors and heads of departments, the identification of prescribed authorities, the allocation of scholarships and resources for graduate education, the desirability or otherwise of a Board of Studies for each Program (and the mode of its appointment), and the extent to which the various elements of the School should be formalised in legislation. In the event, this process of elucidation proved to be extremely difficult and uncomfortable, for it threatened, or was perceived to threaten, long established practices and power-bases. In other words, it forced members of the University to confront the nitty-gritty of what the Graduate School was all about.

Since I had not been personally involved in any of the discussions leading to the formation of the Graduate School, my first undertaking as Dean was to talk at length with as many of the key players as possible in order to obtain a comprehensive sample of ideas and views as to how the Graduate School should develop. This included discussions with graduate student representatives and putative convenors, and involved about 55 interviews, each of about an hour's duration, during the first couple of months after my appointment.

During July and August of 1990, I prepared, in consultation with Mr Edward Helgeby and the Graduate School Advisory Committee (see section 3.3.2 below), a paper entitled "Mechanics of the Graduate School". This paper included the first definition of the objectives of the Graduate School. It was modified following meetings with Heads of Research Schools (4 September 1990) and Deans of Faculties (10 September 1990), then distributed for discussion throughout the University, and finally approved, again after significant modification, by the Board of the Faculties (26 October 1990) and the Board of the Institute (15 November 1990). The Graduate School office was established on the top floor of the Chancelry Annex in July 1990.

In December 1990 the Vice-Chancellor formally appointed, for terms of two years, Convenors for each of the 32 Graduate Programs. It was encouraging to find when the dust had settled that 16 Convenors came from the Institute and 16 from the Faculties; this had not been deliberately engineered!

Formal enrolment of students in Graduate School Programs commenced in January 1991.

3.1 Objectives

The objectives of the Graduate School can be loosely defined as follows:

- (a) To enhance the quality of graduate education at the ANU;
- (b) To increase the number of graduate students at the ANU;
- (c) To improve the "pastoral care" of graduate students;
- (d) To co-ordinate graduate education across the University;
- (e) In all, to make the ANU a more attractive place for graduate study.

Obviously these objectives are not independent and they overlap to some extent. They may be achieved through centrally-based initiatives by the Graduate School and through the operation of the Graduate Program System, with the Graduate Degrees Committee exercising general regulation of

3.2 Operating Procedures

The "Mechanics paper" (1947a/1990) includes an introduction, a statement of objectives, and a statement of principles of operation. Following some general considerations, it then describes the role of a Program Convenor; states that each Program will have a Board of Studies, and outlines its functions; considers the involvement of Heads of Department, Supervisors and Course-work Coordinators; describes the procedures involved in determining scholarship awards within the Graduate School framework; and outlines procedures for the introduction of new courses and the establishment of new Graduate Programs.

In some ways the most important part of the paper is the section on operating principles. These principles were not new but were present in the documentation before Council and the Boards when they decided to establish a Graduate School. The rest of the paper is an attempt to work out a practicable mode of operation based upon these principles and upon perceived realities across the University.

After consideration by Heads of Schools and Deans, the paper was widely and intensively discussed around the University. It generated a great deal of controversy, and stimulated some quite vociferous contributions from Faculties and Faculty Boards to the Academic Boards. Indeed, it had the exceedingly rare distinction of provoking an unofficial joint meeting of Institute Faculty Boards, attended, I understand, by no less than 8 Directors. At this time, i.e. for most of the second half of 1990, I felt considerable empathy with the Aunt Sally at the village fair!

Most of the controversy centred around principle 3.3, i.e. that there will be a single Prescribed Authority for each Program. Given principle 3.2, i.e. that all graduate students will be enrolled in one Program, this led as an inevitable consequence to principle 3.7, i.e. that for Programs containing students from more than one part of the University (as most Programs do), the line of academic responsibility for some students will be different from the line of resource responsibility. Principle 3.3 had been inherent in papers previously before the Boards and Council, e.g. 764/1988 and 2953/1989. There had been suggestions at various times that Convenors should also act as Prescribed Authorities, or that the Dean of the Graduate School should be the Prescribed Authority for all programs. The Mechanics Paper adopted the proposal of paper 2953/1989 that for each Program a Prescribed Authority be appointed from among the Directors and Deans.

In the event, both Academic Boards resolved "to defer any change to current prescribed authorities", but "to adopt the remaining provisions of paper 1947a/1990". In consequence most Program Convenors have had to deal with more than one Prescribed Authority. This has increased administrative complexity but seems to have worked reasonably well. Nevertheless, the multiplicity of academic responsibilities within a single program definitely weakens the integrity of the Program, and the Prescribed Authority question should certainly be considered in any overall review of Graduate School development.

3.3 Administrative Arrangements

3.3.1 Dean

The Registrar's circular of 16 January 1990 calling for expressions of interest in the position of Dean of the Graduate School indicated that the duties of the position were expected to occupy at least one-half of the Dean's time, and possibly more in the first year. Consequently, my appointment in May 1990 was on a 50% basis, but with the understanding that the proportion of time devoted to the duties of the office might be subject to review should circumstances warrant a change. I took the attitude that I should do everything I felt was necessary to establish and develop the Graduate School according to the duty specifications in my letter of appointment. It transpired that the proportion of my time devoted to the duties of Dean increased steadily to about 90% after 11 months, and showed every indication of continuing to increase. I reported this situation to the Vice-Chancellor on 15 April 1991, submitting that the terms of appointment should be reviewed. After appropriate consultation the Vice-Chancellor approved a variation to the terms of appointment, such that as from 1 May 1991 I should devote 90% of my time to the duties of Dean. Since then I have found that the job is really full-time. However, I have appreciated the ability to spend some time, albeit small, keeping in touch with Nuclear Physics.

This committee, whose members are appointed by the Vice-Chancellor, developed out of the "vetting committee" which operated in 1988 and 1989 to erect the fabric of programs. It advises the Vice-Chancellor, through the Dean and the Graduate Degrees Committee, on policy matters pertaining to the School. The membership is: Dean of Graduate School (Chair), Chair of BIAS, Chair of BTF, President of PARSA, and four Program convenors.

3.3.3 Graduate Degrees Committee (GDC)

The Vice-Chancellor appointed the Dean of the Graduate School to be Chair of GDC as from 1 July 1990. I believe, in the light of my experience, that it is essential that the Dean should chair the GDC; were this not the case the position of Dean would be exceedingly difficult.

3.3.4 Graduate Students Section (GSS)

The Graduate Students Section, located on the ground floor of the Chancelry Annex, is responsible for much of the day-to-day administration of graduate student matters, including all aspects of graduate student scholarships; admission, enrolment, induction and examination of research students; course extensions and suspensions; print media advertising and promotion; and processing of inquiries concerning graduate courses. The section is part of the registrar's division, and is headed by Mr Edward Helgeby (Assistant Registrar, Graduate Students), with a staff of 9 people as of August 1991.

The Caro University Administration Review Committee recommended in February 1991 "that the Assistant Registrar (Graduate Students) and staff should be centred in the Graduate School and should be jointly responsible to the Dean of the Graduate School and the Deputy Director/Registrar" (R40). Council resolved on 12 February 1991 "that steps be taken to amend formally the duty statement of the Assistant Registrar (Graduate Students) to make the position jointly responsible to the Registrar and the Dean of the Graduate School". The duty statement of the Assistant Registrar (Graduate Students) was amended in August 1991 to give effect to this resolution. In practice this means that academic operational matters are handled through the Dean of the Graduate School, and that the GSS reports to the Registrar in other matters. The amended duty statement in fact formalises an arrangement which had operated smoothly since the inception of the Graduate School.

3.3.5 Graduate School Office

The Graduate School Office was established on the top floor of the Chancelry Annex in July 1990. It is staffed by an "Assistant to the Dean", working 32 hours per week. Mrs Lorraine Lewis was appointed to this post on a permanent basis on 17 May 1991.

3.3.6 Study Skills Adviser

In mid-1990, Dr Gail Craswell was appointed to a three-year position in the Study Skills Centre (SSC) as study adviser "with a particular interest in developing support systems for postgraduate students". Her duties were enumerated as follows:

1. in cooperation with other SSC staff, provide assistance and advice for students (both undergraduate and postgraduate) with academic problems;
2. help students develop their writing, reading, discussion and reasoning skills, through individual and small group tuition in essay, report and thesis writing;
3. in co-operation with staff in the SSC, develop appropriate systems of advice and support for students in the Graduate School;
4. maintain close contact with the academic staff and supervisors of the students who come to the SSC, and participate in academic courses and programs as and when required.

Dr Craswell's office is located on the top floor of the Chancelry Annex. Her work over the past two and a half years is described in section 4.8 of this report.

4. CENTRALLY-BASED INITIATIVES

The objectives of the Graduate School may be partially achieved through centrally-based initiatives by the School administration. Some of these initiatives are described in detail in the following sections

4.1 Publicity, Promotion and Recruitment

4.1.1 Advertising

Each year graduate courses and scholarships are advertised in Australian newspapers, The London Times, The Observer, Nature and the Times Higher Education Supplement, together with various Australian publications covering postgraduate education.

4.1.2 Graduate School Prospectus

The first prospectus (1991) was issued in July 1990. It provided the first public presentation of the Program structure of the Graduate School. The number of copies printed was 15,000. The prospectus is updated each year, with 20,000 copies being printed for 1992 and 1993. The prospectus is distributed in response to inquiries about Graduate Study at the ANU, and also to a wide range of institutions. More than half the distribution is overseas.

4.1.3 Graduate School Promotional Leaflet

The first promotional leaflet was produced in July 1990 and a second version in July 1992. The number of copies produced was 20,000 in 1990 and 10,000 in 1992.

4.1.4 Attendance at Education Exhibitions

The Graduate School has been represented at the following educational exhibitions within Australia: Great Australian Science Show, Melbourne, July 1991; Careers Exhibition, Darling Harbour, 1992.

4.1.5 Recruitment of Overseas Students

Historically, graduate students from overseas countries have figured prominently in the life of the ANU. For example, overseas PhD students have contributed substantially to the research output of some Research Schools right from their inception. In March 1992 there were 510 overseas graduate students enrolled at the ANU, almost exactly 25% of the total of 2,022 graduate students. The corresponding numbers for undergraduates were 500 out of a total of 7,500.

In 1992 the ANU received \$5.9 million from full-fee paying graduate students. (The corresponding amount for undergraduates was \$3.6 million.) Since universities have almost complete control over the use of revenue from full-fee paying students, it is clear that overseas graduate students make a significant contribution to ANU finances. But the greatest value of overseas students for the University is non-monetary. In addition to their above-noted role in research, they contribute to the internationalisation of university life, and hence to its educational and cultural enrichment.

The Graduate School cooperates closely with the International Education Office in the recruitment of overseas graduate students. A comprehensive paper has been prepared entitled "Recruitment of Overseas Graduate Students (1992)" (737/1992). I participate as a member of the International Education Management Group which meets every few weeks to consider administrative aspects of the University's international education exercise. In August 1992 I participated in a promotional visit to Taipei, Hong Kong and Singapore.

4.1.6 Survey of Recruitment Techniques

In 1991 the Graduate School conducted a recruitment survey among ANU research students. A questionnaire was distributed to 842 research students and 268 responses were received. The results show that verbal recommendation (from ANU staff, staff of the student's own institution, or former ANU students) is overwhelmingly the most effective recruiting technique. Impressions gained from visits to the ANU campus are also important. The use of print media appears to be relatively ineffective. ANU literature (brochure, leaflet etc) appears to play a useful, but not dominant, role.

Since December 1991 a modified questionnaire has been distributed to all incoming graduate students, both research and coursework, at the time of enrolment. It is hoped that this will permit continuous monitoring of the effectiveness of our recruiting techniques and any modifications thereof. For PhD students, the most influential procedures are, again, personal recommendations and

results are similar for both Australian and overseas students. Similar results are found for Master students, except that ANU literature is much more important. For Grad Dip students, ANU literature is even more important.

4.1.7 Inquiry Statistics

Consistent with nation-wide experience, there has recently been a spectacular increase in inquiries for graduate study at the ANU. For example, the total number of "serious" inquiries processed by the Graduate Students Section for the months of August, September and October 1992 was 3530, compared with 2934 and 1328 for the same months in 1991 and 1990 respectively, i.e., an increase by a factor of 2.7 over the past 2 years. A "serious" inquiry is one considered to be sufficiently substantial that written material was sent in response. Needless to say these increases have imposed significant strains on the personnel resources of the Graduate Students Section.

4.2 Graduate School Handbook

A proposal for the production of a Graduate School Handbook, analogous to the Faculty Handbook for undergraduate study, was prepared in mid-1991.

In September 1991 Wendy Antoniak was seconded to the Graduate School for approximately 6 months in order to edit the first issue (1992) of the Handbook. This was a formidable and pioneering task, which she accomplished superbly. The first issue duly appeared in May 1992.

