



THE AUSTRALIAN NATIONAL UNIVERSITY

THE GRADUATE SCHOOL

Current Issues in Graduate Education at the ANU

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DISCUSSION PAPER
CURRENT ISSUES IN GRADUATE EDUCATION AT THE ANU
(R.H. Spear, Dean of Graduate School)

This paper discusses what I consider to be the major issues currently confronting the ANU in postgraduate education. The exercise was undertaken initially to help me sort out my own thinking. The paper is distributed in the hope that it might be similarly helpful to others and that it might help focus discussion within the University of future directions in graduate education. In general no attempt is made to provide detailed prescriptions by which the issues raised should be addressed.

The classification of issues has been distilled from the following sources:

- (i) The ANU Strategic Plan 1995-2004;
- (ii) The report of the Working Party on Future Directions of the Graduate School, and the University's response thereto, as summarised in Council documentation for 14 July 1995;
- (iii) The report of the 1995 review committees for the IAS, and in particular the report of the committee reviewing the IAS as a whole;
- (iv) Exit interviews conducted with approximately 50 individual PhD students over the past couple of years
- (v) Detailed discussions late in 1995 with 45 individual Convenors of Graduate Programs;
- (vi) My own experience since mid-1990 as Dean of the Graduate School and Chair of the Graduate Degrees Committee;
- (vii) My interactions with the Stephen Committee, the Caro Committee, three Quality Audit reviews, and the 1995 IAS review committee;
- (viii) Regular meetings since mid-1990 with the President of PARSA and with the PARSA executive;
- (ix) A visit in late 1993 to graduate schools, or their equivalent, at major universities in the UK and the US, including Cambridge, Oxford, Harvard and Caltech.

The following issues have been identified:

1. Achievement of strategic plan goal for graduate student population.
2. Provision of fee waivers for overseas PhD students.
3. Increased numbers of research students working off campus.
4. Development of Graduate Teaching Program.
5. Supervision.
6. Resources allocation.
7. Graduate student administration.

8. Duration of PhD Scholarships.
9. Coursework as part of the PhD.
10. PhD examination procedures.
11. Mid-term reviews.
12. Graduate tuition fees.
13. Undergraduate content of graduate coursework.
14. Participation of women in graduate studies.
15. Academic tenure.

1. ACHIEVEMENT OF STRATEGIC PLAN GOAL FOR GRADUATE STUDENT POPULATION

One of the most significant elements of the Strategic Plan is an explicit target that graduate students comprise 30 per cent of the student population by 2004, the total student population being that of a “*medium sized institution*”. I have argued elsewhere that this objective presents some formidable challenges (see, for example, attachment to 2276/1994).

Fig. 1 shows how the total number of graduate students at the ANU has varied since 1980. Also shown at the year 2004 are the numbers corresponding to the Strategic Plan 30% goal for various assumptions concerning the total student population in 2004:

- 12000, as specified in early drafts of Part A of the Strategic Plan, and as assumed in some contributions to the final version of Part B (3600 graduate students);
- 12650, corresponding to a 10% increase in undergraduate numbers (3795 graduate students);
- 11500, corresponding to constant undergraduate numbers (3450 graduate students).

For reference, the student population for 1995 is shown in Table I.

Table I	ANU Student Population in 1995	
	Graduate Students	
	PhD	1021
	Master (Research)	99
	Coursework	1206
	Total	2326
	Undergraduates	8051
	Total enrolments	10377

Fig. 2 shows the ratio of postgraduate enrolments to total enrolments since 1980. The Strategic Plan 30% goal is indicated at the year 2004.

The Strategic Plan does not specify the balance between research students and coursework students. If the balance remains the same as at present, the main difficulty will be achievement of the research-student component. However, if the proportion of research students is allowed to fall substantially below its present level, the main difficulty will lie with achievement of the coursework numbers. The following discussion covers these two scenarios.

(a) Assuming that balance between research-student and coursework-student numbers remains

For a total student population of 12000 in 1994, the number of PhD students required to achieve the Strategic Plan goal will be 1580, an increase of 559 over 1995. The corresponding numbers for a population of 12650 are 1666/645; and for 11500, 1514/493. In any case, an increase of about 500 in PhD student numbers is required over the next 8 years, that is, an increase of about 50% on present numbers.

Fig. 3 shows the variation in PhD numbers since 1980; the crosses at year 2004 show the numbers required to meet the Strategic Plan goal for the various assumptions for total student numbers.

If the trend over the past 5 years or so were maintained, then the objective would be met. However, maintenance of this trend will be no small task. Problems to be addressed include the following:

- **Stipend Scholarships** An increase of 500 in the number of PhD students on course means an increase of about 500/3.3 = 150 new scholarship awards per year (assuming an average scholarship duration of 3.3 years). It is to be hoped that a significant proportion of this increase would be covered by APA awards, but that is highly problematic, in spite of the strong arguments presented in the IAS review committee report for an increase in the number of APAs allocated to the ANU (partly through encouragement for greater student mobility). The ANU received a total of 89 APA awards for 1996. Some appreciation of the magnitude of the problem may be gained from the following. The ANU at present provides stipend scholarships from its own funds for about 50% of PhD students. If this proportion remained constant, an additional 500 PhD students would require an extra $\$0.5 \times 500 \times 15000 = \3.75 million per year from ANU funds.

It may be that the goal could be achieved by a large increase in external funding, or by a large increase in the numbers of enrolled PhD students working at off-campus institutions (eg. CSIRO). However, some members of the academic community might not consider the latter option to be congenial to the University's ethos. It is interesting to note that the Strategic Plan makes a rather cautious commitment to "*increase funding, including from external sources, for honours and PhD scholarships to recruit outstanding students*".

- **Office Accommodation** Finding accommodation for an extra 500 PhD students is a daunting prospect. Available accommodation is already stretched to the limit in some parts of the University, e.g. the Faculty of Asian Studies. It may be that developments in Information Technology will relieve the problem to some extent by reducing the need to provide on-campus accommodation. The University should consider whether the increasing number of offices (currently about 6%) being allocated to retired academic staff might not be better devoted to the needs of research students.
- **Resources** The additional 500 PhD students will need resources for such items as field work, computing, research materials and conference attendance. If the present Arts Faculty provision of up to \$2500 per student per year were taken as normative (and on average across the University it will probably be too low), this would require an additional \$1.25 million per year. There would also be an increased need for staff for Study Skills, Counselling and general administrative support.
- **Recruitment** It is not obvious that there will be an extra 500 bodies out there in 2004 wishing, and qualified, to become ANU PhD students.
- **Supervision** At present the number of PhD students per academic staff member (excluding teaching only classifications) is approximately 0.9, an increase of 500 in PhD student numbers would raise this to 1.3. The distribution of supervisory load across the University is very uneven. In some areas, capacity is fully stretched, in others it is substantially under-utilised.

