Is it simply recompense that the public requires? Proprietary rights are also a means of controlling access to an important new technology. In certain quarters, there is concern about potentially fundamental and powerful techniques being controlled by a private interest, and there is a related concern about public research being channelled into areas of a commercial character. History shows that monopoly rights may be used to charge high prices for essential goods, to work inventions to suit sectional interests, and to discourage potential competition with existing products²⁹. If a proprietary right may be obtained over certain inventions. funds may be channelled away from work that is not readily appropriable and commercial but still provides a benefit in the form of public or free 'goods'.

If research institutions and their scientists are free to trade rights to inventions, it is feared by some that professional ethics will be compromised. Researchers will be required to keep discoveries secret until industry has had time to examine their commercial potential and to apply for a patent. Tempted by the provision of funds for research or an opportunity to share in the commercial proceeds, scientists and their institutions would no longer be ready to exchange knowledge freely with their colleagues. They might concentrate unduly on lines of research that attracted their commercial sponsors and favour collaboration with firms in which they had interests. They might become implicated in sharp and risky practices. Concern of this kind has recently been expressed in Australia³⁰.

Such fears have led a Committee of Deans of prominent American universities to publish a declaration of policy about collaborative work31. Locally, several universities (e.g. Macquarie) have built such concerns into their patents policies. According to the Deans, agreements should be constructed in ways that do not promote a secrecy that will harm the progress of science, impair the education of students, interfere with the choice by faculty members of the scientific questions or lines of inquiry they pursue, or divert their energies from teaching and research. (As to the form of collaboration, there is an increasing tendency to establish research companies to act as a 'buffer' between academics and commerce, as well as a source of expertise in contract negotiation and supervision.)

The public funding body, or research institution, may exercise discretion about the type of work it will support or the firms with which it will collaborate. There have been calls to open that exercise of discretion to public scrutiny: details of collaborative projects, including the nature of the academics' commercial in-

terest, should on this view be placed on the public record. Representative committees should be established in these institutions to monitor research projects. This approach may conflict however with the pressure to maintain confidentiality. For example, the details of the project and the name of the University of Adelaide's industrial collaborator under the National Biotechnology Program have been withheld for commercial reasons³².

It may not be desirable to ask a scientific or economic body to choose between research projects on such social criteria as the labour displacing or gene manipulating potential of a technology. To do so either removes some critical choices about the course of technological change from public scrutiny or it embroils such bodies in political controversies. These are choices better made in the policy realms of government, questions, for instance, in the design of the whole patents system. Already the Patents Act does not permit certain medical techniques to be patented³³, and the Federal Government has the power to assume the use of others related, for example, to the national defence. It has been pointed out more than once that if the research institutions refrain from patenting and licensing inventions, then others will simply 'freeride', assuming control by patenting modifications and developments on public inventions.34

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Coming up with bright ideas: Women in academia

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The question: "Why so few?" has now been asked for some decades and it has meanwhile become common knowledge that there are few women in academia. Surprisingly there are still so few despite the debates, the legislation, and the equal opportunity promise.

One should certainly be more surprised in 1985 than one might have been in 1975. The pool of female undergraduate students has become very much larger now than it has ever been. The female retention rate for postgraduate work and tertiary employment, if it had only remained at the same percentage as it had been two decades ago, should have resulted in some redressing of the balance, some equity. But it has not done so3. Female undergraduate students have largely remained a welcome clientele for the maintenance of largely male staffs without demanding anything further from the system which they now support to the tune of roughly 46% of enrolments.

Many of the reforms from above, though necessary steps and overdue responses, must be regarded as failures: women do not take up an equitable share of leadership and responsibility roles in the public and private sector now and they are certainly under-represented at universities and colleges. There are obviously many hurdles and 'critical filters' which

have not been removed despite remonstrances by university administrations. How can tertiary institutions claim today that they are 'equal opportunity employers' when they often continue to have such poor records of female employment at lecturer ranks and above and of the hiring of women? How can one be happy with the fact that a considerable number of staff and students (male and female) at tertiary institutions have acguired a consciousness of covert and overt discrimination? How much has such knowledge really assisted in eliminating discrimination when employment patterns continue to remain unequal, when women continue to be found at bottom rungs of hierarchies, in positions of subservience, and in positions of guest performers with limited contracts?