The Handbook is intended as a reference for all aspects of graduate study at the ANU, useful for both staff and students. The first issue contained:

- general information on the University, support services available to graduate students, ANU graduate degrees and diplomas, fees and scholarships;
- detailed information on each Graduate Program, including staff associated with the Program;
- ANU rules relating to graduate degrees;
- miscellaneous information formerly distributed in the form of loose sheets; for example, notes on supervision arrangements, grievance procedures, submission and examination of theses.

It was distributed free to all academic staff and graduate students to permit maximum feedback. 3000 copies were printed. The response to the Handbook has been overwhelmingly favourable, with many constructive suggestions that have been taken into account in preparing the 1993 issue.

4.3 Graduate School Scholarships

In May 1990 Council decided to provide funds for the establishment of 5 Graduate School scholarships, to be allocated centrally "to the most highly ranked candidates on the APRA order of merit list who had not received an APRA, the conditions of award being identical to those of standard ANU PhD scholarships". The scholarships were to be funded by "front-end loading", having "first call on the University budget" (525/1990 and Item 8 of Council minutes for 11 May 1990).

In July 1990 Council decided to discontinue rental subsidies for postgraduate research scholars, and that the funds so released should be allocated through the Graduate School "to the benefit of postgraduate students of the University", initially for Graduate School scholarships to be awarded by the Joint Committee on Postgraduate Awards to candidates on the APRA order-of-merit list who would not otherwise have received a scholarship offer. The rental subsidies allocation will increase as subsidies for existing scholars are phased out, reaching an eventual total of \$580,000 per year in 1995. Added to the \$188,000 front-end loading for the 5 scholarships referred to in the previous paragraph, and allowing for non-salary supplementation, this will give a total of approximately \$840,000 per year available for Graduate School Scholarships in 1995 and thereafter.

The numbers of Graduate School scholarships already awarded are 6 for commencement in 1990, 20 for 1991, and 20 for 1992. It is anticipated that available funds will permit the award of 15 new scholarships in 1993, 15 in 1994, and 19 in 1995. In addition, there was for a variety of reasons, an accumulation of unspent funds in 1992 which permitted the "one-off" allocation of an additional 6 scholarships for commencement in 1993.

For some years the University has been awarding ANUTECH top-up scholarships of \$5,000 per annum to students at the top of the APRA list; 15 were awarded in 1990, 10 in 1991 and 15 in 1992. At meetings of Heads of Research Schools (1 October 1991) and Deans (14 October 1991) it was proposed, in the course of discussions concerning supplementary scholarships, that ANUTECH top-up scholarships should be discontinued and that the funding so freed-up be used to provide additional base-level scholarships.

Consequently the Vice-Chancellor approved the award of 3 additional Graduate School scholarships in 1993, and it is anticipated that in future this diversion of ANUTECH funds will permit the award of 2 or 3 scholarships annually.

Table 1 give details of the allocation of APRA and Graduate School scholarships in recent years. In spite of the extra awards available through the Graduate School, 31 recommended candidates with first-class honours or equivalent did not receive an offer in 1992. Some of these were subsequently awarded ANU scholarships by Schools or Faculties. A total of 132 ANU scholarships was awarded in 1992, 61 of them to overseas students.

Table 1
Australian Postgraduate Research Awards (APRA) and
Graduate School Scholarships (GSS) awarded at the ANU in recent years

	No of candidates rec. by areas	No of candidates on Merit list with HI/Mast equiv quals	No of awards available	% of successful applicants with HI or Master quals		No of candidates with HI/Master not receiving offers
			APRA	GSS		
1982	135	92	69	-	93	-
1987	100	62	58	-	76	-
1989	115	80	50	1	98	-
1990	135	103	60	5	100	10
1991	180	137	67	20	100	7
1992	235	168	71	20	100	31

On 12 July 1991 Council responded to recommendations by the Stephen committee and the Caro committee by resolving "That the Academic Boards be requested to consider extension of the number of Graduate School scholarships available on a University-wide basis" (1943/1991).

On 14 August 1992 I submitted to the Vice-Chancellor paper 740/1902 ("Proposal for an increase in the number of Graduate School scholarships available for award on a University-wide basis"). This paper estimated that in order to provide sufficient Graduate School scholarships that all HI applicants in future years would receive a scholarship, it would be necessary to provide an additional 20 scholarships per year, which would cost an additional \$1,000,000 per year in the steady state after 3 years.

In making this estimate it was assumed that the number of APRA scholarships available and the rate and quality of scholarship applications remained the same as for 1992. The Vice-Chancellor's Advisory Group found itself unable to support the proposal, but indicated that it "would be prepared to consider a more modest proposal in mid 1994".

It transpired that in 1993, 217 candidates with H1 degrees or equivalent were proposed for scholarship awards (compared with 168 in 1992). The ANU was allocated 71 APRA scholarships, with the possibility of winning a few more in the second round competition, and as explained above 24 Graduate School scholarships were available. Thus, early in January it seemed that more than 80 First Class applicants would not receive offers. Faced with this unhappy situation the University administration decided to use ANUTECH dividend funds to award 10 additional scholarships immediately. In addition, the ANU was very successful in the second round APRA competition, winning 10 of the 75 awards available nationwide. Even so, it seems likely at the time of writing that approximately 50 First Class applicants will not receive offers of APRA or Graduate School scholarships; some of them will be offered ANU Scholarships by Research Schools.

At a meeting of Graduate Program Convenors in June 1992, attention was drawn "to the concern felt in many circles that injustices in the award of postgraduate scholarships may be occurring as a result of differences in the rates of awarding First-Class Honours in different subjects". It was suggested that "the problem is a critical one since awards to first-degree applicants for scholarships are now effectively restricted to those with First-class Honours, and many departments are consequently

decade. Part (a) shows the ratio of HI awards to all degrees awarded, and part (b) shows the ratio of HI awards to all honours degrees. It is clear that the Science faculty awards HI degrees at 2 or 3 times the rate of the Arts and Law faculties. Thus, unless Science students are correspondingly superior to those in Arts and Law, it would seem that the latter students are treated unjustly in the competition for postgraduate scholarships. However, the situation may be more complex than appears at first sight. Of course, even if injustices were removed for ANU students, there could still be a problem, because about two thirds of the applicants for postgraduate scholarships at the ANU come from other Australian universities.

4.4 Aboriginal and Torres Strait Islander Scholarship

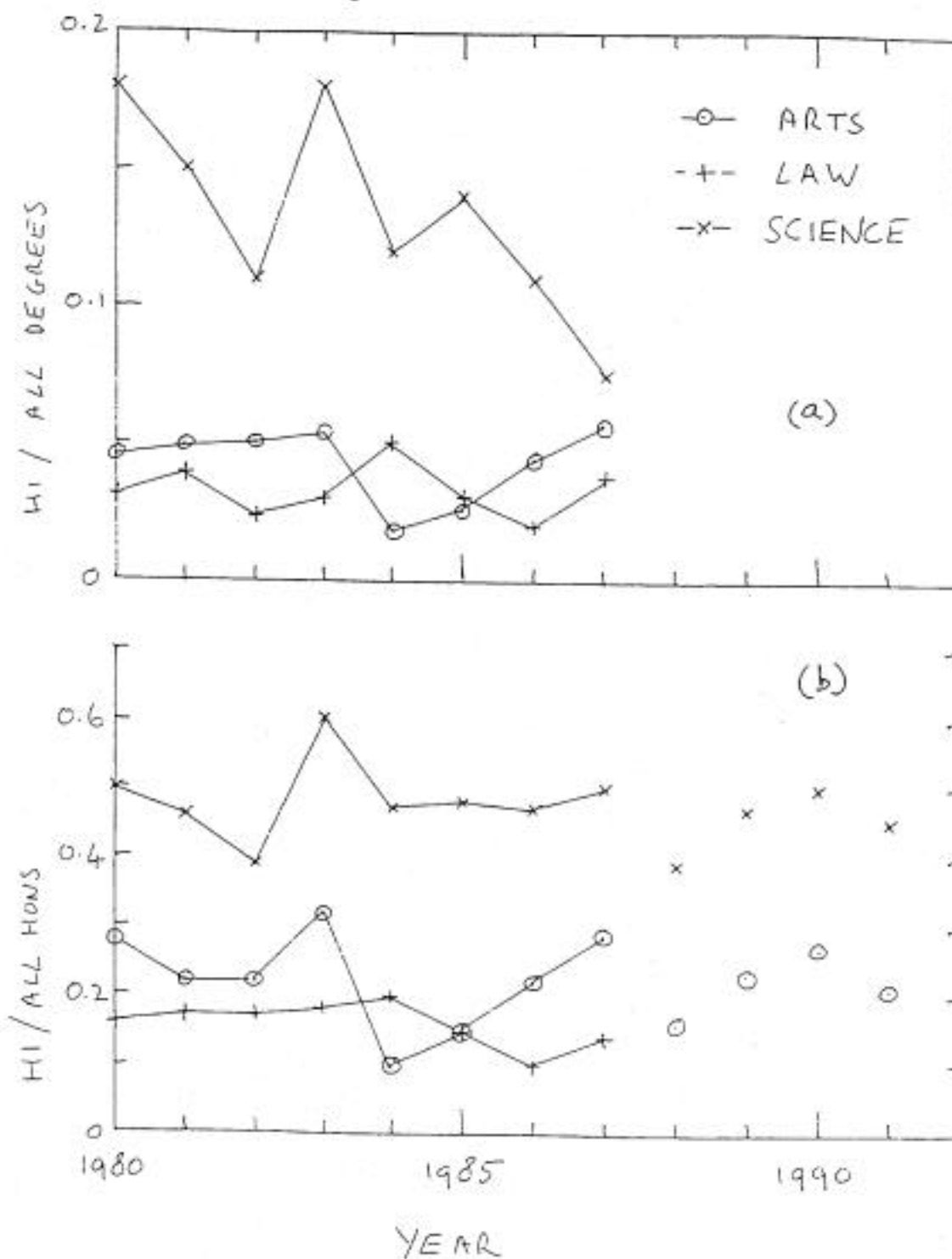
In April 1992 the University approved a proposal (738a/1992) to establish, as part of the University's Aboriginal Education Strategy, a Graduate School scholarship specifically for Aboriginal and Torres Strait Islander students.

Beginning in 1993, one scholarship will be offered each year to a suitably qualified Aboriginal or Torres Strait Islander student wishing to pursue a PhD or Master degree course at the ANU. Conditions of award for both PhD and Master scholarships will be the same as those for existing ANU PhD and Master scholarships. Funding will be obtained from rental subsidies money. If no scholarship is awarded in a particular year, the designated funds will revert to the rental subsidies pool.

Unfortunately it seems that no suitable candidate has emerged in 1993, in spite of extensive advertising.

Figure 1

HI Degrees at ANU



First-class honours awarded by ANU faculties over the past decade, as a fraction of (a) total degrees awarded, and (b) total honours awarded. The data for 1988 onwards are derived from a different statistical base from that used prior to 1988.

4.5 Encouragement of Women's Participation in Research Degrees

Soon after my appointment as Dean, there were strong suggestions from several quarters that the Graduate School should take steps to encourage greater participation by women in research degrees. For example, BTF resolved on 30 November 1990 "to request the Graduate School to report to the Board on measures being taken to improve the participation of women in research higher degrees". The need for such action is evident from Table 2, from which the decreasing participation rate of women with increasing seniority is obvious. The pattern is similar in other Australian universities.

