

# UNITED KINGDOM

*Jeroen Bartelse, Eric Beerkens, and Peter Maassen*

## INTRODUCTION

In the post-war period, the British higher education system experienced a major expansion. By the end of the 1950s, however, it became clear that the route pursued was not going to yield the expansion the system actually required. This was mainly because universities raised their entry requirements to cope with increased demand, rather than accommodate larger groups of students within the existing infrastructure. These growing tensions resulted in the establishment of the Robbins Committee to inquire into the future of higher education. The report published by this committee stated that “all young persons qualified by ability and attainment to pursue a full time course in higher education should have the opportunity to do so” (Committee on Higher Education 1963, p. 49). This reflection provided a guide for the development of the British higher education system thereafter. During the 1960s, several new universities and a wholly new sector of higher education were established. Despite the recommendations of the Robbins Committee, further expansion of higher education did not take place in the universities but mainly in the newly established public sector in higher education: the polytechnics and colleges. This binary system lasted until 1992, when the polytechnics were granted university titles.

Virtually all institutions in British higher education offer the 3-year bachelor’s degree program; most also offer postgraduate degrees leading to master and doctoral qualifications. Undergraduate education consists of 3-year programs. These can be concluded at different levels: the lowest level is the bachelor “pass-degree,” and the highest level is the bachelor “first-class honors degree.” Overcrowding in the undergraduate programs and a decrease in standards have resulted in an inadequate inflow into graduate education—and, consequently, have led to a discussion about extension of undergraduate programs to 4 years. Following undergraduate education, three types of graduate programs are offered leading to three types of qualifications: postgraduate diplomas; master’s degrees (the so-called “taught master’s,” which are curriculum based, and the research master’s degrees); and doctoral degrees (figure 1). This country report discusses graduate education in the United Kingdom and focuses specifically on the doctoral degree.

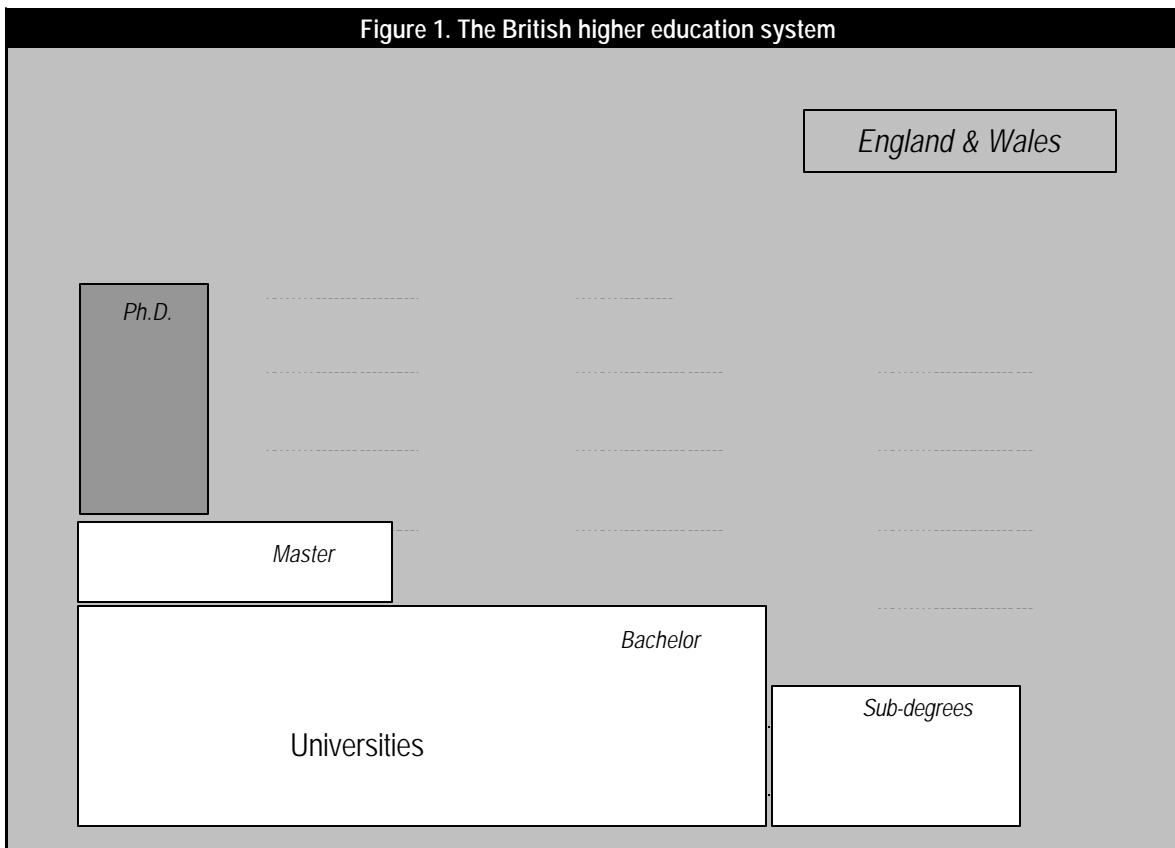
The next section discusses trends in graduate education in the United Kingdom. This discussion is limited to policy developments up until the late 1980s and the effects of these policies on the current number and division of graduate students. Following this, the various policy papers issued in the 1980s and 1990s are discussed. These papers form the basis of the actual reforms that are still ongoing at this time. Finally, support patterns, employment patterns, and international mobility are discussed.