Despite some genuine attempts at change, it is doubtful if at present anything noteworthy is happening that specifically aims at tackling issues of discrimination at the level of everyday life. Such issues of discrimination discussed in this paper concern events that are not quantifiable and easily measurable. They are qualitative in nature, often hidden and indirect, i.e. covert, and minute within the totality of interactions, structures and events in tertiary institutions, i.e. micro-level events. They may, by

themselves, also be mundane and petty. I wish to refer to some of them and then suggest strategies for overcoming them⁴.

Associate Professor D.C. Stove announced in an article in Ouadrant in 1984 that there is no discrimination against women. He claimed that philosophers at least never notice the sex of their colleagues (his department only employs men). In his opinion, philosophers would not be able to tell or care about the difference between a broom-stick and a human being as long as either could do the job⁵. Understandably, there is a reluctance generally to pin large scale theoretical constructs on petty events and behaviours. Nobody wants to be petty. We all experience frictions in our working life. Any discriminatory experience does not make for good conversational material at the best of times. This reluctance to identify seemingly spurious and accidental behaviours as a consistency of prejudicial attitudes is much to blame for the notable lack of change at micro-level. Here, discrimination goes on daily, almost unimpeded in many cases. Intentionally or unwittingly, such acts of discrimination are often directed against

Many acts and behaviours, verbal and non-verbal, have two clearly definable goals: to silence women in academia and

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to isolate them into positions of political and intellectual innocuousness. The tactics of silencing and isolating have not disappeared today; they have merely changed in type and have partly been driven underground. Ostracism is a game with infinite variety and can be played with surprising subtlety. The effects on the person concerned, however, may be devastating, whatever the methods. I have known women to resign from positions on the grounds of unspoken discrimination. We need not assume here the stance of the woman as a victim: women are fighting back and are gaining new strengths almost daily, partly through these experiences However, we do need to realise that young women, having poked their noses into tertiary institutions, are likely to acquire the knowledge of some of their less palatable social conventions and may thus decide not to continue to further degrees and/or not to consider a tertiary institution as a possible place for career advancement. Very capable and bright young women may be lost to higher tertiary education and employment. When they are sensitive enough to understand certain processes of discrimination they are also likely to wish to avoid them.

The strategies for achieving isolation of a staff member or to ensure a lack of participation of that staff member are familiar and describing them here is unnecessary. Perhaps a colleague in the Social Sciences may wish to engage upper level students in the task of recording interactions at two locations: the staff club and the corridor. Some of the social status of the familiar lunch ritual has been frayed of late because of increasing lunchtime teaching commitments or committee obligations. Nevertheless, the luncheon is still a rather significant social event and can tell a great deal of the department's real attitudes to women as opposed to those which male colleagues may profess otherwise. One of the most typical tactics of expressing non-verbal hostility consists of turning shoulders away from the intruder, or, if the intruder comes later, of forming a tight circle which cannot be easily broken. Another one, punishing by silence, is to engage in a super-lively and animated discussion with another male colleague, re-establishing eve contact as often as possible while eating and being so engrossed in conversation that it is made difficult if not impossible for the woman to break into the interaction. Corridors are equally telling congregational places. In some departments, the habit of clustering in corridors and around office and lab doors is well developed. This habit may have important social and political functions. The little visits that male colleagues pay each other, the short conversations in the middle of the corridor, the brief moments of

sitting in each other's offices may carry as much weight in terms of power and control as the visit together to the pub, the meeting for tennis games or a dinner invitation. All of these are typically male activities. Female staff members are very infrequently involved in these.

'Many acts and behaviours, verbal and nonverbal, have two clearly definable goals: to silence women in academia and to isolate them into positions of political and intellectual innocuousness.'