Table 2
Participation of women (in per cent) at various levels in the ANU,
as of 31 March 1991

Undergraduate degree enrolments	51.5
Intermediate degree enrolments (Grad Dip, Master, etc)	43.6
PhD enrolments	34.6
Tenured academic staff (The Faculties)	16.2
Tenured academic staff (IAS)	4.4

In her report "Barriers to Women's Participation as Postgraduate Students" (DEET, 1989), Ingrid Moses writes (p.10) as follows:

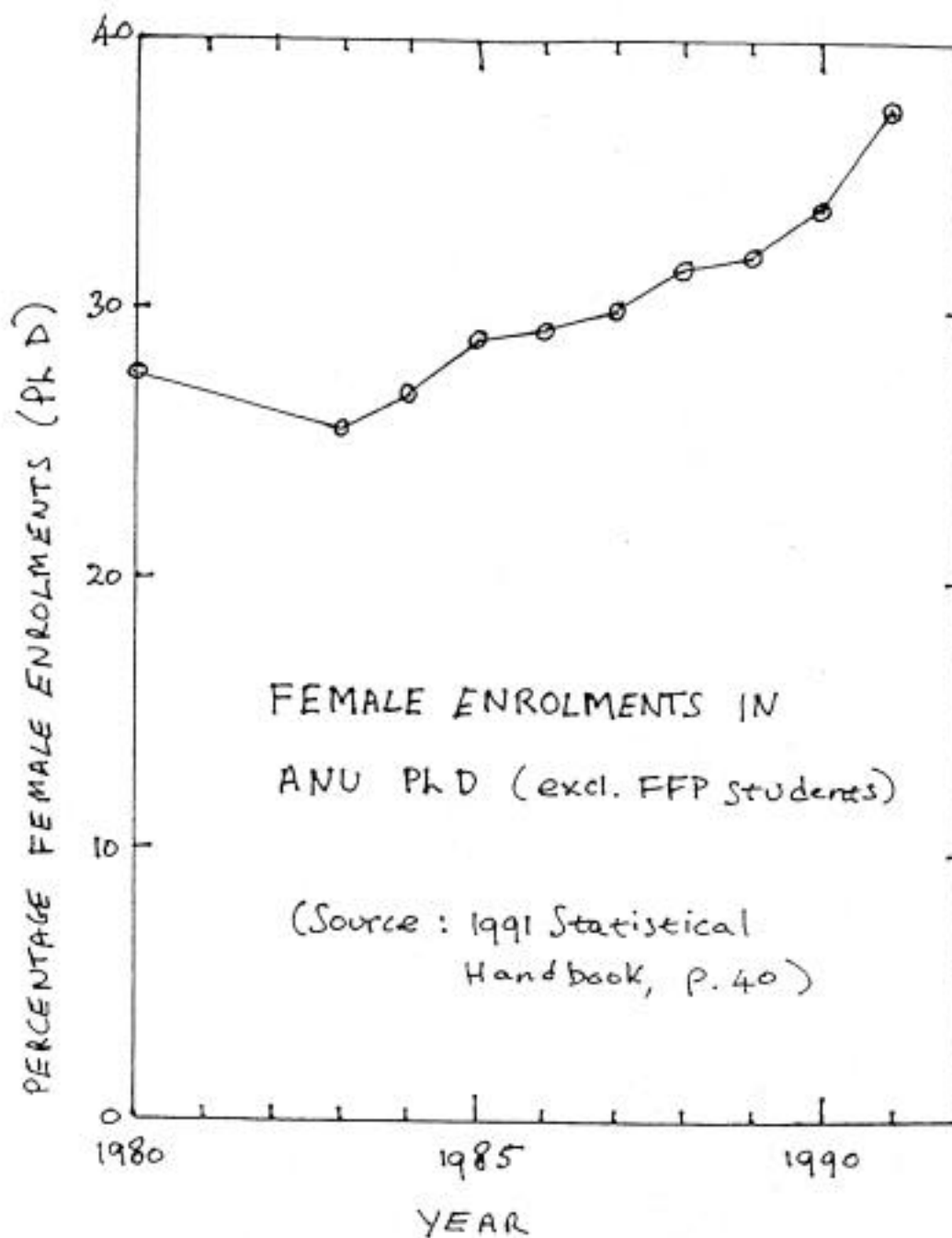
"The pattern of lower enrolment in honours and postgraduate courses by women is similar in all Australian universities; it presents a system-wide and systemic problem, a problem of social equity from women's and the community's point of view, a community problem of wastage of intellectual resources, and poor pay-off of government investment".

It might also be added that an increase in women's participation as tenured academic staff would help to meet the academic staff shortage we are told to expect in the near future.

Actually, women's participation has been increasing steadily in some areas of the ANU. Excluding full-fee-paying students, the percentage of women among undergraduate enrolments has increased from 43.9 in 1980 to 51.8 in 1991, and for PhD enrolments the corresponding increase has been from 27.5 to 37.4 (see figure 2). Even the percentage of women among tenured academic staff in the IAS has shown signs of increasing, from 2.7 in 1989 to 3.4 in 1990 and 4.4 in 1991; however, the absolute numbers involved are so small (6, 8 and 10 respectively) that the increase is barely significant.

Figure 2

Female PhD Enrolments at ANU



I believe that the low involvement of women as tenured academic staff arises not so much from discrimination against women applicants for tenured positions (although not everybody would agree with that), as from the fact that for most tenured positions, especially in the IAS, there are few qualified women applicants. Clearly an essential, though not necessarily sufficient, condition for rectifying this situation is an increase in the participation of women in research degrees.

In the light of all this, the Graduate School has established a working party to initiate some appropriate action. The following approaches have been pursued:

The chief initiative in this connection has been the conduct of a survey of honours students at the ANU to investigate the reasons for the drop-off of women's participation between the honours year and the PhD (approximately from 52% to 36%). A comprehensive questionnaire was distributed in July-August 1992 to about 350 honours students, to be followed up by a second questionnaire in April 1993.

4.5.2 Seminars for Undergraduate Students

Late in 1991 a series of seminars was held with the aim of encouraging women undergraduates to consider seriously the option of doing graduate degrees. Four seminars were held for the following groups: (a) first-year students; (b) final-year students in the Faculties of Arts, Asian Studies, and Economics and Commerce; (c) third and fourth year Science students; and (d) senior undergraduates in the Law Faculty. The response to these seminars was sufficiently encouraging that they were repeated in August 1992. The format in each case was three 10 minute addresses, followed by questions and discussion. On each occasion I presented factual information, and a senior woman PhD student and a female academic each talked about their experiences.

4.5.3 Introduction of a Short-term Part-time Scholarship

In response to a proposal from the working party, the University has introduced a limited number of short-term part-time scholarships which would allow research students, who for "compelling social reasons" (CSR) are temporarily unable to study full time, to suspend their full-time scholarships and study half-time for a period of up to 12 months, while receiving a stipend of half the stipend paid under the principal scholarship. Although the CSR scholarships have obvious application to women in maternity situations, they are in fact gender neutral, and would be available to any student with "compelling social reasons" e.g. recovering from illness.

4.5.4 Introduction of Graduate School Re-entry Scholarships

The working party developed a proposal for the introduction of a limited number of one-year, full-time, post-graduate, re-entry scholarships which would allow awardees, for example, (a) to upgrade qualifications in order to render them eligible for entry to a post-graduate research degree course, or (b) to develop skills which would enhance their prospects of success and speed of progress in such a course. It was envisaged that an awardee would normally work under the guidance of a specific member of academic staff. The scholarships would be available to women wishing to resume academic studies after a significant absence.

Applicants would be invited to propose a year's program. This could involve, for instance, undertaking a Graduate Diploma course, or working with an academic mentor on a research project, or some combination of research training and formal study. For applicants already sufficiently well qualified to enter a research degree course, the experience gained during the year would make it more likely that they could, for example, complete a PhD course within a three-year period. The main criterion to be adopted in awarding the scholarship would be the likelihood that the award would contribute to the eventual successful completion of a research degree.

In June 1992 the Vice-Chancellor approved the offer of three re-entry scholarships for tenure in 1993. The value of a re-entry scholarship will be the same as the annual stipend for a PhD scholarship. The scholarships will be funded by diverting some of the money allocated by the University for post-doctoral re-entry fellowships. Permission has been received from the Sex Discrimination Commission to advertise the scholarships exclusively for women. The University has established a Re-entry Awards Committee, chaired by the Dean of the Graduate School, which will consider applications both for Re-entry Fellowships and Graduate School Re-entry Scholarships.

Three Re-entry Scholarships have been awarded for commencement in 1993.

4.6 Orientation and Welcome Sessions for New Graduate Students

Each year the Graduate School conducts two orientation and welcome sessions for new graduate students. After a brief welcome to the University (e.g. by the Vice-Chancellor) information is presented, both verbally and via distribution of literature, about the Graduate School, PARSA, the Counselling Centre, Graduate Students Section, Study Skills Centre, International Education Office

Health Service, Instructional Resources Unit, Careers and Appointments Section, and the Computer Services Centre. These sessions have been very successful.

4.7 Quality of Graduate Student Supervision

I believe that the overall quality of supervision provided for graduate students at the ANU is excellent. Nevertheless, it is variable, and "horror stories" are not uncommon. They come particularly to the notice of staff of the Counselling Centre, the Health Services Centre, and the Study Skills Centre. Certainly supervision quality is a major concern of PARSA. Exit surveys conducted by that organisation in the late 1980s found that approximately 27 per cent of exiting PhD students were dissatisfied with significant aspects of their supervision (D.J. Cullen, "A Future for Postgraduate Study at the ANU", PARSA, 1989). Whether we like it or not effective supervision will become increasingly important now that PhD scholarships are limited in most cases to 3 years.

There is a clear expectation, at least among the student body, that the Graduate School should initiate action to remedy defects in supervisory practice at the ANU. In fact, supervision is a sensitive subject with academics, and any suggestion that the quality of supervision might be improved usually meets with a frosty reception. On one occasion when I suggested to a certain Faculty Board meeting that one of the objectives of the Graduate School might be to improve the quality of supervision, exception was taken to the word "improve", but "enhance" was deemed to be acceptable.

In September 1990 the ANU submitted a proposal for funding, under the DEET Evaluations and Investigations Program 1991, for a 2 year project entitled "Establishing effective supervision practice: an investigation into the relationship between supervisory practice, institutional support structures, and gender variations for Australian and overseas students across disciplines". The proposal was developed in collaboration with CEDAM and the Study Skills Centre. Funding of \$35,000 was awarded by DEET, and supplementary funding of \$16,260 was provided from the Graduate School budget. Project directors are Ms Margot Pearson (Director of CEDAM), Dr Larry Saha (Sociology, Faculty of Arts), and the Dean of the Graduate School. In April 1991 Dr David Cullen was appointed research officer for the project, working half-time for two years.

Dr Cullen has been conducting an intensive program of interviews and surveys including many PhD students and academic staff members. He will present his report in mid 1993. It is expected that the report will help put the subject of supervision firmly upon the agenda for discussion throughout the University. Other factors which will focus attention upon supervision include the effects of the 3-year PhD scholarship limit, review of the University's attendance requirements for PhD students, and pressure from PARSA for the introduction of an accreditation system for supervisors. In its submission to the Stephen committee, PARSA advocated some form of "accreditation of supervisors to the Graduate School". Recently Professor Peter Sheehan of the Australian Research Council has argued that institutions should "accept much more responsibility for training supervisors and to include the assessment of performance of academic staff as PhD supervisors in the performance appraisal procedures currently being discussed" (Proc. AVCC/ARC Conference on Research Training and Supervision, Canberra, May 1992, Ed. Ingrid Moses, p.5).

Although many academic staff would probably react adversely to any accreditation proposal, it is not such a revolutionary idea. In many North American universities, faculty must be accredited to the Graduate School before they can supervise graduate students or teach graduate courses. In fact, it would be possible to introduce a quite simple and non-threatening accreditation system at the ANU. For example, it could be a requirement that before any newly appointed member of staff was permitted to act as a PhD supervisor, he/she should normally first serve as an adviser on a supervisory panel of at least one (or possibly two) student(s), and should participate in a training program on supervisory practice conducted by an appropriate University body (eg CEDAM) and involving senior academic staff in the training process. At least 3 other Australian universities already conduct regular workshops/training programs on postgraduate supervision. The program would be conducted regularly (eg annually) and could be open to any member of academic staff. Obviously the requirement would need to be appropriately modified for newly appointed staff with supervisory experience elsewhere. Apart from its primary purpose, such a system would have the secondary benefit of increasing awareness across the University of the need for the highest possibly quality in graduate student supervision.

The appointment of Dr Gail Craswell as Study Skills Adviser attached to the Graduate School has been an outstanding success.

Dr Craswell's primary task is assistance to individual graduate students with academic problems. In this capacity she saw, in the period March 1991 to July 1992, 200 individual students, involving a total of 508 consultations. In addition, 99 students took courses conducted by her.

Apart from these regular, individual student consultations, Dr Craswell has helped organise and has participated in many workshops and seminars for various Graduate Programs on such subjects as thesis examination, the first 18 months of a research degree, supervision, article and book production and publication, conference attendance and presentation, funding and grants, and negotiating the job market. She has also conducted courses on essay writing, and a series of seminars on postgraduate writing for overseas graduate coursework students, designed around cross-cultural problems of transition.

4.9 Symposia and Workshops

From time to time the Graduate School arranges University-wide symposia and workshops on matters related to graduate education.

For example, on 1 July 1992, the Graduate School and CEDAM jointly arranged a one-day symposium in University House on the subject "Quality in PhD Education". Speakers and subjects were:

Dr Estelle Phillips (University of London) "The concept of quality in PhD education", Professor Edward Holdaway (University of Alberta) "Issues in the organisation of graduate studies",

Dr Margaret Powles (University of Melbourne) "Staff development for PhD supervision",

Professor Ingrid Moses (University of Technology, Sydney) "Issues in women's participation",

Ms Brigid Ballard and Mr John Clanchy (ANU) "Supervising overseas students",

Dr Tony Gallagher (DEET) and Mr Tony Roberts (President of PARSA) participated in a panel discussion, and Professor Max Neutze (ANU) chaired a forum on "Quality". Approximately 100 people, from various parts of Australia, attended the symposium.