In spite of the reservations expressed above, it should be noted that the IAS review committee, after a thorough examination of resources available, considered that "*the potential exists for the IAS to supervise three times as many PhD students as it does today*". In 1995, the IAS and Centres had 642 PhD students. Thus, a factor of three increase would provide an extra 1284 students, far in excess of the required 500. It is therefore worth quoting the review committee's remarks in full:

“The IAS represents a major national and international resource for PhD training and other postgraduate studies. However the number of PhD students in the IAS is only about one third greater than the number of recurrently funded academic staff. This represents an under utilisation of a substantial resource. In other universities around the world research-active members of the academic staff could expect to supervise at least three PhD students at any one time, and in some cases substantially more.”

It goes on to note that even the much more modest increase prescribed by the Strategic Plan

“will be hard to achieve unless the present arrangements for allocating PhD scholarships are changed, and there is more incentive for students to migrate from the institutions where they took their first degree”.

In summary, it seems fair to say that if the present balance between research students and postgraduate coursework students is preserved, then the Strategic Plan goal of 30% graduate students by 2004 will only be achieved via a redistribution of University resources so substantial as to change significantly the character of the University. Presumably, however, the authors of the Strategic Plan did wish to effect significant changes.

(b) Allowing a substantial reduction in the proportion of research students

In 1995, 44% of graduate students were PhD students. If, for argument's sake, this proportion were allowed to fall to one third, then the Strategic Plan objective for 2004 would be achieved (for 12000 students total) with a graduate student body comprising 1200 PhD students, 116 Master-by-research students, and 2284 coursework students (it is assumed for the purposes of this calculation that the ratio of M(res) to PhD students remains constant). This represents an increase of 179 PhD students (relative to 1995). Inspection of Fig. 3 suggests that this should not be too difficult to achieve. On the other hand, the number of coursework students (1206 in 1995) will have to increase by about 1000. This is not impossible, but will demand substantial personnel resources for preparation, presentation and evaluation of the courses. It is for the University to decide whether it would wish to have a graduate student population with such a reduced research-student component.

2. PROVISION OF FEE WAIVERS FOR OVERSEAS PhD STUDENTS

Historically, research students from overseas countries have made a major contribution to the ANU's research enterprise. However in recent years, as noted by the IAS review committee, *“the imposition of overseas student fees has reduced significantly the recruitment of graduate students from abroad”*. The committee argues that *“the government should reconsider its position on overseas students as part of its overall policy for closer links with the world”*.

Partly as a contribution to achieving the 30% goal, the Strategic Plan states that *“the University aims to be the first choice of an increased number of research students from top overseas institutions”*. The problem is that in order to support an overseas PhD student, not only must a stipend scholarship normally be provided, but course fees must also be funded. In 1996 these were in the range from \$13000 to \$16500 per year. If prospective students have to pay these fees from their own resources, US universities become financially more attractive. Some parts of the ANU do provide a limited number of fee-waivers, but this is a costly operation, and the financial arrangements involved are less than totally transparent.

In addition to scholarships provided to students from selected developing countries as part of its foreign aid program, the Federal Government provides a limited number of Overseas Postgraduate Research Scholarships (OPRS) which cover tuition fees and are available to students from all countries. Competition for these awards at the ANU was intense, and many excellent applicants were unsuccessful; the Chair of the Joint Committee on Postgraduate Awards considers that it is probable that more than 30 of the unsuccessful applicants would have been very competitive in the APA competition had they been eligible.

It is clear that both the quality and quantity of PhD students at the ANU could be significantly increased if more funds were available to pay tuition fees for overseas students. Possible mechanisms might include the establishment of a pool of OPRS-equivalent fee-waiver scholarships to be allocated to the Graduate School for competitive award by the Joint Committee on Postgraduate Awards.

Another approach to the problem is the somewhat intriguing commitment in the Strategic Plan to “expand opportunities for the Graduate School to recruit top research students from a wide range of overseas institutions through provision of special research assistantships and tutorships”.

3. INCREASED NUMBERS OF RESEARCH STUDENTS WORKING OFF CAMPUS

In recent years increasing numbers of research students have been funded from external sources or have performed their research at off-campus institutions such as industrial research laboratories or government research organisations (eg. CSIRO). The development of the CRCs has enhanced this trend. The Strategic Plan makes it clear that the University will encourage this practice:

“The University will further develop its links with industry, including industry-based research degrees in which students spend significant portions of their courses on the premises of the industrial partner and have both ANU and industry supervisors”.

To some extent, as noted in section 1(a) above, this may be seen as a means of achieving the 30% graduate student goal. However, it is also considered to have great intrinsic value. For example, the Strategic Plan considers that:

“The CRCs have improved the University’s graduate student recruitment capability, widened the scope of research problems tackled by staff and students, and strengthened relationships with industry”.

The Faculties Strategic Plan notes that off-campus involvement will “*increase the diversity of experience for PhD students*”, and the Faculty of Engineering and Information Technology is developing research courses in which, because of the perceived enhancement of educational experience gained thereby, “*students spend a substantial percentage of their course time in the collaborating industry’s environment*”. Off-campus location does, however raise problems, including the following:

(a) Requirements for attendance at the University

In the past the ANU has had quite stringent attendance requirements for its research students. In 1993 the Graduate Degrees Committee, while re-iterating the numerous benefits to be obtained by attendance at the University, recognised that there may be “exceptional cases” where established attendance requirements might be relaxed to some extent, e.g. “*PhD candidates working elsewhere in institutions which are linked with the University, such as CRCs*”. Paper 1599A/1993 (p.426 of 1996 Graduate School Handbook) sets out, for PhD students, procedures for considering such “exceptional cases”, each of which is considered on an individual basis and can only be approved by the full Committee. Similar arrangements for Master (Research) students are under consideration. The seminars and workshops conducted by the relevant Graduate Programs have played a very useful role in engaging CSIRO-based students more closely with the University.

(b) Supervision arrangements

It is incumbent upon the University to ensure that the research students working in off-campus situations are provided with supervision consistent with the University’s standards. The PhD rules (5A and 6) require that for each PhD candidate the prescribed authority appoint a supervisory panel of “*not fewer than 3 persons, of whom at least one shall be a supervisor*”. A supervisor must be “*a member of the full-time academic staff of the University*”, except that the Graduate Degrees Committee may approve the appointment of a supervisor who is not a full-time member of the academic staff of the University provided that “*in such a case at least one person who is a full-time member of the academic staff of the University shall also be appointed as a supervisor*”.

Thus, a student working in an off-campus institution may have a member of that institution as a supervisor, provided that an appropriate ANU staff member is appointed as joint supervisor. Presumably this policy has been adopted partly to provide continuity of supervision, and also to ensure that somebody with formal status will carry the can if something goes wrong with the student's course.