One student, on an informal count, recorded over 50 such informal interactions of office visits and corridor encounters of one male staff member. Out of these encounters only two were with female colleagues and they were the briefest. All others occurred with male colleagues. The contact with the female staff members, moreover, concerned students and tests, i.e. concerned professional and absolutely inevitable contacts. Less evident but no less real are private invitation patterns which often exclude women, in particular those without professionally attractive or acceptable husbands. Whatever the strategy of exclusion may be, and usually several strategies are combined, they are, by themselves, hardly worth a mention. However, precisely because of the extremely petty nature of men's behaviours against women, women are repeatedly placed into positions of fighting against cotton wool. As one female academic expresses it:

The problem which bothers the woman academic . . . is that she is denied many of the informal signs of belonging and recognition . . . on such simple daily activities as finding someone to have lunch with, or someone with whom she can share a research interest. Perhaps, then, it is in matters such as these that she has achieved less than full membership in the 'club' and she is left with a feeling that she belongs to a minority group which has not gained full acceptance.

How to counteract such discriminatory events? Perhaps one should not and one does not need to act. One of the first steps to avoid being affected by such low levels of abusive behaviours is to redefine the situation in each case. Obviously, the lunch-ritual-exclusion-tactic is childish and immature and does not befit any officer of a university or college. Such

occurrences should either be ignored or the woman should make it known to the men in question that they have a problem which they might have to tackle in the near future. The signs of 'recognition and belonging' may have to be looked for elsewhere, particularly when there are few or no other women in the department concerned and when the department is particularly chauvinistic. There are women in other departments. One can meet them by organising interdisciplinary activities (teaching, seminars). The loss of informal decision-making participation in corridors, behind closed doors and at lunch tables, involving important stages of opinion formation (e.g. 'sussing out' a situation before formulating views, statements on policy etc.) can be fully or partly recouped by participation in faculty committees which have become a very important forum for women. Many women in academia have established contacts and structures across departments/schools and even faculties, and have begun to realise their combined strength. Young women in the process of attaining a tertiary education, however, do not necessarily see these clandestine networks of women away from the 'homebase'. What they see very clearly - and sometimes also comment upon — is the clustering of men in corridors, the troupes of men marching to staff clubs. For a woman, these facts are not recommendations for a pleasant working environment.

Processes of isolating are ultimately likely to be less consequential than the process of silencing, Silencing, i.e. muting a person intellectually, is the real tragedy of discrimination, when and where it occurs. This is of course true for both sexes. I am working on the assumption that a person who can come up with bright ideas - and have these acknowledged as bright ideas - is much more likely to feel adequate and legitimate at a tertiary institution than a person who has either no bright ideas or has no or few opportunities to express them. Arguably, the person in the former category should not be at a tertiary institution, but the person in the latter category should but may not be discovered or sufficiently fostered to begin to know that her or his ideas are indeed bright.

One of the most important means of seeking public acknowledgment of one's own ideas (i.e. also ability, talent and knowledge) is to enter the arena of research seminars and conferences at regional, national and international levels. Academic discourse follows a number of explicit and implicit rules which vary by culture and country. Irrespective of the specific conventions, women are clearly a phenomenon not fitting the tradition of academic discourse.

By definition, the arrival of women everywhere in academia is anti-traditional but has occurred at a time when the predominant perception of the roles of women by society at large is still traditional. Some conventions work distinctly against women, against their self-confidence, against any real perception of chance and opportunity in an academic career. Young women are particularly affected. To date, we have not created an image of the 'bright young woman' as we have indeed internalised the concept of the 'bright young man'.

How deeply rooted such discourse patterns are in the construction of the world as a 'male reality' is more than evidenced by the enormous difficulty women have in trying to break into such discourse. At a conference called "The dialectics of biology and society in the production of mind", held at Bressanone, University of Padua in 1980, a women's group of academics, among other things, had this to say:

... in academic ... circles, women still do not fit in 'naturally'; the style of discourse is male, as is the way of relating on a very cognitive, impersonal level about issues that one may, in fact, feel quite passionate about. That the rules of the academic game have been defined by men, and that women therefore feel profoundly outside (and we are not using the terms 'women' and 'men' as biological categories, but assume that we all agree that these are primarily social constructs) is a fact that is often lost sight of by progressive as well as by conservative male academics, and even sometimes by women who have succeeded in making inroads into the mainstreams of academic life.7

These observations are not new and yet, rarely is it spelled out in what ways these male constructs impede women's effective participation in the public arena. The women at Bressanone took the trouble of isolating several criteria of discrimination and of gender differences in presentation of self and of arguments during session. Their findings appear to be so typical that probably most women working in academia will concur that here only the obvious is stated. But is it? — since so little is done about it. The Bressanone delegates argued that:

- 1. women were given minimal opportunities to speak
- 2. women received no encouragement to speak
- 3. women presented their ideas in a tentative way
- 4. men asserted their arguments even if these were only exploratory
- 5. men tended to refer to what other men had said

- 6. men tended to ignore what other women had said
- 7. men tended to incorporate ideas by a previous female speaker without acknowledgment

Often these processes of inclusion or exclusion of a debater in or from discourse were so subtle that many of the men and some of the women were initially not aware of them. However, in toto the effect can be devastating, especially for younger women who often enter the arena with a visible lack of confidence. This fact alone must be regarded as scandalous for it symptomatises oppression in the very countries which pride themselves with freedom of speech traditions. The worst and least fightable of the discourse tacties, one might add, is to make implied reference - in words, deeds or nonverbal cues - to the lesser worth of the speaker, which can and has been translated into meaning 'less intelligent'. However erroneous such an interpretation may be, it has worked remarkably well to shut up women.

The voice of women in academia - in academic discourse as distinct from political and social discourse - is at best a timid one. For young women it whittles down to a whimper or to total silence and withdrawal. Regrettably, when a young women is encouraged to speak within such a discourse framework, she usually becomes so self-conscious that the sentences don't hang together well, the speech is faltering, petering off or ending in a limp question or semi-desperate waves of the hand. It is easy not to reply to such responses. When I have asked students after a seminar why they did not say anything, these women in upper levels, honours year or even in Masters courses have often replied that they found the experience thoroughly intimidating and they felt they were 'not good enough'. Here is a vicious circle that needs to be broken. No woman will want to stay in a system which systematically perpetuates her feeling of inadequacy which in turn is derived from constructs of sexism, not from any intellectual inferiority.

'Tokenism . . . is a convenient way of confirming and consolidating the status quo . . .'

Of course, there are very successful women in academia today. I do not wish to get involved here in a discussion on why they succeeded. The reasons are complex and certainly elements of class,

privilege, luck, connection, unusual stamina, extraordinary intelligence and many more variables enter into these considerations. I do not wish to belittle their success by simplifying the reasons for it. Yet, one has to continue to be aware of tokenism and of the paradigms in which success functions. The kind of assertiveness and push needed to succeed in academia has to be scrutinized very carefully. Assertiveness of what and for whose benefit, and whose scene? Assertiveness in a woman clearly runs counter to the predominant constructs of femininity in our culture. Some of the most successful female academics today may espouse the same principles as their male counterparts and may thus even be guilty of applying similar discriminatory tactics. Tokenism, and this needs to be spelled out clearly, is a convenient way of confirming and consolidating the status quo, thereby further cementing the discriminatory practices.

The presence of a successful female academic may sometimes provide a model for younger women. Experience has shown however that such presence has done little to facilitate greater participation by women at the postgraduate level. A few models certainly don't replace strategies. There are strategies available. The women at Bressanone chose to take very positive and direct steps. Their aim was to achieve a fairer gender distribution in academic discourse and to improve inter-gender communication. Not one of them would claim now that their efforts were crowned by unequivocal success. Two of the delegates, of whose personal comments I know, have remained critical of the attempts but in a positive way. They agree that despite the general willingness to deal with questions of discrimination and the very good atmosphere at the conference, the aims were more difficult to achieve than had been supposed and that there were difficulties with implementing certain policies which had not been expected. Nevertheless, all parties apparently learned from the exercise and went away with a much clearer understanding of the issues involved. The first step at the Bressanone conference was to organise separate meetings for the female delegates. The women used such meetings as a forum to identify their situation at the conference and to analyse and discuss their roles. Eventually, they devised a number of clear behavioural strategies:

- 1. to acknowledge each other's contributions very deliberately
- 2. to build on each other's contributions during conference sessions
- 3. to engage more in informal discussions, involving men and women.

In other words, women began to develop a feeling of solidarity and began to act consciously in support of each other. We do not learn from their summarised discussion whether or not the women's style of presentation and debate was in any way affected. A number of noticeable changes occurred at the conference, so the delegates report. The women's overt support of each other increased debate and broke down inhibitory formalities. Younger women began to make comments and participate more actively in debates in both formal as well as informal situations. The separate gatherings, furthermore, helped considerably in breaking down sex-divisions, 'Men, as well as women, were sharing more explicitly their ideas with others'8. In other words, the overall effect of this, initially political, act of separate meetings finally improved communication in general and facilitated a fuller exchange of ideas.