Since Dr Phillips is joint author of the well-known book entitled "How to get a PhD", advantage was taken of her presence at the University to have her conduct a half-day workshop on that subject for PhD students. Attendance was limited to 80, and the workshop was over subscribed, with students attending from a wide cross section of Graduate Programs. There has been substantial demand for similar workshops on future occasions.

4.10 Graduate School Forum

The Graduate School Forum is a meeting held from time to time to provide an opportunity for graduate students and academic staff to discuss subjects relevant to graduate education. The first Forum was held on 30 October 1991, and a total of 9 have now been held. Three have been at lunchtime in the Coombs Theatre, and the remainder on Wednesday evenings in University House following the usual House Dinner.

The Forums are planned by a small committee comprising approximately equal representation of graduate students and academic staff. Details of Forums held thus far are given in Tables 3 and 4.

Table 3
Graduate School Forums (1991)

30 October	Coombs Lecture Theatre, 12.45 pm
	<i>"SHOULD COURSEWORK BE AN ESSENTIAL PART OF THE PhD. DEGREE?"</i>

Professor Ian Wright (Head, English Department)

Dr David Cullen (former president of PARSA)

26 November Coombs Lecture Theatre, 12.45 pm
"THE NATURE OF A UNIVERSITY IN THE CURRENT AUSTRALIAN CONTEXT"
 Hon. Barry Jones MP

Table 4
Graduate School Forums (1992)

18 March	University House, 8.00 pm <i>"WOMEN IN ACADEMIA"</i> Professor Di Yerbury (Vice-Chancellor, Macquarie University)
30 April	Coombs Lecture Theatre, 12.45 pm <i>'POSTGRADUATE EDUCATION UNDER A COALITION GOVERNMENT'</i> Dr David Kemp (Shadow Minister for Education)
*26 May	University House, 12.45 pm <i>"GOVERNMENT POLICY ON GRADUATE EDUCATION"</i> Hon. Peter Baldwin (Minister for Higher Education and Employment Services)
3 June	University House, 8.15 pm <i>"THE DUMB COUNTRY"</i> Mr Jack Waterford (Deputy Editor, Canberra Times)
29 July	University House, 8.15 pm <i>"IS THERE REALLY A LOOMING CRISIS IN ACADEMIC STAFFING?"</i> Ms Meredith Baker (NILS, Flinders University)
9 September	University House, 8.15 pm <i>"GRADUATE EDUCATION FROM AN INDUSTRIAL PERSPECTIVE"</i> Mr Brian Loton (Chairman, BHP)
7 October	University House, 8.15 pm <i>"THE HISTORY OF THE UNIVERSE"</i> Professor Don Mathewson (MSSSO)

*Speaker withdrew at 30 minutes notice, because of a threatened student demonstration.

4.11 Graduate School Overseas Students Committee

This is a committee comprising academic and administrative staff and graduate students which meets regularly to address problems facing graduate students from overseas countries. The committee has considered such matters as accommodation (especially proposed arrangements for graduate students in Fenner Hall, and ways of coping with the regular crisis requirements for short-term accommodation); information dissemination; recruitment, enrolment and orientation procedures; and health insurance; and has sought ways of ameliorating problems raised.

4.12 Liaison with Graduate Students

The Graduate School provides a mechanism whereby concerns raised by graduate students can be addressed by the University. To this end I meet approximately monthly with the President of PARSA, and several times a year with the PARSA Representative Council. In addition, I have held meetings with the students from almost every Graduate Program; some on more than one occasion. This has involved more than 40 sessions, each lasting approximately an hour. These interactions have brought to light a wide variety of graduate-student concerns, e.g. adequacy of supervision arrangements, provision of resources (such as office accommodation, conference travel, field-work support, availability of computers), effects of the 3-year scholarship limit, residential accommodation, and medical insurance. In most cases it has been possible to have the problems addressed in appropriate University and Graduate School forums, usually with positive results. The Graduate School has provided financial assistance (~\$1,000 per year) to enable PARSA to extend the distribution of their annual Postgraduate Orientation Handbook from newly enrolling students only to all graduate students.

4.13 Proposal for a Graduate Teaching Program

The Graduate School is proposing to establish a two-year pilot Graduate Teaching Program. Under this scheme, each semester about 12 research-degree students would be given the opportunity to tutor two hours per week in The Faculties and to attend a weekly one-hour training session in the skills of university teaching. If successful, this pilot scheme could be extended to give all research students in the Graduate School the opportunity to gain professional training and experience in academic teaching as an integral component of their research degree.

To some extent the proposed program is seen as a response to the need to attract Australian graduate students to an academic career in order to meet the anticipated shortage of well qualified academic staff in the coming decade. In most disciplines it will not be possible to solve this problem by overseas recruitment because the US, Britain and other Western European countries will be experiencing similar shortages over the same period. The program will provide an opportunity to begin the systematic nurture of potential staff members among our graduate students.

At present graduate students who do find tutoring work in Australian universities are given little if any guidance or support in their first encounter with teaching. Their experience is often less than happy, and this can turn them against considering a career in tertiary education. By being given the opportunity to teach for limited hours combined with some concurrent training and support, students will have a much better introduction to university teaching and so may think more favourably about an academic career.

In addition, the training provided will improve the quality of their teaching should they eventually enter the academic profession, will help to develop their communication skills, and will strengthen their CVs and employment prospects.

In all, the proposed program will enhance the quality of the ANU's graduate education and at the same time has the potential to contribute significantly in meeting the nation's academic staffing needs.

The detailed proposal (739A/1992) was conceived and formulated by Brigid Ballard (Study Skills Centre), and has been developed in consultation with Margot Pearson (CEDAM). The proposal has been approved in principle by Heads of Research Schools, Deans, and the General Policy Committee of RIAS. Possible sources of funding are being explored. A copy of the proposal was included as an

"Example of Good Practice" in the recent HEC report "Achieving Quality" (Canberra 1992), pp. 173-175.

4.14 Proposal for the Establishment of a Statistical Consulting Unit in the Graduate School

Ever since its establishment there have been suggestions that the Graduate School should conduct/arrange courses in a variety of specific areas. One such is statistics. The statistics option was discussed informally with many people during 1991, and a working party was established "to investigate whether the Graduate School should initiate University-wide courses in statistics for graduate students, and if so, what form they might take and what would be the resource implications". Comments were invited from all Graduate Program Convenors and from all ANU research students.

From these discussions it became clear that the statistical consulting services currently available within the University are greatly appreciated but also greatly overloaded, and that there is a considerable demand for short courses on specialised topics in statistics. The working party concluded that the Graduate School could best contribute to the alleviation of this situation by making an appointment of a statistical consultant who would provide a consulting service specifically for graduate students, and would investigate the need for specialised short courses and arrange/conduct them.

Consideration has been given to the administrative and academic relationship of such an appointee to the statistical consulting centre operated by Dr Ross Cunningham and located within the Department of Statistics, Faculty of Economics and Commerce. It is proposed that the most efficient arrangement would be for Dr Cunningham and his programming assistant to join with the proposed Graduate School appointee to form a statistical consulting unit within the Graduate School, headed by Dr Cunningham and reporting to the Dean of the Graduate School.

A draft proposal along these lines, covering both the rationale for the proposal and its resources implications, was distributed for comment by interested parties in February 1992. The matter is still under discussion within the University, and Professor David Griffin (Pro-Vice-Chancellor and Chair, BTF) has established a Working Party "to advise upon statistical consulting, viewed as part of the University's research infrastructure".

4.15 Desirable Balance of Graduate/Undergraduate and Overseas/Australian Students at ANU

Table 5 shows the numbers of graduate students enrolled in various courses at the ANU at 31 March for the years 1990, 1991 and 1992. The total number of graduate students at the ANU has increased by about 43 per cent over the past two years. This sudden increase is imposing various strains upon the University's resources, some of which are discussed elsewhere in this report. More fundamentally, it raises the question of the desirable balance between undergraduate and graduate students. In 1992 there were approximately 8,000 undergraduates at the ANU. Table 6 gives the percentages of graduate students at the ANU in 1990, 1991 and 1992. A related question concerns the desired total number of students.

Table 5
Numbers of graduate students enrolled at ANU as at 31 March
for 1990, 1991 and 1992

	1990	1991	1992
PhD	618	676	777
Master	217	299	401
Grad Dip	369	538	672
Others	208	126	172
Total	1412	1639	2022

- Note:** (a) at any given time there are also about 130 graduate students on suspension of course
(b) the 1992 figures include about 30 Grad Dip/Master students at the Institute of the Arts

A memorandum was forwarded to the Vice-Chancellor on 3 June 1992 suggesting "that there is an increasingly pressing need for the formulation, at the highest level, of a clear policy on the balance of graduate and undergraduate students at the University". Hitherto the University's approach has been, as I understand it, simply to recruit as many graduate students as possible (with the proviso that, in the case of research students, adequate supervision should be available). In this spirit, one of the objectives of the Graduate School was enunciated as "To increase the number of graduate students at the ANU". The question is given greater pertinence by clear indications that the Government is becoming increasingly concerned about the graduate/undergraduate balance in Australian universities.

Table 6

**Graduate students as a percentage of total students at the ANU,
calculated by EFTSU and by enrolments**

	1990	1991	1992
TOTAL ANU			
EFTSU	18.1	17.5	19.2 (18.2)
Enrolments	19.0	19.2	21.3 (20.2)
FACULTIES ONLY			
EFTSU	9.8	9.9	11.1
Enrolments	10.9	11.9	13.4

(): includes ITA

There is also a closely related need to specify the desirable proportion of overseas students at the ANU. It is usually assumed that full-fee paying students provide a source of revenue for the University and that there should therefore be no constraints on their recruitment. However, overseas research students impose at least the same demands upon the University's supervision resources as do Australian students. In addition, the education of overseas graduate students does have special costs, such as the provision of extra support services, and it is possible that the real financial gain to the University from overseas graduate students is much less than would appear at first sight. Nevertheless, quite apart from financial considerations, it can be argued that internationalisation of the University is intrinsically desirable. At 31 March 1992 the numbers of overseas students at the University were 510 graduate (i.e. 25.2 per cent of the total) and 500 undergraduate.

I believe that it is no exaggeration to claim that the resolution of these issues has profound implications, for a substantial change in the graduate/undergraduate balance, or in the local/overseas student balance, will change the nature of the University. Furthermore, it is desirable that the University should take the initiative rather than simply react to future government directives. The matter is currently under discussion within the University.

It is of interest to note that both the University of Sydney and the University of Melbourne have recently announced their intention to increase their graduate student populations at the expense of undergraduate numbers. In particular, Melbourne aims to increase its proportion of higher degree students from 13.5 per cent in 1992 to 20 per cent by 2000 (item in Australian Campus Review Weekly, 22 October 1992).

4.16 Miscellaneous Initiatives

Other initiatives undertaken by the Graduate School include the following:

- (i) Submission to Vice-Chancellor arguing that time and effort devoted by academic staff to graduate-student supervision, teaching and administration should be explicitly included among promotion criteria for both the IAS and The Faculties.
- (ii) Submission to Industry Commission inquiry on "Export of Education Services" arguing against the imposition of school fees for the children of some categories of overseas students studying in Australia.
- (iii) Approaches to University of Canberra and ADFA proposing ways in which members of those institutions might be involved in the ANU Graduate School. This was in response to a Council resolution. Negotiations are proceeding.

- (iv) During the past two years or so, I have given more than 80 talks on the Graduate School to such groups as Faculties, Faculty Boards, Graduate Programs, new academic staff and graduate students, the Stephen Committee, the Caro Committee, and the ARC/AVCC conference on "Research Training and Supervision".
- (v) Involvement in numerous committees, boards, and selection committees.
- (vi) The position of Dean is providing a focus for individual graduate students and staff members with inquiries and concerns re the graduate-education process at the University.

5. GRADUATE PROGRAMS

The second major vehicle for the achievement of the objectives of the Graduate School is the Graduate Program system. The concept of University-wide discipline-based Graduate Programs within the ANU context was enunciated by Wang Gungwu in 1978 and was central to Council's decision to establish a Graduate School in May 1988. One of the main aims of the system is to provide students in a given discipline with access to the whole of the University's resources in that area, both of facilities and personnel.

From 1988 onwards, proposals were sought from academic staff for Graduate Programs which would collectively cover the whole of the University's offerings in graduate education. As an approximate guideline it was suggested (2953/1989) that the number of full-time research students in a Program should range between a minimum of 20 (in order to provide adequate peer support) and a maximum of 60. In the event, it was not possible to adhere strictly to either limit.

Proposals were considered by a "vetting" committee, appointed by the Vice-Chancellor. This has since developed into the Graduate School Advisory Committee. Recommended proposals were considered for 2-year provisional accreditation of Programs by the GDC. Some difficulties were experienced in erecting the boundaries between certain groups of Programs which have methodologies or objectives in common, or which are inherently interdisciplinary, and it was anticipated that there would be some adjustments before substantive accreditation was eventually granted. To permit graduate work to begin in a new area, or to allow a Program that is too small to have a chance to grow, the GDC agreed to special conditions applicable to "developmental programs". Women's Studies is such a Program.