In practice this arrangement has sometimes proved to be less than ideal. In some cases, the supervision provided by the ANU supervisor is only nominal, and indeed it appears that the research project involved is sometimes of very little interest to any member of the ANU staff. Some ANU staff have indicated that they feel distinctly uncomfortable with being what has been described as "flag-of-convenience" supervisors. The question also arises as to whether it is appropriate for ANU students to work on thesis topics which are of little real interest to any ANU staff member.

If off-campus arrangements are to increase substantially, the University should consider whether the present joint-supervision prescription is satisfactory. It might be desirable to allow staff members of off-campus institutions to act as supervisors, possibly by strengthening the role of adjunct appointments. It would be necessary to ensure that the University's general obligations to students working in such situations were fully met.

(c) Intellectual property

The Graduate School has been receiving an increasing number of inquiries from academic staff and graduate students concerning intellectual property issues, mainly in connection with research performed by graduate students working with CRCs and various external bodies. There is a great deal of uncertainty and confusion. The consequences of ill-advised arrangements can be quite serious. The Council of Australian Postgraduate Associations claims that CRCs "*are failing in their duty of care to postgraduate students on the issue of intellectual property ownership*".

Official ANU policy is contained in Finance Committee paper 2634B/1986 (1996 Graduate School Handbook p.474), but only one brief paragraph refers specifically to students. There is an urgent need for a clear, authoritative and contemporary intellectual-property statement from the University, especially in relation to research performed by graduate students.

4. DEVELOPMENT OF GRADUATE TEACHING PROGRAM (GTP)

The GTP, an initiative of the Graduate School, aims ultimately to give as many ANU PhD scholars as want it the experience of both University teaching and of systematic training and support in the course of their PhDs. In this way it provides a distinctive character to the ANU PhD, at least in the Australian context. The need for such experience was stressed by several of the 1995 review committees.

The GTP is in the second year of a two-year pilot program. By the end of 1996 approximately 100 PhD students will have graduated. The Program consists of a semester-long series of weekly seminars and activities on various aspects of university teaching. Student participants must be concurrently tutoring or demonstrating in The Faculties. Initiatives are under way this year aimed at increasing the participation of IAS-based students. The Program Co-ordinator is Mr John Clanchy, working on a half-time basis.

The Program has been warmly received by graduate students and academic staff. Summaries of student evaluations, and copies of the Co-ordinator's report for 1995, are available from the Graduate School. The Program was reviewed at the end of 1995 by James Wilkinson, Director of Harvard's Bok Center. His very positive report is also available from the Graduate School. In his conclusion he commented:

"The best part of this sort of program, it seems to me, is that it trains people who will take the gospel of good teaching with them out in partibus infidelium. A major contribution of the ANU may be to serve as a Center from which a new respect for teaching takes root among Australia's professors and researchers of tomorrow".

The University's Strategic Plan for Teaching and Learning commits the University to "continue and develop a graduate teaching program for PhD students to give them a structured and professional introduction to teaching" (Vol.2, p.194). It should be noted that the existence of the GTP at the ANU may well act as a significant attraction for potential PhD students.

Hitherto the GTP has been funded entirely from Quality money. Funds exist to cover 1995 and 1996, but funds will need to be identified for 1997 onwards, either from Quality money for, say 3 years, or on an ongoing basis via VCAG. The base cost, assuming that the Co-ordinator's appointment remains half-time, is approximately \$42000 per year.

5. SUPERVISION

I believe that the overall quality of supervision provided for research students at the ANU is high; to a considerable degree this is due to the system of supervisory panels (probably unique in the Australian context) that was introduced at the ANU in 1982. However, exceptions are not uncommon. Indeed, supervision problems are one of the two main areas of complaint addressed by graduate students to PARSAs and to the Graduate School. In a substantial paper submitted to the Working Party on Future Directions of the Graduate School, PARSAs commented as follows:

"PARSAs has a considerable store of anecdotal experience which clearly indicates that poor supervisory practice is one of the most pressing academic concerns to students in all areas across the campus. Evidence gathered by means of anonymous exit surveys conducted by PARSAs quantifies this experience. There is not doubt to those at the 'coal face' of being a graduate student is pressing enough to require a systematic assurance of quality."

Several of the IAS review committees commented on the need for initiatives to assist academic staff in their supervisory task. For example, one committee stated:

"Inasmuch as the student supervisor relation is the key to postgraduate training, formal training should be a requirement of all supervisors".

Although it would be naïve to suggest that this view is shared by most academic staff at the University, it does seem that over the past 5 years or so, there has been an increasing acceptance of the need to enhance the quality of supervision. For example, the University's response to the report of the Working Party on Future Directions of the Graduate School "*recognizes the desirability of professional development in the area of postgraduate supervision*", and the Strategic Plan for Teaching and Learning has as one of its major objectives: "*To strengthen and demonstrate the University's commitment to teaching and supervision*".

Working in collaboration with CEDAM, the Graduate School has evolved a strategy which combines devolved initiatives by Graduate Programs with a limited number of centralised initiatives.

Quality money was used in 1995 to fund pilot projects on supervision by half a dozen Graduate Programs. These initiatives were commended in the University's response to the report of the Working Party on Future Directions of the Graduate School. They will be evaluated by an Advisory Committee chaired by Professor Derek Robinson, and a report will be prepared as a guide for future similar activities.

In late 1994, CEDAM and the Graduate School conducted a seminar on supervision for recently appointed academic staff. This was well attended and well received. A similar half-day seminar will be held in March 1996, and it is expected that this will become a regular event. A number of other centralised initiatives are under consideration, including a possible program for new academic staff modelled on the GTP.

It is essential that the University do whatever is necessary to continually maintain and enhance the quality of its postgraduate supervision.

6. RESOURCES ALLOCATION

The allocation of resources (eg. Funds for fieldwork and conference travel; office accommodation; and access to stationery, telecommunications, computers and photocopying) ranks with supervision as one of the two main issues of concern addressed by graduate students to PARSA and the Graduate School. Taken overall, the provision of resources for graduate students at the ANU is probably unsurpassed in any other Australian university. The problems concern inequities in resource distribution and lack of clear information about resource availability. The inequity problem has been highlighted as a result of the development of the Graduate School's university-wide Programs. In the process of talking to one another, 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 Graduate Program should be provided with different resources. It is usually assumed that students in the IAS are better supported than those in The Faculties, but this is not universally so.

In their submission to the Working Party on Future Directions of the Graduate School, PARSA and the Dean of the Graduate School both suggested mechanisms by which the Graduate Program system might be used to effect a more equitable allocation of resources, and the Working Party report included some specific recommendations along these lines. However, these recommendations were firmly rejected by the joint academic boards, and it is apparently the overall view of the University that the Graduate School should have no substantial role in the allocation of resources (other than scholarships).