The strategies employed by the women at Bressanone seem promising and appealing as a starting point for concrete actions intended to radically change prevalent patterns of discourse and to eliminate discrimination at the work-place.

- I propose that, in future, women in academia should:
- 1. continue to press for equal representation in organising committees of conferences and seminars⁹
- 2. begin to organise women's groups at conferences in order to ascertain strategies and to analyse their participation patterns
- 3. begin to acknowledge each other overtly at public gatherings
- 4. begin (or continue to be) very explicit about encouraging young women anywhere in the learning or career path
- 5. individually interject at those points in debate when an argument by a previously female speaker has been ignored

- 6. if there is no other woman present to support a female delegate, interject herself and repeat her argument
- 7. insist on communicating clearly but not necessarily with the intention of 'fitting in' to the style of debate of male speakers.

'Silencing, i.e. muting a person intellectually, is the real tragedy of discrimination...'

Too many women still see themselves wrongly as victims without recourse for change. Admittedly, covert forms of discrimination are less tangible and are therefore more difficult to tackle than overt discrimination which, moreover, can be objectified and can be discussed fairly abstractly. At the same time, I agree with the number of writers over the past decade who have also thought that counter-strategies even at the micro-level of discrimination are available.10 They can be applied in situations in which traditions are strong and the roots of the discrimination appear masked. And they must be considered and applied now in order to work towards the equity which. theoretically, should be implementable at this time. Women's entry into academia one hundred years ago has broken a tradition. Therefore, there is no need to succumb to that tradition since the most important step in breaking it has already been taken.

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- 4. Cr. Sue Wills "Perceptions of Discrimination: Realism not Paranoia" in WHY SO FEW? op.cit., especially pp.93-94. She notes that most studies on discrimination have confined themselves to areas of, what she calls 'objective' discrimination, i.e. macro patterns of employment etc. and have paid no or too little attention to the subjective aspects of discrimination. 'Personal experiences can' in fact be 'far more sensitizing than the use of statistical data alone'.
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- This includes EEO office help of course in cases that require outside assistance. The instances referred to here are often below that threshold, however,

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A study of staffing patterns in faculties and departments of education in Australian universities

Introduction

Staffing practices and recruitment patterns in Australian universities have been the subject of considerable research during the past 25 years. Interest in the topic first emerged during the 1950s when it became increasingly apparent that the universities, faced with a shortage of suitably qualified people to fill the growing number of academic positions

throughout the country, began to rely more and more heavily on recruitment from overseas. This trend became the subject of a number of studies designed to establish the nature and scope of this

Tien, in a study of staff at the Universities of Sydney and Melbourne during the 1950s, found that 33 per cent of his 479 respondents were foreign born. Encel concluded that of some 1200 appointments made across Australia during the period 1957 to 1960, 34 per cent were from overseas.2 Rodda, writing in 1964, was of the opinion that 'something like 40 per cent of academic staff in recent years' had been appointed from outside Australia3 while Browne, some five years later, reported that of a sample of over 1100 staff at the Universities of Melbourne and Queensland, 33 per cent were from overseas countries.4 Interest in the extent of overseas staffing in universities continued into the 1970s when Cropley and Hemingway suggested an Australiawide figure of over 30 per cent⁵ and Saha and Klovdahl, writing in 1979, claimed an overall figure of 40 per cent. 6 It is obvious from these figures that one important ongoing factor in university staffing is the

extent of its overseas component.

overseas influence on university staffing,

An extension of the research interest shown in overseas recruitment is seen in a number of studies which have sought to delineate the influence of specific countries in the staffing of Australian universities. Encel found that in the late 1950s, 57 per cent of all overseas appointments were from the United Kingdom and only 9 per cent were from the United States.7 Saha and Atkinson reported that some 50 per cent of overseas appointees at Sydney University in 1973 were from the United Kingdom.8 A comprehensive Australiawide study by Fallon covering the period 1956 to 1974, detected a marked balancing over this period of the numbers of staff being recruited from the United Kingdom and the United States. In 1974, United Kingdom recruitment stood at 37 per cent and United States recruitment at 34 per cent although, when Canadians were taken into account, the total North American contribution rose to 44 per cent.9 Saha and Klovdahl found a similar trend towards North American recruitment and a decreased proportion of appointments from Britain. 10