Enrolment of students in 32 Graduate Programs commenced at the beginning of 1991. Each graduate student is enrolled in a single Program. Each Program covers the whole of the University's graduate education in the subject concerned. In addition, students may register a secondary affiliation with up to 2 other Programs; this means that their names are placed on the mailing lists of the Programs concerned so that they can be kept informed of activities conducted by the Programs and may participate if they so desire.

Program Convenors have special responsibility for the arrangement of workshops, seminars etc., and for exercising pastoral oversight and monitoring the academic progress of students in the Program. The latter role includes the assessment of applications from prospective students for admission and scholarships, and involvement in the appointment of supervisory panels for PhD students and the assessment of thesis examination reports. They also arrange Program-specific promotional literature and promotional activities. The responsibilities of Convenors are given in detail in section 5 of 1947a/1990.

Each Program has a Board of Studies, normally chaired by the Convenor, which plans and implements the development of the Program, and is responsible for advising the Dean of the Graduate School concerning the appointment of the Program Convenor. The composition and modus operandi of the Board have been left for determination by the members of the Program, except for a stipulation that each Board should include student representation.

Academic staff may be associated with more than one Program, provided that they are able and willing to be involved in teaching or supervision in each such Program.

5.1 Details of Currently-operating Programs

When graduate students were first formally enrolled in Graduate School Programs at the beginning of

Programs were granted provisional accreditation: Engineering, resulting from fission of the original very large Program in Physical Sciences and Engineering; Statistics, which emerged from the Mathematical Sciences Program; Commerce, which emerged from the very large Economics Program; Music; and Visual Arts; the latter two Programs result from the amalgamation of the ANU and ITA.

Table 7 lists all current Programs, together with the numbers of students enrolled as at 10 November 1992. Data for the Commerce, Visual Arts and Music Programs are not included because formal accreditation of those Programs had occurred too recently for them to be added to the system.

TABLE 7
STUDENTS ENROLLED IN GRADUATE PROGRAMS
AS AT 10 NOVEMBER 1992

Program Name	PhD	Master	Other	Total	(FT/PT)
A1 Anthropology	38	20	2	60	(44/16)
A2 Astronomy & Astrophysics	16	0	0	16	(16/0)
B1 Biochem. & Molecular Biol.	34	1	5	40	(36/4)
C1 Chemistry	49	6	0	55	(51/4)
C2 Computer Science & Tech.	22	10	20	52	(34/18)
C3 Commerce*	^a 5	^a 3	^a 16	^a 24	
D1 Demography	28	23	18	69	(61/8)
E1 Earth Sciences	32	3	3	38	(35/3)
E2 East Asian Studies	17	5	21	43	(30/13)
E3 Ecology	11	3	4	18	(15/3)
E4 Economics	64	44	145	253	(141/112)
E5 Epidemiology & Pop. Health	19	18	20	57	(31/26)
E6 Evolution & Systematics	14	0	3	17	(10/7)
E7 Engineering	20	1	0	21	(20/1)
G1 Geographical Sciences	17	7	3	27	(19/8)
H1 History	33	26	8	67	(39/28)
L1 Law	11	15	78	104	(19/85)
L2 Linguistics	21	25	14	60	(34/26)
L3 Literature & Art	21	25	48	94	(39/55)
M1 Mathematical Sciences	17	3	5	25	(18/7)
M2 Medical Sciences	43	0	0	43	(42/1)
M3 Music*	0	0	^a 25	^a 25	
N1 Neuroscience	11	1	1	13	(12/1)
P1 Philosophy	23	9	5	37	(26/11)
P2 Physical Sciences	68	3	0	71	(69/2)
P3 Plant Sciences	37	2	1	40	(37/3)
P4 Political Science & Int. Relations	46	51	153	250	(130/120)
P5 Prehistory & Archaeology	22	7	4	33	(27/6)
P6 Psychology	7	20	2	29	(18/11)
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Q1 Quaternary & Regolith Studies	17	4	0	21	(16/5)
R1 Res. Manag. & Envir. Science	48	25	62	135	(103/32)
S1 Sociology	5	12	9	26	(11/15)
S2 Southeast Asian Studies	6	8	7	21	(16/5)
S3 Statistics	9	6	16	31	(13/18)
V1 Visual Arts*	0	^a 6	^a 22	^a 28	
W1 Women's Studies	2	3	8	13	(2/11)
Unknown/No special program	20	2	11	33	
Total (excluding C3, M3 and V1)	854	404	749	2007	

*Numbers for C3, M3 and V1 not included in computer printout because formal accreditation had occurred too recently for them to be added to system. Approximate numbers shown for C3 would be included in E4; those for M3 and V1 are additional.

5.2 Program Activities

5.2.1 Promotional Literature

Each Program has produced its own promotional/recruiting literature, which is intended to provide detailed Program-specific information beyond that contained in the Graduate School prospectus. This material ranges from a few typed sheets in some cases to glossy printed booklets in others. Funds are available from the Graduate School to assist in the production of this literature. In most cases Convenors deposit supplies of their Program literature with the Graduate Students Section. When inquiries about specific Programs arrive at the Section, the relevant Program-specific literature is sent immediately in response. This system works very efficiently. As indicated in section 4.1, the number of inquiries received has increased dramatically over the past couple of years.

5.2.2 Workshops and Seminars

A wide variety of workshop/seminar activities has been developed by the various Programs. As indicated earlier, no attempt is made to prescribe or stereotype Program activities. Each Program is left to develop initiatives appropriate to its own circumstances.

Some Programs have conducted series of workshops on methodological topics, e.g. "How a thesis is examined" or "How to give a seminar"; usually these are organised with the assistance of Dr Gail Craswell, the Graduate School Study Skills Adviser. Others have developed seminar programs on research topics. In some cases study weekends covering either or both of these emphases have been held at the University's property at Kioloa, typically involving about 25 graduate students and about 5 staff members.

5.2.3 Student Recruitment

Some Programs have used Graduate School funds to support recruiting visits to other universities by staff and/or students, or to support visits to the ANU campus by prospective graduate students. These are both very effective recruiting techniques.

5.3 Support for Program Convenors

5.3.1 General Meetings of Convenors

Meetings of all Program Convenors are held every few months. The meetings are intended to provide information that will help Convenors in running their Programs, and to give them an opportunity to share experiences and ideas and to raise problems and concerns. For example, the meeting of 6 March 1992 consisted of a general discussion of Graduate School objectives for 1992. Occasionally, visiting speakers have been invited to address the meetings.

It was recognized early in the discussions concerning the formation of the Graduate School that Program Convenors would need "resources of their own" to enable them to administer their Programs (see, for example, 2953/1989). Accordingly, the University has provided funds for this purpose. The Graduate School Advisory Committee decided that the Dean should be responsible for the allocation of funds among the various Programs. The rationale for this, and the guidelines to be followed, are set out in the following extract from a memo to all Convenors dated 6 November 1991:

It seems likely that \$160,000 will be available for distribution to Convenors in 1992 to help them administer their Programs.

I don't think it is possible to devise a satisfactory formula for the distribution of this money. The amount required will vary greatly from one program to another, depending, for example, on the number of departments involved and their geographical distribution, the number of students involved, the complexity of the program (amount of coursework, seminars etc), access to "free" secretarial assistance, etc. Some programs may not need any money at all. The money should be regarded as providing additional funds to help support activities intrinsic to the operation of the program; there is, for instance, no way that Graduate School money can replace the considerable funds already spent around the University on graduate student promotion. *If the operation of a program involves no substantial change to the status quo, it is difficult to justify the provision of supplementary funding.*

In the past available money has been used for such things as preparation of Program-specific publicity materials, costs of recruitment and promotion, conduct of seminar programs and workshops (including weekends at Kioloa), administrative/secretarial support, and purchase of hardware (eg personal computers).

Convenors located in adjacent geographical areas might find it advantageous to combine some of their available funds to arrange a joint (part-time?) secretary/administrative assistant.

So far Convenors have on the whole been very responsible in their request for financial support, and it has been possible to grant almost every Convenor the amounts requested. However, I suspect that competition for funds will be tougher in 1992. In allocating money, consideration will be given to the extent that the proposed usage will help achieve the specific aims of the Graduate School, i.e.

1. To enhance the quality of graduate education;
2. To increase the number of graduate students; and
3. To improve the "pastoral care" of graduate students.

One of the elements in this consideration will be the effective operation of the Program's Board of Studies.

5.4 Review of Graduate Programs

GSAC decided on 5 June 1992 to conduct a review of all Programs at the end of 1992 as a preliminary to substantive accreditation. Consequently, all Convenors were asked to submit a written report on their Programs by 31 October 1992, covering the Program's current status and future development. Subsequently, letters were sent to all academic staff and to all graduate students informing them of the review and inviting them to submit comments to the appropriate program convenor or direct to me.

Reports received from Convenors, together with comments from students and staff, are currently being digested. They will be available to any working party that might be established to advise on the future development of the Graduate School. A preliminary examination of the reports indicates, not surprisingly, that the nature and extent of activities undertaken by individual Programs varies widely. It is also clear that in some parts of the University the numbers of graduate students are approaching the limits set by availability of supervision and physical resources. The program system has been very successful in facilitating interaction between students in a given discipline from different parts of the University, and likewise of academic staff. Collectively the reports provide an invaluable, and probably unprecedented, overview of graduate education at the ANU.

5.5.1 *Status of Convenors*

There is no doubt that Program Convenors are the key people in the operation of the program system. They are appointed by the Vice-Chancellor, acting on the recommendation of the Board of Studies of the Program concerned, and of the Dean of the Graduate School, and their duties have been approved by the Academic Boards (1947a/1990). In a very real sense the effectiveness of any given Program depends on the vision, diligence and competence of the Program Convenor. Their duties can be very time-consuming, especially during the concentrated period at the end of each year when applications from prospective students for admission and scholarships must be assessed and graded. The arrangement of seminar and workshop programs requires imagination, a good working knowledge of the whole of the academic area concerned, and the commitment of time. Similar requirements obtain for the preparation and dissemination of Program-specific promotional material. They are involved at various stages in the monitoring of a student's academic progress; in some cases they perform duties hitherto ascribed to departmental heads. In addition, they may often be called upon to counsel individual students on a variety of matters. For all of this they receive no direct compensation. If the Program system is to continue, and especially if it is to become more effective, it is essential that adequate support be provided for Convenors. This should include a more formal recognition of their status.

Furthermore, there is a strong *prima-facie* case that some form of compensation be provided to Convenors. Although an appropriate salary loading would be the most obvious possibility, some Convenors, especially those based in The Faculties, might well prefer some relief from teaching duties, or an accelerated entitlement to outside-studies leave. A difficulty in such arrangements, however, arises because the amount of work done by individual Convenors varies greatly, due to a variety of factors: size of Program, (i.e. number of staff and number of students), spread of Program across departments, amount of coursework in Program, the Convenor's own perception of the task, the Convenor's commitment to the task, and competition from other demands on the Convenor's time.

As far as possible, the work of a Convenor should be a creative exercise rather than an administrative chore. It is interesting to note that since the first formal appointment of Convenors at the beginning of 1991, a substantial number of them have been promoted, left the ANU for higher-level appointments elsewhere, achieved formal honours, or been invited by the University to undertake significant new responsibilities.

5.5.2 *Prescribed Authorities*

Historically, the prescribed authority for each graduate student has been the Director or Dean (or equivalent) of the area in which the student is located. In early planning for the Graduate School, it was assumed that each Program would have its own prescribed authority, appointed from among the Directors and Deans, or possibly other senior staff with relevant experience (2953/1989). Such an arrangement was proposed in the "Mechanics of the Graduate School" paper (1947a/1990), and was considered acceptable by meetings of Heads of Research Schools and Deans of Faculties. However, it was rejected by the Academic Boards, who resolved in late 1990 "to defer any change to current prescribed authorities until further consideration could be given to these matters by the Graduate School Advisory Committee". The primary cause of concern was the realisation that the proposed arrangement would inevitably imply that for some students the line of academic responsibility would be different from the line of resource responsibility. Another option considered was that the Dean of the Graduate School should be prescribed authority for all Programs with authority to delegate whatever functions were deemed appropriate. This option is administratively simpler, but was rejected by meetings of Directors and Deans. A third suggested option, that Program Convenors should also be prescribed authorities, was not seriously pursued, partly because of a perception that it would increase the burden on Convenors to an unacceptable level.