Rather,

"it is the responsibility of each area to provide a level of support sufficient to enable the completion of a student's agreed program of study".

However, it is interesting to note that the Science Faculty in its strategic plan advocates

"the establishment by the Graduate School of an off-the-top central fund for ensuring that postgraduate students are equally resourced across the University within the same broad areas".

It is gratifying that in its Strategic Plan for Research Management the University undertakes that it will

"by mid-1996, develop a clear statement of University policy on availability and allocation of resources to graduate students".

Such a clear statement will be an invaluable aid to graduate-student recruitment.

7. GRADUATE STUDENT ADMINISTRATION

In 1991, the University accepted a recommendation of the Caro Committee and decided that the Dean of the Graduate School should have academic oversight of the Graduate Students Section. The Working Party on Future Directions of the Graduate School, noting *"the degree of interaction and interdependence between the Graduate Students Section and the Graduate School Office"* recommended that the Graduate Students Section be re-named *"the Graduate School Administration"*. The joint committee of the two academic boards endorsed this recommendation. However Council, following intervention by the Registrar, referred the recommendation to the Vice-Chancellor for resolution in due course.

In the meantime, the Registrar had developed a proposal to re-organise the administration of students; graduate and undergraduate administration would be integrated, and the Graduate Students Section abolished as a separate entity. Staff will be multi-skilled, and none will have responsibility solely for graduate students.

The Dean of the Graduate School, who is also the Chair of the Graduate Degrees Committee, has expressed concern at the proposal, chiefly for the following reasons:

- To submerge graduate administration in a general student conglomeration will lower the profile of graduate education, which in contrary to the increased emphasis on graduate education clearly inherent in the University's strategic plan.
- It is feared that the multi-skilling process will result in a deterioration of the specialised expertise required for graduate administration.
- The Chair of the Graduate Degrees Committee relies heavily on the expert advice provided by senior and experienced members of the Graduate Students Section, particularly in handling the delicate and complex problems that often arise in connection with graduate students. It would be a disaster if this focussed expertise were dissipated.

The proposal has been considered by the Graduate Degrees Committee and both academic boards, who have called for comments from Schools and Faculties.

8. DURATION OF PhD SCHOLARSHIPS

Australian Postgraduate Research Awards (APRA) allocated before 1 January 1989 were for a period of 3 years, but extension up to a maximum of a further twelve months was easily arranged. As from that date, the maximum extension was reduced by the Australian Government to 6 months, and much more stringent conditions were imposed. The University has since 1976 applied the same general terms of eligibility and conditions to its own scholarships as those applying to APRAs (now Australian Postgraduate Awards with stipend, APA).

In October 1993, the Graduate Degrees Committee, in response to a request from BIAS, established a working party to examine the impact of the reduction in duration of scholarships on the quality of the ANU PhD. After considering the views of academic staff and graduate students, and consulting all other Australian universities, the working party has prepared a paper (723/1995) which is currently before the Committee, and should be forwarded to the academic boards in March or April.

There is a substantial view, both at the ANU and elsewhere, that there has been no decline in the standard of PhD theses, but rather that the reduction in scholarship length has concentrated minds wonderfully and resulted in more effective use of time. However, the majority of staff and students at the ANU consider that the shorter scholarship period has had negative consequences, chiefly through a tendency to choose "safe" topics and a reduction of flexibility to take account of unavoidable delays. A common view is reflected in the following comment:

"It is difficult to provide hard evidence that the quality of the PhD thesis had declined, but this may be the wrong of at least an unduly narrow approach to the question. There is a view that it is the intangible, difficult to measure aspects of PhD education which are suffering."

The working party paper presents four options:

- (a) Press the government for restoration of the previous arrangements
- (b) Press the government for more flexibility, eg to permit funds saved by early PhD completions to be used for those whose course, for legitimate reasons, goes beyond 3.5 years.
- (c) Introduction of a supplementary scholarship scheme by the ANU.
- (d) Accept the status quo, acknowledging that local areas can sometimes find supplementary funds or part-time work for students.

Most of the 1995 IAS review committees considered that PhD scholarships should be tenable for more than 3.5 years, suggesting that the current limitation inhibited the broadening of the experience of PhD students through course-work, teaching experience, language training etc. For example, the RSBS committee felt:

“that PhD training at RSBS could be further enhanced in the current length of PhD scholarships were increased, some form of coursework were introduced and the students were to gain some teaching experience.”

The committee reviewing the Institute as a whole recommended

“that the ARC should revisit the policies and procedures for the allocation of APAs”.

The committee also expressed concern at the traditional lack of mobility of Australian students, and made the interesting suggestion, for the ARC’s consideration,

“that students undertaking postgraduate study at the same institution in which they have completed their first degree should have postgraduate awards of three years’ duration, but students who move to another institution for their postgraduate study should have an award for four years”.

Not only would the latter measure increase the vigour of Australian PhDs, but it would also take account of the fact that a student changing institutions takes time to adjust to new circumstances, and is less likely to “hit the ground running” than a student carrying on from an honours research project at the same institution.

9. COURSEWORK AS PART OF THE PhD

There is a definitely increasing trend towards introduction of coursework into the ANU PhD. The Economics Graduate Program has included compulsory examinable coursework as a progress requirement in the PhD for some years. Some areas have had less formal coursework arrangements, eg CRES, RSC and MSSSO, and other areas are developing coursework of various kinds, eg RSPHysSE, RSISE, and the Graduate Program in Political Science and International Relations.

Several of the 1995 IAS review committees explicitly supported the introduction of coursework, eg

“Committee members feel that advanced level graduate coursework is vital to adequately train graduate students in biology today” (RSBS)

and

“The possibility of introducing coursework in programs for PhD students where this is not yet provided ... should be considered. ... The absence of coursework in most divisional PhD programs in the School is out of line with international practice in the English speaking world” (RSPAS).

The review committee for the IAS as a whole endorsed the concept of coursework within doctoral programs. However, it went on to note that *“the current limit on the length of PhD scholarships seems to offer little opportunity for extended compulsory coursework for PhD students at this time”.*

Some parts of the University have addressed this problem by introducing short courses, summer schools and workshops of various kinds. Most of these involve graduate students not only from the ANU but also from other Australian universities, and so may be considered as contributing to fulfilment of the ANU’s national responsibilities. Examples of annual events are the summer school conducted by the Theoretical Physics Department of RSPHysSE, the one-week workshop conducted by the Graduate Program in Earth Sciences, the Humanities Research Centre Summer School, and the one-week course conducted by the Urban Research Program of RSSS. The rationale for such initiatives is exemplified in the following extract from the announcement for the 3-week national workshop on Algebra, Geometry and Topology held at the ANU in January this year:

“Australian PhD programs suffer from a lack of coursework offerings. A PhD program in the US will typically extend over four to five years and incorporate the equivalent of two years of courses, while in Europe the undergraduate course usually contains considerably more mathematics. Students with a PhD from good US or European universities will typically graduate with a broader knowledge of Mathematics than their Australian counterparts”

It is likely that these summer-school type activities will become increasingly common at the ANU in the next few years.