Another aspect of university staffing which has attracted research interest is that of 'academic inbreeding'. This term was used by Saha to describe the practice of graduates of a university being employed as members of academic staff of that university. In his 1968 study of Sydney University he found that 20 per cent of his sample of 140 had 'perfect inbreeding' in that all of their qualifications were gained from Sydney University. A further 33 per cent had partial inbreeding, with one Sydney degree, and 47 per cent had no qualifications at all from Sydney. Saha concluded that despite the influence of overseas recruitment, inbreeding was a very significant factor at Sydney University during the late 1960s. Interestingly, he found the Science Faculty to be significantly more inbred that the Faculties of Arts or Engineering. 11

Another line of research into academic staffing in universities was that pursued by Browne in 1972 when he applied organisational theory to an analysis of the recruitment practices of Queensland University. He found that certain types of recruitment procedures, which varied across the departmental groupings of arts, science and professional subjects, led to the employment of particular types of candidates. The educational goals of particular departments and faculties were found to influence significantly the types of appointments which they made. ¹²

Purpose of the Study

This study examines the staffing of faculties and departments of Education in Australian universities in terms of three of the research directions outlined above; the extent of overseas influence, the origins of overseas influence, and the extent of academic inbreeding.

The study is restricted to the field of Education because of the author's background and interest in this area, because staffing patterns in the field do not appear to have been previously examined in any detail, and because the effect of variations across different universities is minimised if only one field of study is considered.

The study seeks to answer four questions about the staffing of faculties and departments of Education:

- 1. What types of qualifications are held by Education staff in Australian universities?
- 2. What are the sources of the qualifications held by Education staff in Australian universities?
- 3. What is the extent of overseas influence on Education staffing in Australian universities?
- 4. To what extent does academic inbreeding exist in faculties and departments of Education in Australian universities?

Procedure

The study attempts to answer the questions set out above through examination and analysis of Education staff in a sample of ten universities across Australia.

The technique of analysis of qualifications as a means of determining the origins of academic staff has been used in previous studies and is considered to be a legitimate procedure. ¹³ In the study the qualifications of lecturers were obtained from staff listings in the current Handbooks and Calendars of the institutions chosen.

The sample of ten universities was chosen from those with Schools, Faculties or Departments of Education and for which staff lists were available indicating degrees held and the universities or colleges from which they were obtained. The sample includes universities from all States. When the sample had been chosen, the qualifications of staff involved were analysed and used to generate the tables which follow.

Limitations of the study

A significant limitation of the study lies in the procedure used to identify those staff members assumed to have originated from overseas. A common procedure in previous studies has been to use the first degree as an indicator of country of origin.14 This indicator was not always used in this study because it was a reasonably common practice in the 1960s for Australian teachers, after gaining teacher's certificates or diplomas, to go overseas to acquire first degrees and then to return to Australia for employment and for further study. 15 Instead, the full qualifications of each staff member were considered and an assessment made as to whether or not they indicated overseas origins. When all qualifications were obtained in one country, nationality of that country was assumed. A first degree from an overseas institution was considered to indicate country of origin when followed by one or more subsequent qualifications from institutions in the same country. It is conceded that errors could occur through this method of identification and the findings relating to proportions of staff originating from overseas should only be treated as very general ones. The procedure adopted, however, does represent an attempt, absent in most previous studies, to separate genuine overseas recruitments from returning Australians.

Findings of the study

1. What types of qualifications are held by Education staff in Australian universities?

Table 1 lists the number of Education staff at each of the universities studied and the total number of their qualifications. It then proceeds to a breakdown of these qualifications in terms of percentages of different types of awards. Across the total sample of 517 staff it was found that 17 per cent of all qualifications were at the diploma level, 34 per cent were at first degree level, 30 per cent were at masters level and 19 per cent at doctoral level. Comparisons of the figures for the various universities against these averages reveal considerable diversity and varying emphases on different types of qualifications.