No attempt has been made to revive the issue since the decision of the Academic Boards in late 1990 that no change should be made for the time being to current prescribed authorities. Consequently most Convenors have had to deal with more than one prescribed authority for the students in their Programs. Similarly, some administrators have had to deal with students from several Programs, e.g. about a dozen Programs in the case of the Assistant Faculty Secretary (Science). This has resulted in some administrative complexity. However, the system has settled down reasonably well. Relative to pre-

staff members have an interest in specific files, and are in a position to keep track of files and to ensure that they are not held up for an unduly long time in one location. Nevertheless, the assignment of a single prescribed authority to each Program would certainly give greater integrity to the Program, and the prescribed authority question is one of the basic issues to be resolved in connection with the development of the Graduate School. It is interesting to note that in at least one Program involving students from a Research School and a Faculty, the Director of the Research School has devolved his "prescribed authority" for the students concerned to the Dean of the Faculty and that the arrangement has worked well.

5.5.3 Allocation of Resources

Over the past two and a half years I have held many discussions with academic staff and graduate students, both individually and in groups, about graduate education at the University. By far the most common complaint has concerned inequities in the allocation of student-related resources across the University, chiefly for fieldwork and conference travel, but also for more mundane items such as office accommodation, access to computers, and resources for photo-copying. These complaints have emanated not only from The Faculties but also from some parts of the IAS. It is usually assumed that students in the IAS are better supported than those in The Faculties, but this is not universally so.

It is not uncommon for overseas full-fee paying students to complain that they are not receiving resources for which they believe they have paid. There is also evidence that in some parts of the University the allocation of resources varies according to whether a particular student is on a scholarship, is full-fee-paying, or is a private student.

The question of resources allocation is one of the major concerns of PARSA. For example, the PARSA submission to the IAS review stated that "there will need to be a funding commitment for the Graduate School which would centralise some of the services available to students and their supervisors" and that "PARSA supports finances being spent on the Graduate School to ensure that the University commits funding over the term of all students (sic) candidature ... and to provide support services for students".

One of the basic objectives of the Graduate School has been to encourage interaction among graduate students working in a given discipline in different parts of the University. This has been largely achieved, but one of the perhaps unforeseen consequences has been that, in the process of talking to each other, students have become increasingly aware that the ancillary resources available to them vary widely depending upon their location in the University. They find it hard to understand why two students working in the same discipline for the same degree in the same University should be provided with different resources.

It is difficult to avoid the conclusion that these inequities in resource allocation can only be avoided by some kind of centralised system, as advocated by PARSA. The obvious mechanism for conference-travel funds, and perhaps also for fieldwork funding, would be the pooling of such funds on a University-wide basis and allocation by a committee operating under the aegis of the Graduate School. It should be noted in this connection that the centralised allocation of APRA and Graduate School Scholarships is managed very effectively by a small committee, the Joint Committee on Postgraduate Awards, the members of which are chosen not on a representative basis but because of their relevant expertise and experience, ie they do not have an advocacy role. Similar groups could allocate conference-travel and fieldwork funds. The adoption of such procedures would obviously involve considerable practical difficulties, particularly since financial support for graduate students now comes from a wide variety of sources, including research grants of various kinds and CRC's. It might be possible to take account of variations of need with discipline by delegating much of the process to Boards of Studies of individual Programs. The needs of students within a given Program would presumably be more homogeneous than those which apply across disciplines.

One of the stated objectives of the Graduate School is to provide students in a given discipline with access to the whole of the University's resources in that discipline, both of facilities and personnel. Although substantial progress has been made, it cannot be said that this objective has been achieved until existing inequities in resources allocation are minimised.

5.5.4 Nomenclature

A minor problem has arisen in connection with the expression "graduate program". Use of these words for University activities other than the Graduate School Programs formally accredited by the GDC leads to confusion. Although the expression was not invented by the Graduate School, and it does have a certain generic applicability, it would be helpful in the ANU context if its use in written material were limited to those Graduate School entities formally accredited by the GDC. Similar considerations apply to use of the expression "Program Convenor".

6. GRADUATE DEGREES COMMITTEE

The fact that the Dean of the Graduate School has been appointed Chair of the GDC greatly facilitates the Graduate School's role in the coordination of graduate education across the University. The GDC is a joint committee of the two Academic Boards of the University. Until recently it was responsible to the Boards for Doctoral and Master degrees: for the oversight of policy and application to individual cases in areas such as admission to candidature, course determination, course content, supervision, examination and admission to degrees. As from 1 May 1992 the GDC merged with the former Intermediate Awards Committee (IAC), and the GDC is now responsible for all graduate degrees, diplomas and awards. The Chair of the GDC is authorised to act on behalf of the committee in most individual cases, and only the more difficult and controversial situations are referred to the full committee.

6.1 Recent Policy Issues

Some of the more significant policy issues addressed by the GDC over the past couple of years include the following:

- Amendment of higher doctorates degree rules in order to make the requirements for higher doctorates more demanding;
- Establishment of a working party to consider the nomenclature and structure of intermediate awards and graduate degrees, resulting in decisions by the Academic Boards to set minimum course lengths for Graduate Diplomas and Master degrees;
- A working party is currently considering entry requirements for integrated Graduate Diploma/Master degree courses;
- Establishment of a working party to review the University's attendance requirements for PhD candidates; a draft report has been circulated for consideration by Schools and Faculties;
- Clarification of GDC guidelines concerning the inclusion of reprints of published articles in PhD theses.

6.2 Simplification of Administrative Procedures

Many of the administrative procedures relating to graduate students have been significantly simplified. For example, the procedures involved in processing applications for suspension of course have been greatly streamlined.

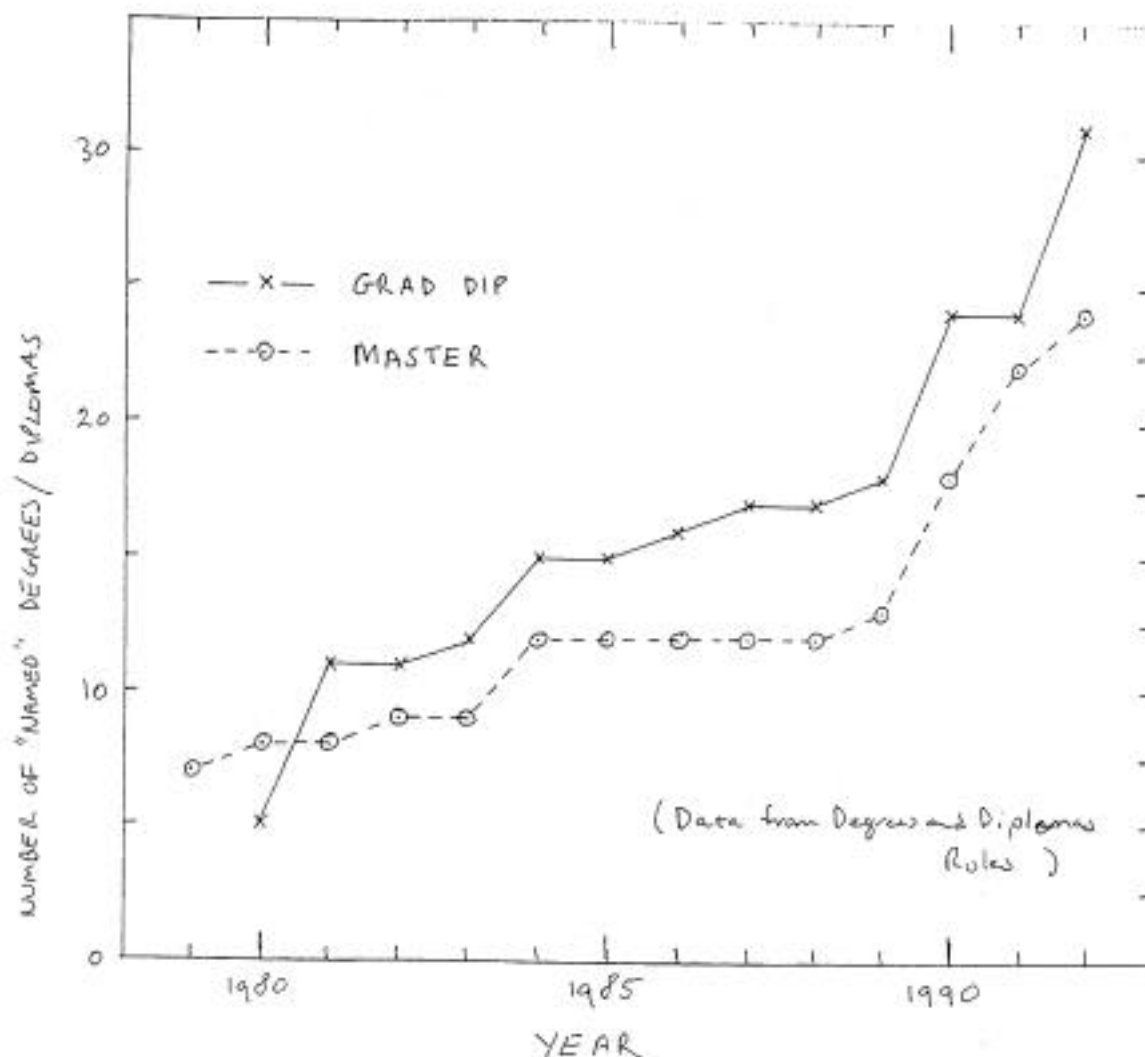
6.3 Statistics

6.3.1 Proliferation of Graduate Diplomas and Master degrees

Fig.3 shows the number of named Graduate Diplomas and Master degrees offered by the University as a function of time. As of November 1992, there were 31 named Graduate Diplomas and 24 named Master degrees, each having its own style and its own award category at conferring ceremonies. The numbers have been increasing steadily over the past decade, and if anything the rate of increase is accelerating. The GDC working party on Nomenclature and Structure of Intermediate Awards and Graduate Degrees expressed its concern at "the continuing proliferation of degrees and diplomas in the University."; however GDC chose not to endorse this concern. Nevertheless, there are many in the University who believe that this continuing proliferation is "degrading the currency"; others regard it as a healthy manifestation of the University's diversity and flexibility.

Figure 3

Number of ANU "Named" Master Degrees and Graduate Diplomas as a function of time



6.3.2 Completion and Withdrawal Rates

In July 1990 the Australian Vice-Chancellors' Committee published a report entitled "The Progress of Higher Degree Students", presenting the results of a comprehensive survey of those who began higher degree courses in Australian universities in 1983. Table 8, which is Table 4.4 of the AVCC report, shows the percentage of PhD students who had completed their courses by early 1989. The table shows that approximately 64% of Australian full-time PhD students had completed within 6 years. The ANU rate of 70% is relatively good.

Table 8

PhD Students commencing 1983 – status at end of 1988

University	Attendance and Completions									
	Wholly No.	F/T % ^a	Wholly No.	P/T % ^a	Mainly No.	Acad. % ^a	Mainly No.	F/T % ^a	Mainly No.	P/T % ^a
Adelaide	18	78	1	*	—	*	8	*	—	*
ANU	112	70	1	*	—	*	—	*	—	*
Deakin	5	*	2	*	1	*	—	*	—	*
Flinders	13	*	—	*	—	*	2	*	—	*
Griffith	8	*	—	*	—	*	5	*	—	*
James Cook	7	*	3	*	—	*	3	*	—	*
La Trobe	22	67	10	*	—	*	5	*	6	*
Macquarie	7	35	6	19	—	*	3	*	—	*
Melbourne	39	65	1	*	3	*	15	60	—	*
Monash	52	63	1	*	—	*	5	*	6	*
Murdoch	5	*	2	*	1	*	4	*	—	*
Newcastle	14	*	2	*	—	*	—	*	—	*
New England	9	*	5	*	1	*	2	*	—	*
N.S.W.	39	51	5	17	—	*	—	*	—	*
Queensland	48	68	8	25	2	*	12	36	4	*
Tasmania	11	48	—	*	—	*	2	*	—	*
West. Australia	18	51	—	*	1	*	6	*	—	*
Wollongong	4	*	1	*	—	*	8	*	1	*
TOTAL	431	64	48	21	9	31	80	43	17	29

Source: AVCC "The Progress of Higher Degree Students"

The completion rate for PhD students at the ANU may be deduced from the data shown in Table 9, which gives the status of all PhD students enrolled at the ANU between January 1979 and 16 November 1992. Of a total of 2901 enrolments, 324 either failed, lapsed or were terminated for some reason. Ignoring students still on course or on suspension (853), and students who transferred or died (32), the non-completion rate is 324/2016, i.e. 16.1%. Thus, the effective rate of satisfactory completions is 83.9%.