10. PhD EXAMINATION PROCEDURES

The procedures for examination of ANU PhD theses are set out in Parts V and VI of the PhD Rules (p. 357, 1996 Graduate School Handbook). On the whole these procedures work very well. However, significant problems arise from time to time. They relate, for example, to the long delays that sometimes occur; ambiguity in the recommendation options allowed to examiners (particularly concerning the meaning of "minor amendments"); support available to candidates required to "revise and resubmit"; circumstances under which oral examinations are required; procedures for conduct of oral examinations; the degree of contact considered appropriate between student, supervisor and examiners; and the selection of examiners.

As it is more than a decade since there was any substantial consideration of our procedures, I intend to ask the Graduate Degrees Committee in a few months time to undertake a major review thereof. Such basic questions as the following might be addressed:

- How can the process be speeded up?
- What is the place of oral examinations?
- To what extent are external examiners necessary?
- Could the whole process be entirely internal?

The review should involve widespread consultation across the University.

11. MID-TERM REVIEWS

In 1982 the academic boards requested all faculties, schools and centres to develop appropriate procedures for conducting mid-term reviews of progress of PhD students and to report descriptions of these procedures to the Graduate Degrees Committee. It was envisaged that the mid-term review would involve a substantial piece of written work by the student based on work already done, as well as a reconsideration of such matters as the aims and objectives of the project, supervisory arrangements and the quality of the student's performance. It was not proposed to prescribe uniform procedures to apply throughout the University. Rather, it was understood that the requirements would be different in different areas, particularly with respect to timing and to the specification of written work required. In the event, procedures adopted vary substantially across the University.

The rationale for mid-term reviews has been well expressed by the Faculty of Arts:

"The primary purpose of the mid-term review must be to help the student to complete a satisfactory thesis".

The consequences of poor performance in a mid-term review, and the procedures involved in such cases, have never been codified. This has caused some apprehension among students. In 1991 a meeting of Deans noted that *"our present procedures are deficient in that the University's options for action following an unsatisfactory mid-term review had not been made clear"* and agreed that *"this aspect should be formalised in writing and publicised to students"*. The Dean of the Graduate School was asked to raise the matter with the Graduate Degrees Committee. However, action was deferred pending the outcome of the review of the Graduate School.

The variation in procedures across the University has also caused confusion among both staff and students. For example, students in a given Graduate Program located in different areas are subject to different mid-term review procedures.

Students have also complained that they have not been adequately informed of what is required of them, and indeed some students have not even been aware that a mid-term review is required until it is

almost upon them. It is clearly the responsibility of the school or faculty in which the student is located to ensure that this information is properly provided.

Some areas of the University, eg. MSSSO and the Faculty of Science, have requested the Dean of the Graduate School to initiate a University-wide review of mid-term review procedures. However, this also was deferred until the University had considered the relevant recommendations of the Working Party on Future Directions of the Graduate School. It is clear that a review by the Graduate Degrees Committee is now due. It will occur later this year.

The Working Party has made specific recommendations in this connection, and these have basically been accepted by the University. They include proposals for better dissemination of information, and a specific suggestion that *“the minimum components of a mid-term review should include: 1) a written report; 2) a seminar presentation; 3) an interview with the supervisory panel; 4) a consultation between the student and an independent observer who will normally be the head of department or, where the head is supervisor, the program convenor”*.

12. GRADUATE TUITION FEES

Prior to 1994, and since 1990, the Government permitted universities to charge fees for a limited number of postgraduate courses: *“Specialised courses which are designed for professional upgrading or extension purposes”*, with a research component of less than 50%. Accordingly, the ANU charged fees for a small number of courses, eg. Grad Dip in Foreign Affairs and Trade, Master of Clinical Psychology. In November 1993 the Government relaxed these guidelines and extended the coverage to permit the charging of fees for postgraduate courses with *“whatever combination of coursework and research elements they choose”*, ie *“irrespective of the level of research content”*. Some nursing and education courses were excepted. This continues to be Government policy. On this basis the ANU decided in late 1993 to impose tuition fees for all *“coursework”* and *“coursework and research”* postgraduate courses *“in respect of new part-time enrolments from 1994 onwards”*. The corresponding full-time enrolments would continue to be on a HECS basis.

The University reviewed this policy in mid-1994, partly in response to student complaints that the policy discriminated against women and low-income earners and that the payment arrangements required full payment up front and could not be deferred as is possible with HECS. It was decided to consider extension of tuition fees to include students enrolled on a full-time basis.

In September 1994, the University decided to charge a \$5000 fee in 1995 and 1996 for participation in the Legal Workshop course, which leads to the award of the Graduate Diploma in Legal Practice. It also approved a loan scheme to assist students to meet the fee. In announcing the decision, the Vice-Chancellor indicated that specific recommendations of fees for full-time students in other postgraduate courses in 1995 would be considered by Council in October.

The Isaac Review Committee on Graduate Tuition Fees met in November 1994. Its report, accepted by Council in December, accepted *“in principle the charging of Graduate Tuition fees”* to both part-time and full-time coursework postgraduate students, but recommended means by which access, equity and hardship considerations should be addressed.

It was decided that it was too late to impose new fees (other than for the Legal Workshop) for 1995. During 1995, the University failed to reach agreement on the full-time fees question for 1996.

The delays and confusion have greatly complicated the preparation of promotional literature for postgraduate courses, and have introduced additional costs into the process. It is probable that consequent uncertainty in the minds of prospective students was substantially responsible for the decrease in new enrolments for coursework Master degrees and Graduate Diplomas that occurred in 1995 and seems likely to occur again in 1996. It is vital that the University produces a clear policy on postgraduate fees within the next few months.

13. UNDERGRADUATE CONTENT OF GRADUATE COURSEWORK

In July 1992, the academic boards, acting on a recommendation of the Graduate Degrees Committee, resolved

“to approve that by 1 January 1994 the proportion of undergraduate pass degree units in graduate degrees and diplomas be, unless explicitly exempted by the GDC for a specific course in very special circumstances, one third or less”.

However, the problem is: *“What constitutes a graduate unit?”* It appears that a substantial proportion of units offered in graduate courses are not dedicated graduate units. Although identified with a graduate-level alpha numeric, they are in fact undergraduate pass level units, but with special workload and assessment arrangements, eg longer essays, more individual consultation, assessment at higher level.

This situation has caused considerable chagrin among graduate students, particularly those paying fees. For example, a part-time graduate diploma student writes:

“A fee paying student at my level had available at best only one-third tuition at a graduate level, and otherwise only has the option of undergraduate coursework assessed at a higher level”.

The student’s Program Convenor has reiterated this point, adding that

“Although these units are assessed slightly differently, they are, for all practical purposes, in particular the amount of work involved for lecturers, no different from undergraduate units. Our program is not alone in this respect: I understand that most grad dips in Arts consist largely of undergraduate units. ... Part-time grad dip students are paying more for these “undergraduate” units than the undergraduates themselves. Many students perceive this as a serious injustice”.

The problem is not unique to the ANU. For example, a student from another University, who lodged a formal complaint with the Trade Practices Commission, has been quoted as follows:

“As a postgraduate student I have been lumped in with 19-year-olds in identical tutorials with identical material and the assessment regime is identical apart from one or two additional topics”.

The solution will be costly; the preparation, presentation and assessment of dedicated graduate units requires a great deal of staff time. It may be necessary to move toward the American system and devolve larger amounts of undergraduate teaching to graduate students, so relieving staff to work on graduate courses. Possibly more use could be made of staff from the IAS to teach at graduate level. The problem will be exacerbated if coursework-student numbers increase to the extent envisaged in the strategic plan.

It is encouraging to note that the Faculty of Arts strategic plan proposes as follows:

“Find the offering of an expanded range of postgraduate degrees by coursework from graduate tuition fees. This will involve developing a wider range of units specifically designed for honours and postgraduate students”.

The situation is potentially explosive and needs to be addressed urgently. It is incumbent on the University to ensure that fee-paying students get value for money.

14. PARTICIPATION OF WOMEN IN GRADUATE STUDIES

As shown in Fig. 4, the participation of women in graduate studies at the ANU has increased steadily over the past 15 years or so, and was 44% in 1995. PhD enrolments show a similar trend (Fig. 5), although there was a somewhat surprising drop in 1995 (to 37.6%, excluding FFP students).

Although these trends are encouraging, large variations exist across disciplines. For example, in 1994 the female/total percentages for PhD students (excluding FFP) were 1/19 (5%) in RSISE, 0/12 (0%) at MSSSO, and 4/51 (8%) in RSPHysSE; in contrast to 34/49 (69%) at JCSMR, 63/111 (57%) in the Arts faculty, and 59/106 (56%) in the Science faculty.

The Graduate School has undertaken a number of initiatives in recent years to encourage women's participation in graduate studies, including the award of a few re-entry scholarships each year. It may be that the University's efforts need to be more closely targeted on non-traditional areas.

In 1995, the University endorsed the following recommendations from the Working Party on Future Directions of the Graduate School:

"... that the Dean of the Graduate School continue, in consultation with Deans and Directors, to examine ways to increase the participation of women in graduate education ..."

The recommendation goes on to specify a number of initiatives which might enhance women's capacity to perform academically.

The need to increase the numbers of women enrolled in research degrees is given little prominence in the University's strategic plan, which is a little surprising given that a supply of suitably qualified women would be necessary if the present gender imbalances among academic staff are to be rectified.

15. ACADEMIC TENURE

There are continually increasing pressures to reduce tenure in Australian universities. For example, the Howe review recommends

"amendment of industrial awards so as to remove tenure ratios from parent awards".

The IAS review committee suggested that

"the proportion of tenured appointments should continue to be progressively reduced. Five year renewable contracts should become the norm".

and recommended that

"the IAS should continue the trend away from tenure and toward renewable contracts for new academic appointments".

In its response to the report of the IAS review committee, the University actually

"welcomes .. that the review committee approves of ... reducing the proportion of academic staff with tenure".

In all of this, little consideration appears to have been given to the requirements of PhD education. A PhD student requires continuous supervision for between three and four years (sometimes more if course suspensions occur). Academic staff on 5-year contracts could only provide such supervision to students who commence their course early in the staff member's contract period. Furthermore, the prime objective of such staff will usually be to ensure their re-appointment at the end of 5 years. If PhD supervision is not seen to promote this objective, it will only be undertaken with great reluctance, and supervision will become increasingly cursory and superficial. This would have a serious impact on the university's (and the nation's) research-training enterprise.

CONCLUSION

In my view, the primary challenge for the University concerning graduate education is the strategic plan goal that, by the end of year 2004, graduate students should comprise 30 per cent of the total student population. All the other issues discussed in the present paper relate, in various ways, to the achievement of this objective. The following questions need to be addressed, desirably within the next 12 months:

- 1 Are we fair dinkum about the 30 per cent goal?
- 2 What mix of research and coursework students is desired?
- 3 What proportion of graduate students should be FFP international students?
- 4 What resources will be required?
- 5 How will these resources be obtained?
- 6 What steps must be taken to recruit the desired students?

It is probably no exaggeration to claim that the character of the ANU in the year 2004 will depend very substantially on the answers to these questions.