Table 9

Completion rate for ANU PhD students

GRADUATE STUDENT SYSTEM
(AUSTRALIAN NATIONAL UNIVERSITY)
All PhDs ever on the computer

Port Sequence	Code	Male	Female	Unknown	F/T	P/T	Unknown	Total
Course	(CCC)	509	292		725	76		801
erdue from Suspension	(CCN)	5	3		8			8
Suspension	(CCS)	26	18		38	6		44
g. expired, no outcome	(CCX)	3			2	1		3
igible for Conferal	(CDP)	8	3		11			11
Absentia Conferal	(CGA)	21	3		24			24
tending Conferal Cerm	(CGC)	28	15		40	3		43
ferred Conferal	(CGD)	8	1		9			9
wise & Resubmit Thesis	(CRP)	10	12		22			22
end Thesis	(CTA)	13	7		20			20
esis Under Examination	(CTE)	48	28		70	6		76
esis Pending	(CTF)	54	31		76	9		85
rm. non-payment of GSF	(NCF)	1	1		2			2
urse Lapsed	(NCL)	2	3		5			5
rm. by ANU	(NCT)	52	19		67	4		71
thdrawn from Crs/Cand	(NCW)	146	87		203	30		233
nferred	(NDC)	1039	358		1368	29		1397
iled	(NDN)	11	4		15			15
urse transferred	(NXC)	13	8		20	1		21
ceased Student	(N2Z)	8	3		11			11
Totals		2005	896	0	2736	165	0	2901

Table 10 shows withdrawal rates from graduate courses for male and female students at the ANU, obtained from a survey of all records for the years 1980/81 to 1991, and some records prior to that period, expressed as percentages of all students ever enrolled at the various levels.

As can be seen the female withdrawal rates are, with the exception of Graduate Diplomas and non-degree, higher than those for males. It is also of interest to note that withdrawal rates for PhDs are less than half the average for all postgraduates.

Table 10
Withdrawal rates (percentages) for ANU graduate courses
for years 1980/81 to 1991, with some data from earlier records

	Male	Female	Total
PhD	7.07	10.8	8.17
Master degree	13.12	14.02	13.45
Master Qualifying	19.86	34.09	25.21
Graduate Diploma	32.96	28.93	31.67
LittB	33.55	43.33	38.43
PG Prof Training	1.37	2.38	1.77
Graduate non-degree	12.66	10.98	12.18
Total	16.83	19.27	17.66

Table 11 shows the total number of PhD and Master degrees completed each year at the ANU from 1984 to 1991.

Table 11
PhD and Master degree courses completed, covering all students
for the whole of the ANU

	1984	1985	1986	1987	1988	1989	1990	1991
PhD	100	101	118	127	135	130	168	184
Master (research)	32	23	17	25	26	19	19	20
Master (coursework)	69	70	75	82	66	62	84	101
Total PhD and Master	201	194	210	234	227	211	271	305

Table 12 gives information on the PhD examination process at the ANU. It shows, for theses submitted in the period 1 July 1991 to 30 June 1992, the time scale of the process; and the numbers of theses accepted without amendment, accepted after minor amendments, and referred back for revision and resubmission.

6.3.3 Female Participation Rates in Graduate Degrees

Table 13 shows female participation rates for graduate degrees at the ANU for the years 1981 to 1990. The data are extracted from ANU Statistical Handbooks.

Report on PhD examinations from 1 July 1991 to 30 June 1992

REPORT ON PHD EXAMINATIONS FROM

1 JULY 1991 TO 30 JUNE 1992

Results to 30 October 1992

1 OF 117 EXAMS COMPLETED

	ARTS	ASIAN STUDIES	E & C	LAW	SCIENCE	RSSS	RSC	RSES	RSPACS	RSPHYSSSE	RSSS	JCSMR	CRBS	MS550	SMS	TOTAL
Number of submissions	23	6	3	1	15	15	5	2	23	14	16	8	3	2	4	140
Resubmissions (included above)	1	-	-	-	-	1	-	-	-	-	2	-	-	-	-	4
Published Works "	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	2
Oral examinations	6	2	-	1	6	3	-	-	11	1	1	2	1	-	2	36
Unconditional admission	4	-	1	-	1	3	-	-	3	7	7	2	2	1	2	33
Minor amendments	17	4	1	1	10	5	5	1	14	3	7	5	1	-	2	76
Revise and resubmit	1	1	-	-	3	-	-	-	2	1	-	-	-	-	-	8
Fail	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Admission by Council to 11.9.92.	15	3	1	1	10	5	5	-	13	10	11	6	3	1	3	87
Average number of weeks elapsed from despatch of theses to receipt of 3rd examiners report.	22	16	17	10	15	16	16	22	16	16	16	16	20	16	18	17
Average number of weeks elapsed from submission to despatch of thesis	6	6	2	3	6	1	1	5	3	1	4	-	-	5	-	3
Examinations still in progress as at 30 October 1992.	1	1	1	-	1	7	-	1	4	3	2	1	-	1	-	23

Please note*** 8 submissions were accepted prior to the Christmas break and were therefore delayed because the University offices were closed.

8 submissions were accepted on the 7 July 1991 deadline. Average despatch time for these theses 14.5 weeks. By discounting these submissions the average despatch time is reduced to 2.5 weeks.

Percentages are based on 117 examinations completed by 30.10.92.

Table 13**Female participation rates for graduate degrees at the ANU (expressed as percentages)**

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
PhD	25.8	24.7	26.6	27.3	29.2	28.9	29.3	30.2	31.8	33.1
Master	33.2	37.7	38.6	34.8	36.9	37.0	41.2	42.5	43.9	44.9
Graduate Diploma	15.9	20.6	29.3	31.1	28.7	34.8	30.3	30.6	33.3	39.9
LittB	50.0	54.2	55.4	51.3	51.3	49.5	49.3	46.4	46.8	42.5
PG Prof Training	36.6	35.2	25.7	34.2	27.1	36.5	40.9	50.6	53.0	51.4
Total	29.9	30.9	32.7	32.5	32.1	33.6	33.6	35.1	36.8	38.7

It is clear that the female participation rate has increased significantly since 1981, overall and for PhDs (see also figure 2 of this report). A comparison with national figures and trends is set out for all higher degrees (i.e. PhD and Master degrees) in Table 14.

Table 14**Female participation rates in PhD and Master degrees, at ANU and nation-wide**

	1979	1981	1988	1989	1990
ANU		28.4	34.4	35.5	36.2
National	26.8		36.9	38.0	

Care must be taken in reading these figures as the national figure includes e.g. education, a field not represented at ANU and one which nationally had a 55% female participation rate in 1989. If education is taken out, the national participation rate reduces to 35% that year. ANU and national trends are very similar.

6.3.4 Distribution of Graduate Students

Table 15 shows the numbers of graduate students located in various parts of the University for the years 1991 and 1992.

Table 16 gives the numbers of graduate students per academic staff member in various parts of the University in 1992. The numbers of academic staff were taken from 1991 statistics since the 1992 staff numbers were not available at the time the table was prepared, but this will have negligible effect on the significance of the data.

It should be noted that Table 16 gives a slightly misleading representation of research-student load per staff member because some areas of the University have substantial proportions of staff who are normally expected to play little role in research-student supervision, e.g. the Research School of Chemistry has an academic staff of 67, but 33 of these are Post-doctoral Fellows. Table 17 shows the number of graduate students per "effective" academic staff member, where the "effective" number excludes Post-doctoral Fellows, Tutors and Senior Tutors. In any event, it is clear that the staff of the Arts and Science faculties make a very substantial contribution to research-student supervision at the University, particularly in view of their additional responsibility for undergraduate teaching.

Table 15

POSTGRADUATE ENROLMENT, 1991 AND 1992
Including Full Fee Paying Students

	Ph.D		MASTER'S DEGREE				OTHER		TOTAL	
	1991	1992	Research		Coursework		1991	1992	1991	1992
IAS										
RSBS	41	43	1	2			1		43	45
RSC	29	38	1	2					30	40
RSES	19	22		1					19	23
JCSMR	48	53							48	54
RSPacS	111	131			34	63	174	206	319	400
RSPHysSE	74	87	1			2			75	89
RSSS	48	59	1	2	20	23	18	14	87	98
MSSSO	16	15						2	16	17
SMS	13	11	2	1					15	12
sub-total	399	459	6	8	54	88	193	223	652	778
CENTRES										
CRES	10	15	3	4					13	19
NCEPH	14	18	3	2	8	15	16	19	41	54
CISR	1	1	1	1					2	2
sub-total	25	34	7	7	8	15	16	19	56	75
THE FACULTIES										
Arts	89	95	35	38	90	113	118	184	332	430
Asian Studies	22	12	6	5	1	5	12	24	41	46
Econs-Comm	25	23		26	20	6	76	119	121	174
Law	3	3		1	5	14	163	160	171	178
Science	116	146	42	47	22	25	82	91	262	309
sub-total	255	279	83	117	138	163	451	578	927	1137
ITA						6		39		45
TOTAL ANU	679	772	96	132	200	272	660	859	1635	2035

MEM
Statistical Office
26/11/92

Table 16
Postgraduate Students Per Staff Member (1992)
(Including Full-Fee Paying Students)
N= number of academic staff from 1991 statistics

	N	PhD	Master (research)	All Research Students	All Graduate Students
IAS					
RSBS	77	0.56	0.03	0.59	0.58
RSC	67	0.57	0.03	0.60	0.60
RSES	41	0.54	0.02	0.56	0.56
JCSMR	76	0.70	0	0.70	0.71
RSPacS	106	1.24	0	1.24	3.05
RSPHysSE	92	0.95	0.02	0.97	0.97
RSSS	79	0.75	0.03	0.78	1.24
MSSSO	21	0.71	0	0.71	0.81
SMS	23	0.48	0.04	0.52	0.52
Sub Total	582	0.79	0.02	0.81	1.34
CENTRES					
CRES	16	0.94	0.25	1.19	1.19
NCEPH	17	1.06	0.12	1.18	3.17
CISR	10	0.10	0.10	0.20	0.20
Sub Total	43	0.79	0.16	0.95	1.74
THE FACULTIES					
Arts	135	0.70	0.28	0.98	3.20
Asian Studies	40	0.30	0.13	0.43	1.15
Econ & Comm	72	0.32	0.08	0.40	2.42
Law	44	0.07	0.02	0.09	4.04
Science	154	0.95	0.30	1.25	2.00
Sub Total	445	0.63	0.22	0.85	2.55
Total ANU	1070	0.72	0.11	0.83	1.86

Table 17

Postgraduate Students per "Effective" Staff Member (1992)**(Including Full-Fee Paying Students)****N¢ number of academic staff from 1991 statistics, less number of Post-doctoral Fellows, Tutors and Senior Tutors**

	N¢	PhD	Master (research)	All Research Students	All Graduate Students
IAS					
RSBS	55	0.78	0.04	0.82	0.82
RSC	34	1.12	0.06	1.18	1.18
RSES	34	0.65	0.03	0.68	0.68
JCSMR	63	0.84	0	0.84	0.86
RSPacS	95	1.38	0	1.38	4.21
RSPHysSE	80	1.09	0.03	1.12	1.11
RSSS	69	0.86	0.03	0.89	1.42
MSSSO	14	1.07	0	1.07	1.21
SMS	19	0.58	0.06	0.64	0.63
Sub Total	463	0.99	0.02	1.01	1.68
CENTRES					
CRES	14	1.07	0.29	1.36	1.36
NCEPH	16	1.13	0.13	1.26	3.38
CISR	8	0.13	0.13	0.26	0.25
Sub Total	38	0.89	0.19	1.08	1.97
THE FACULTIES					
Arts	124	0.77	0.31	1.08	3.48
Asian Studies	28	0.43	0.18	0.61	1.64
Econ & Comm	55	0.42	0.11	0.53	3.16
Law	40	0.08	0.03	0.11	4.45
Science	134	1.09	0.35	1.44	2.31
Sub Total	381	0.73	0.25	0.98	2.98
Total ANU	882	0.88	0.13	1.00	2.26

7. FUTURE POSSIBILITIES

In responding to the recent reports of the Stephen Committee inquiring into the future of the IAS, and of the Caro Committee inquiring into University administration, the University firmly confirmed its intention to continue development of the Graduate School.

Thus, it can be fairly claimed that the continuing development of the Graduate School is not at issue at this time. Rather, the question is what form that development should take.

The major questions confronting the University concerning the Graduate School are:

Should the elements of the Graduate School acquire a more formal status? and

Should the Graduate School have a more substantial role in the allocation of resources for graduate education?

The major issues concerning graduate education in general at the ANU are, in my judgement, the allocation of adequate resources in response to a rapidly growing graduate-student population; the quality of supervision (section 4.7); and the formulation of a policy concerning the desirable balance between graduate and undergraduate student numbers (section 4.15).

In late 1992 the Academic Boards noted the University's intention to establish a working party early in 1993 "to consider the future development of the Graduate School". The following sections present some specific recommendations that are intended to provide a partial basis for the working party's deliberations. It is assumed that they will be considered in conjunction with other relevant material, e.g. the reports prepared by Program Convenors in late 1992 as part of a review of individual Graduate Programs. Presumably the working party will also invite submissions from all interested parties. In cases where the recommendations flow from discussion occurring earlier in this report, reference is simply made to the appropriate section. Unless indicated otherwise in specific cases, it is assumed that the operating procedures of paper 741/1992 will continue to apply. It is stressed that the recommendations have no status other than being the personal submissions I would make to the working party at the time of writing.