R.H. Spear

13 February 1996

Figure 1

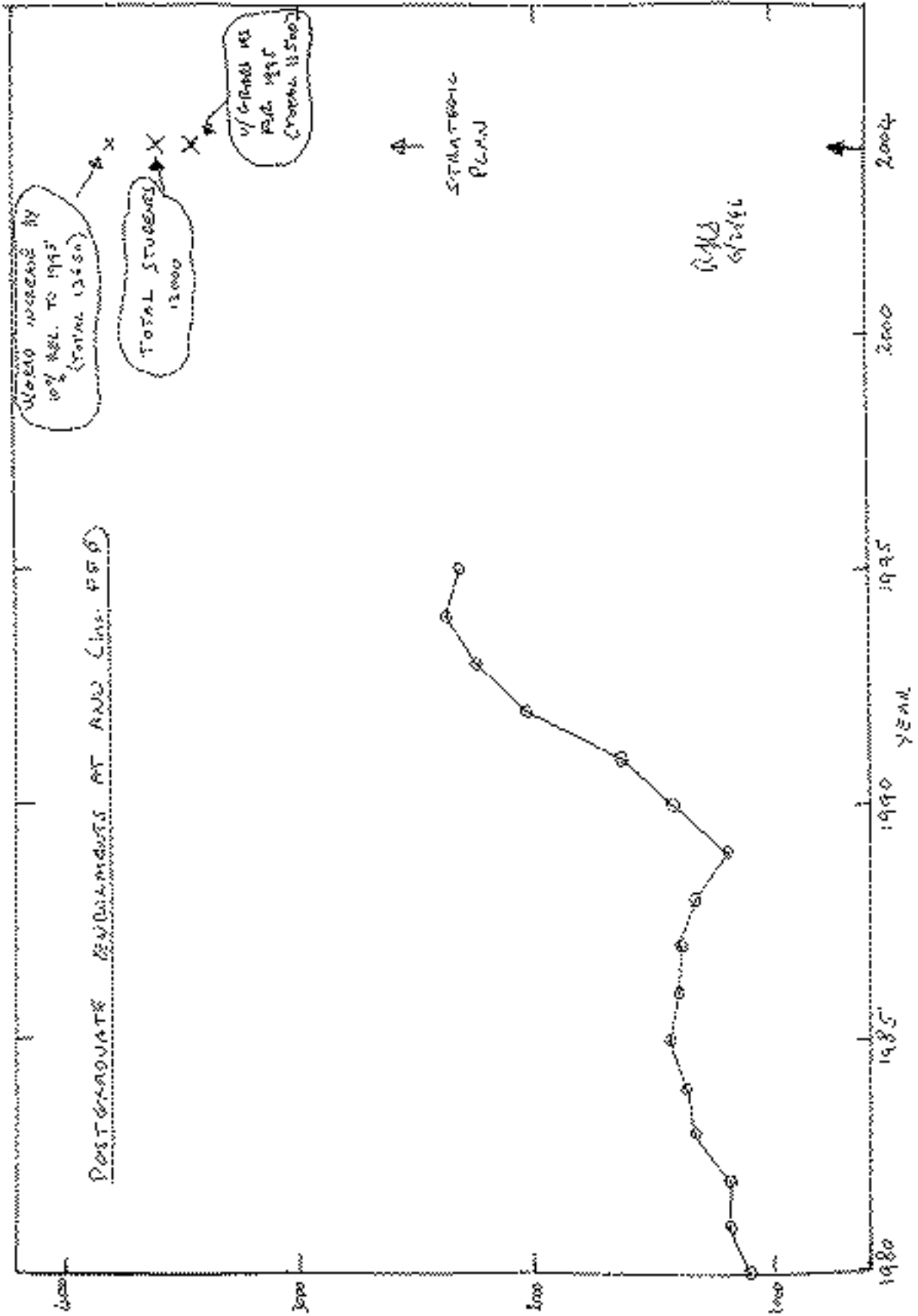


Figure 2

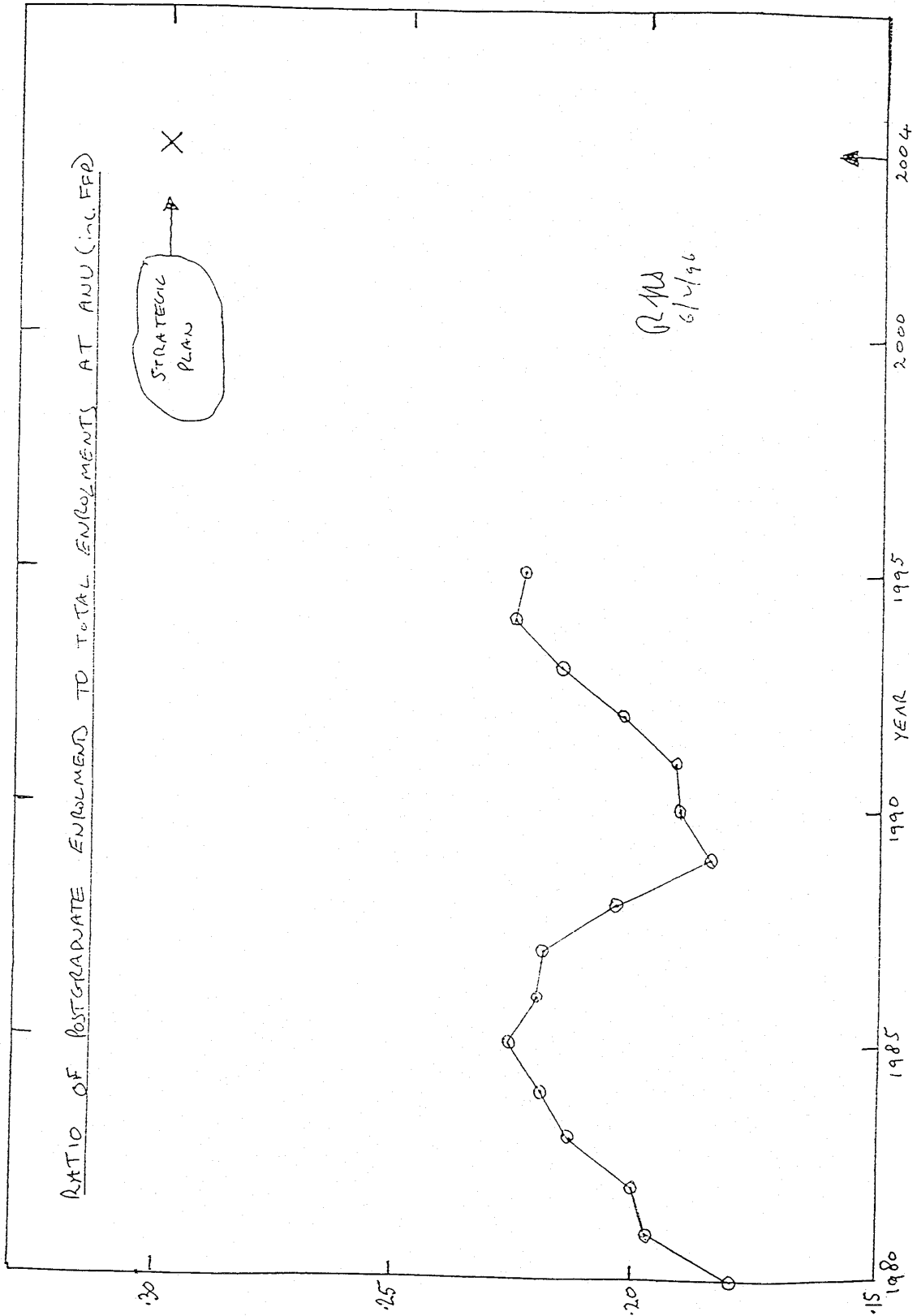


Figure 3

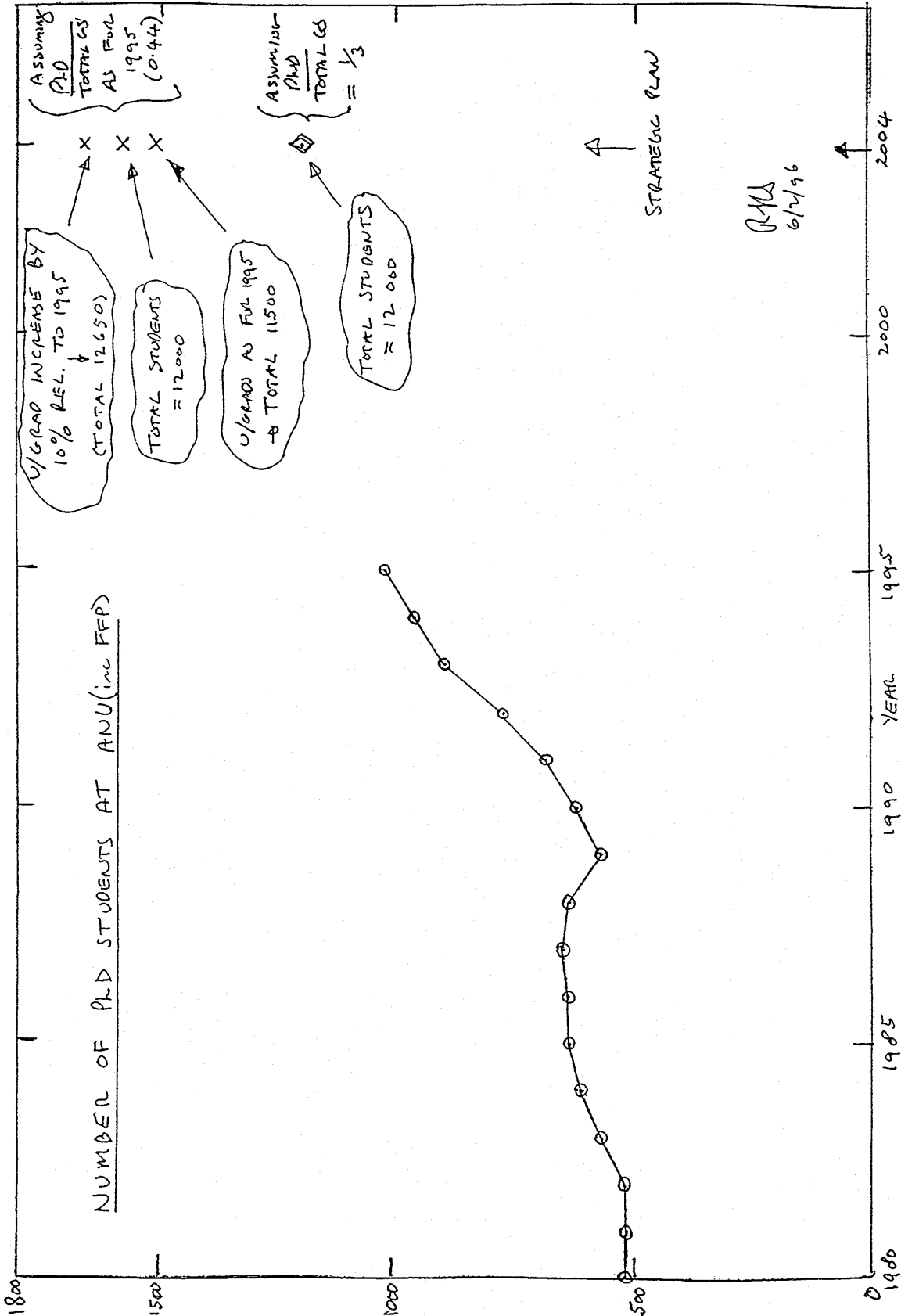


Figure 4

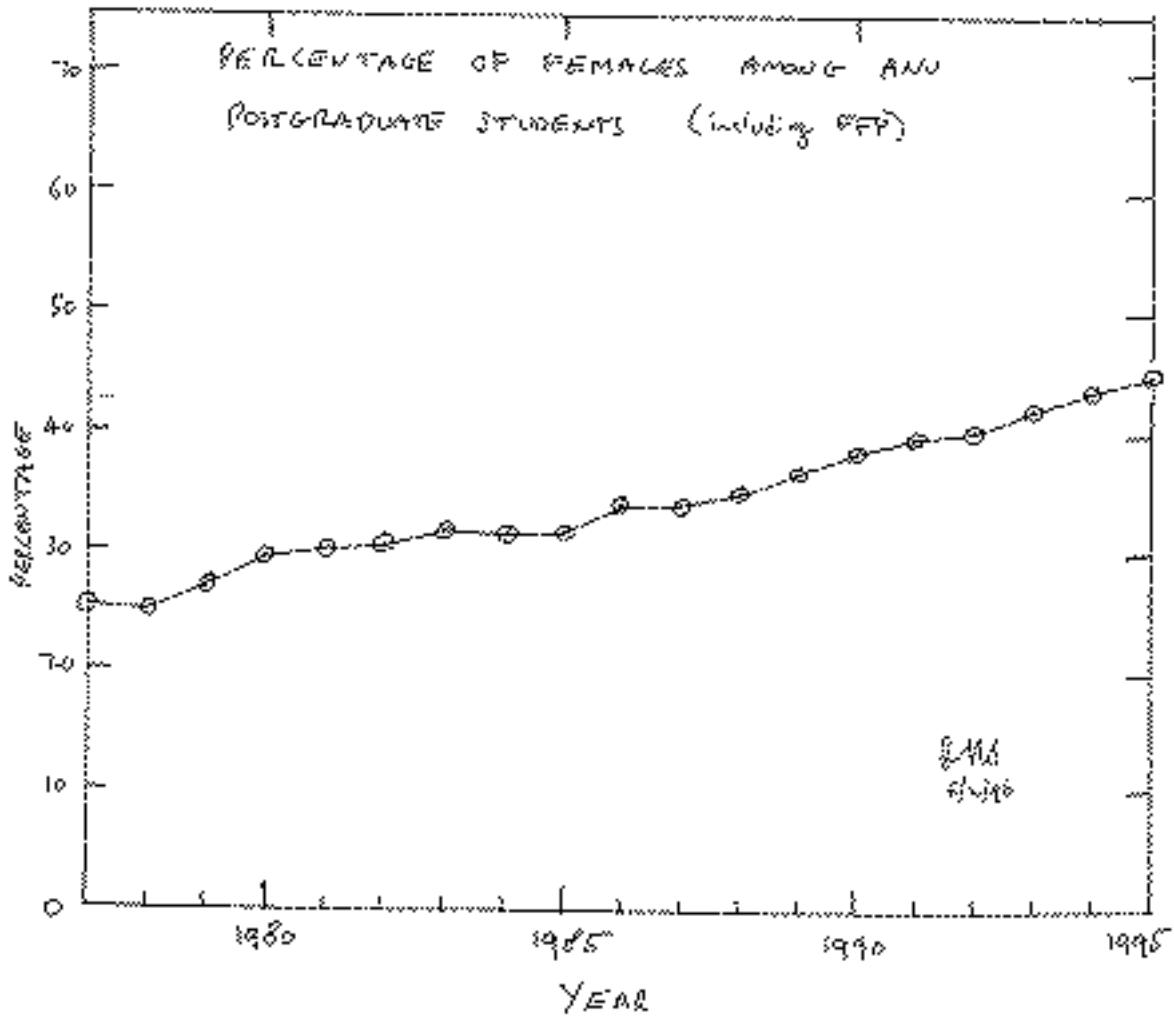


Figure 5