7.1 The Key Issue: Formality or Informality?

No Graduate School structures or procedures are yet embodied in University legislation. The only elements of the Graduate School that have any sort of formal status are as follows:

- The Graduate School itself was established by resolution of Council
- The office of Dean of the Graduate School was established by Council
- Graduate Programs are formally accredited by the GDC, upon advice from the Graduate School Advisory Committee (GSAC)
- Program Convenors are appointed by the Vice-Chancellor
- Operating procedures of the Graduate School (paper 1947a/1990) were approved by BIAS and BTF (after excision of the proposal to change Prescribed Authority arrangements)
- GSAC is appointed by the Vice-Chancellor
- Graduate students are formally enrolled in Graduate School Programs.

Otherwise, the structures and procedures of the Graduate School are informal and heuristic.

There are those who believe that the Graduate School should continue to develop in this informal manner, arguing that this provides maximum flexibility for development and minimises bureaucratic inhibitions to innovation. Certainly there is strength in this argument.

However, if Graduate Programs are to have a truly substantive role in graduate education at the ANU, and this surely is implicit in the establishment of the Graduate School, then the various elements of a Graduate Program, in particular the Board of Studies, the position of Convenor, and the concept of Program membership, will need to have well-defined formal status. Many of the suggestions made in this report with a view to solving present problems in graduate education at the ANU can only be implemented if the relevant Graduate School elements have such status.

Hence, recommendation (1):

- (1) *That the following entities, offices and concepts be given a formal basis:*

The Graduate School

The Dean of the Graduate School

Graduate Programs

Graduate Program Convenors

*Staff membership of Graduate Programs**Student enrolment in Graduate Programs***7.2 Program Structure**

The role of a Program Convenor has already been spelled out in the "Mechanics paper" (1947a/1990), and approved by the Academic Boards. However, the composition and role of the Board of Studies is much less clearly defined. Section 7 of the Mechanics paper specifies that each Program will have a Board of Studies "which will represent the academic staff of the Program and will include graduate student membership". It is explicitly stated that "the Board of Studies will operate informally", and its functions are rather loosely defined, although they do include advising the Dean of the Graduate School concerning appointment of the Program Convenor. No indication is given as to how a given Program will establish its Board of Studies.

In fact, each Program Convenor has now arranged the establishment of a Board of Studies and reported its composition to the Dean of the Graduate School. In many cases it is not clear exactly how this establishment occurred, and the extent and nature of activities undertaken by different Boards vary greatly. For some Programs the composition of the Board was specified in the original proposal for accreditation of the Program.

Presumably the structure and membership of each Board of Studies should be determined by the members of the Program. However, Program membership is also very loosely defined: "Staff may be associated with more than one Program, provided that they are able and willing to be involved in teaching or supervision in each such Program:" (section 3.9, 1947a/1990). Presumably the Board of Studies should be the body responsible for membership accreditation. In order to resolve this chicken-and-egg situation, it is proposed that initially the Deputy Vice-Chancellor should determine the structure and membership of each Board of Studies, acting on the advice of the Dean of the Graduate School, formulated after due consultation, especially with the Program Convenor. It would be expected that such initial structure and membership would conform fairly closely to existing informal arrangements.

Hence recommendations (2) and (3):

- (2) *That the structure and membership of each Board of Studies be determined in the first instance by the Deputy Vice-Chancellor on the recommendation of the Dean of the Graduate School.*
- (3) *That members of academic staff be registered with particular Graduate Programs at the determination of the Program Board of Studies.*

It has already been determined that each graduate student will be enrolled in a single Program, and procedures for such enrolment have already been developed. In future, members of the Board of Studies should be elected by the staff and students in the Program. The election procedures should be as simple as possible. Hence recommendations (4) and (5):

- (4) *That staff members of each Board of Studies, other than ex-officio members, be elected by the staff registered with the Program.*
- (5) *That student members of each Board of Studies be elected by the students enrolled in the Program.*

It was indicated in paragraph 3.8 of the Mechanics paper that although a graduate student "will be enrolled in a single Program, he or she may have an association with other Programs". As discussed in Section 5 of the present report, procedures have since been developed whereby students may register a secondary affiliation with up to two other Programs. Hence recommendation (6):

- (6) *In addition to their primary enrolment, graduate students may register a secondary*

Hitherto Convenors have been appointed by the Vice-Chancellor for 2-year terms. It is proposed that this practice be continued. Hence recommendation (7):

- (7) *That Graduate Program Convenors continue to be appointed for terms of 2 years by the Vice-Chancellor, on the recommendation of the Board of Studies of the Program concerned and the Dean of the Graduate School.*

It will be clear from various parts of this report that Convenors play a key and very responsible role in the operation of the Graduate School, often involving a good deal of time and effort. It seems appropriate therefore that the University should consider some form of remuneration for this work. This complex matter has been discussed in section 5.5.1. Hence recommendation (8):

- (8) *That the Graduate School Advisory Committee consider the desirability and means of remunerating Program Convenors, and make appropriate recommendations to the Vice-Chancellor.*

As the final element of Program structure, it is obviously desirable that the Prescribed Authority question be re-visited (see section 5.5.2). Hence recommendation (9):

- (9) *That the Graduate School Advisory Committee consider the proposition that there be a single Prescribed Authority for each Graduate Program, and advise the Vice-Chancellor accordingly.*

Although the program structure arrangements recommended in this section may seem at first sight to be excessively bureaucratic, they are all relatively simple, and provide a framework whereby academic staff may be involved at the local level in taking initiatives which will enable Graduate Programs to play a substantive role in maintaining and enhancing the quality of graduate education. An obvious example is the possible introduction of formal coursework in the PhD degree course in particular areas where this might be deemed desirable.

7.3 Supervision of Research Students

From section 4.7, recommendation (10):

- (10) *That the Graduate School Advisory Committee develop a detailed scheme for the accreditation of supervisors of research students, and report to the Academic Boards.*

Item 3.5 of the Mechanics paper (1947a/1990), as adopted by the academic boards, stated that "Arrangements for selection of supervisors will be developed by each Program and submitted by the Program Convenor to the Dean of the Graduate School for approval". In fact such arrangements have not yet been instituted for any Program, probably because under the present informal situation no mechanism exists for action by a "Program" per se. However, if the structural arrangements advocated in Section 7.2 above are adopted, the Program Board of Studies could be the active agent. Hence recommendation (11):

- (11) *That each Program Board of Studies develop arrangements for selection of supervisory panels for research students and submit such arrangements to the Graduate Degrees Committee for approval.*

7.4 Mid-term Reviews

Under present arrangements each PhD student is subject to a mid-term review. Such reviews were instituted by the Academic Boards in 1982, with the requirement that each Research School and Faculty work out its own procedures. Understandably, the procedures developed vary widely across the University. This produces considerable uncertainty in the minds of many students, as also does the

In May 1991 the Vice-Chancellor asked me to review procedures for mid-term reviews, particularly with a view to clarifying the possible consequences of such reviews. In addition, the Science Faculty made a similar request in October 1991. It has not yet been possible to complete this review. Hence (12):

- (12) *That the Dean of the Graduate School review procedures for mid-term reviews of PhD students, with a view to obtaining greater University-wide consistency and to clarifying the consequences of mid-term reviews, and make appropriate recommendations to the GDC.*

One consequence of the present arrangements is that students in a given Program, being located in different areas of the University, may be subject to quite different mid-term review procedures. In the context of the Graduate School Program system, this is anomalous. There seems to be no reason why the responsibility for mid-term review for all PhD students in a given Program should not be vested in the Program Board of Studies, hence achieving uniform treatment for all students in the Program. This procedure would be facilitated if greater University-wide consistency were achieved via recommendation (12). Hence recommendation (13):

- (13) *That the responsibility for conducting mid-term reviews for students within a given Program be vested in the Board of Studies of that Program.*

7.5 Procedures for Resources Allocation

Problems arising from the uneven allocation of resources for graduate students in various parts of the University were discussed in detail in section 5.5.3. It was suggested there that these problems might be overcome by adopting some sort of centralised system. Hence recommendation (14):

- (14) *That the Graduate School Advisory Committee investigate the possibility of devising a practicable system for achieving a more equitable allocation of resources to graduate students, including funds for conference attendance and fieldwork, and report to the Academic Boards.*

It has been suggested that the University should determine a minimum level of resources that should be available to graduate students, eg for office accommodation, access to computer facilities, provision for photocopying, as well as conference-travel and field-work. Such University-wide determination is difficult because of the widely differing needs of students in different disciplines. However, the problem could be handled at a Program level. Hence recommendation (15):

- (15) *That each Program Board of Studies determine a minimum level of resources that should be available to research students in the Program.*

7.6 Miscellaneous Recommendations

During early discussions of the Graduate School, a divisional structure was suggested (see, for example, paper 764/1988). Although this arrangement was not adopted, there could be circumstances in which it might have some merit. For example, if a Program in Southwest Asian Studies should emerge in the future, a Division of Asian Studies, involving the 3 Programs in East-, Southeast- and Southwest Asian Studies might be attractive for promotional purposes, and for encouraging interaction between students and staff in the 3 areas. The conduct of methodological seminars and workshops as described in sections 4.8 and 5.2.2 would sometimes be more efficiently based on groups of kindred Programs rather than on single Programs. Programs associating to form a Division would each have their own Convenor, but some form of joint Board of Studies might be possible. Hence recommendation (16):

- (16) *That the Graduate School Advisory Committee consider the possible voluntary association of kindred Programs to form a Division, and develop appropriate administrative procedures.**

From section 4.5, recommendation (17):

- (17) *That the Graduate School continue to develop initiatives aimed at increasing the participation of women in research degrees.*

From section 5.5.4, recommendation (18):

- (18) *That as far as possible, use of the terms "Graduate Program" and "Program Convenor" be restricted to accredited Graduate School entities.*

The Director of RSPacS (Professor R.G. Ward), in responding to a request for comments on the future development of the Graduate School, has suggested in a letter dated 20 November 1992 that "there is a strong case for the Graduate School taking over the administration of all graduate diploma and master's coursework programs". He continues: "Many of these are sited in a particular part of the University but the teaching is garnered from many different parts of the University and beyond. I think that a Graduate School with the resources to organise these through the graduate programs, rather than having them sit in individual departments, would be more effective and might result in better cooperation. It may also help to eliminate unnecessary layers of administration".

Implementation of this suggestion would have very substantial resource implications, and the idea may well be unacceptable to significant sections of the University. Nevertheless, it is worthy of serious consideration. Hence recommendation (19):

- (19): *That the University consider the possibility that the Graduate School should administer all Graduate Diploma and Master by coursework programs.*

It was suggested in section 4.15 that the recent large increase in graduate student enrolments at the ANU raises the question of the desirable balance between graduate and undergraduate student numbers. Hence recommendation (20):

- (20) *That the University formulate a clear policy on the desirable balance of graduate and undergraduate students.*

Other matters that the working party might consider are the adequacy of the University's resources for the production of the Graduate School Prospectus and Handbook and other student-related publications, and the continuing proliferation of named Master degrees and Graduate Diplomas.

8. CONCLUSION

The progress of the Graduate School has not been without growing pains, and in some cases substantial opposition, at least at the outset. However, experience thus far suggests that the Graduate School provides a framework within which a lot of valuable initiatives can be fostered and developed for graduate education at the ANU.

Some of the significant achievements of the Graduate School since its inception are the following:

1. A large increase in the number of staff actively concerned with improving the quality of graduate education at the University (Program Convenors, members of Boards of Studies, members of various Graduate School committees, etc.).
2. In many areas, substantial contributions to the enrichment of graduate education (seminars, workshops, etc.).

*In the spirit of recommendation (18), the Graduate School should avoid the use of the word

3. Increased interaction between graduate students across campus.
4. Increased interaction between staff across campus.
5. Improved pastoral care for graduate students.
6. Better mechanisms for the presentation of graduate student concerns to the University administration.
7. Enhanced promotion and recruitment processes (eg Graduate School prospectus, promotional activities of individual Graduate Programs).
8. Provision of a Study Skills adviser specifically for Graduate Students.
9. Substantial initiatives to encourage women's participation in research degrees.
10. Establishment of Graduate School Forum.
11. Publication of Graduate School handbook.
12. A significant contribution to increasing the coherence of the University.

The number of graduate students at the ANU has increased dramatically in the two years or so of the Graduate School's existence. To what extent this increase can be attributed to the operation of the Graduate School is not clear. However, as stressed above, it signals the need for the University to formulate a policy on the desirable balance of graduate/undergraduate students, which will to a considerable extent determine the nature of the University.

This report is an abbreviated and updated version of a more detailed report which was lodged with the Vice-Chancellor on 8 February 1993 with the intention that it should serve as a basic reference for the working party to be established to advise on the future development of the Graduate School. It was subsequently distributed to Deans and Directors. Copies are available from the Graduate School Office.