## TRENDS IN GRADUATE EDUCATION

In the binary higher education system of the United Kingdom, universities were supposed to maintain their traditional academic role, including basic research; while public sector institutions were meant to develop vocational types of higher education. The polytechnics, however, took a more complex view of their role in the system, striving to become more equal to, and less different from, the universities. After the polytechnics were granted university titles in 1992, the binary system practically changed into a unitary system: 74 universities enroll 90 percent of all students in higher education, and 143 other institutions provide education for the remaining 10 percent (Brennan and Shah 1994).

In general, the British higher education system, both in the past and in the present, can be characterized as specialized, elitist, small-scale, and focused on first degree provision (Becher 1993). Two universities, Oxford and Cambridge, monopolized higher learning in England for six centuries, until the foundation of the Universities of London and Durham in the second quarter of the 19th century. In 1917, Oxford was the first British university to introduce the Ph.D., largely to attract American scholars away from Britain’s wartime enemy, Germany (Simpson 1983). Professors had begun to incorporate research work into their own activities, but still research was considered subordinate to teaching activities, rather than the basis of professorial orientation and university organization. This might account for the moderate integration of the Ph.D. degree in the British system. In 1938, there were only 3,000 postgraduates in British universities; these represented only 6 percent of the full-time total student population.

Figure 1. The British higher education system



Although the number of doctoral graduates has grown rapidly during the several decades following the Second World War, its growth was considerably slower than in most other countries in Europe. In the *Robbins Report* of 1963, therefore, expansion of participation in graduate education was recommended. The committee gave two reasons why these increases were needed. First of all, there should be more graduate students in order to provide more teachers for the rapidly expanding system of higher education. Second, more students were needed to keep up with the fast pace of change in the scientific and technological revolution. It was assumed that the demand for people with graduate degrees would increase with supply.

The *Robbins Report* proposed a new structure for graduate degrees, in which a 3-year Ph.D. would follow a 1-year master's degree program. The reforms proposed in this report emphasized the importance of a close relationship between graduate education and the labor market. It was envisioned that American graduate schools would be copied in terms of training through formal instruction and seminars. This way, doctoral students would no longer be dependent on a single supervisor. After the *Robbins Report*, governmental statements on graduate education were largely absent. In 1982, the Association

of British Research Councils published the *Report of the Working Party on Postgraduate Education*, better known as the *Swinerton-Dyer Report*. This report called for labor market information and employment trends to be taken into consideration when deciding upon the number of grants to be allocated by the research councils. Like the *Robbins Report*, the *Swinerton-Dyer Report* also recommended the inclusion of coursework as part of the doctoral program.

In the late 1980s, there was a shift in power concerning research and science policy from leading academies, the funding bodies, and the research councils to the government. The British government started to play a more definitive role in the setting of research objectives. These developments and the various papers issued in the 1990s (discussed later in this report) form the basis of the current graduate education system.

The commitment to personal teacher-student relationships still exists in this system. The British approach to university organization does not focus on research as a primary university activity, prevailing over teaching and study, as it does in Germany. The orientation toward research came rather late and was mainly a reaction to scientific progress and improvement in research training

and research in other countries. Research gradually developed into a standard and subsidized component of faculty activity.

Nonetheless, in terms of number of students, the training component in research has remained relatively underemphasized in British universities. It generally involves a few carefully chosen students who conduct research in a close relationship with their mentors. This has resulted in a doctoral program with little or no curricular provision. Most graduate students register for the Ph.D., which normally requires 3 years of full-time study. Some students register with the intention of obtaining a master's degree, usually either a master of arts or a master of science taken full time in 1 year, or a master of philosophy taken full time in 2 years.

In the current system, only students who achieve a bachelor first-class or upper second-class honors degree are admitted to a graduate program, although exceptions are made for people with relevant professional experience. Admittance to a graduate program occurs in two stages. The first stage is the provision of a studentship (scholarship) by the British Academy or a research council, in which the results of the undergraduate career are taken into account. Second, the student has to be accepted by the department. Expectations regarding time to completion of the program and chances of success of the research proposal are leading criteria for admission by the institutions (Kaiser, Hezemans, and Vossensteyn 1994).

Small size, selectivity, and high quality go together along with personal relations between teacher and student. This apprenticeship model has been a major characteristic of the British system and has the advantage of being easy to operate, with clear lines of responsibility between student and supervisor. The theses produced are made publicly available and consist of a monograph or series of selected papers in learned journals.

Within the various disciplines, there are important differences in this traditional model. In the natural sciences, a graduate student joins a research team and works on a research thesis while contributing to the overall efforts of the group. In the humanities and social sciences, however, students normally select their own topics and work independently. Formal contact is much greater in science departments.

As a result of the reforms in the higher education system in the early 1990s, the number of university graduate students boomed between 1993 and 1994. As the poly-

technics were awarded the university title, the number of taught master's degrees, in particular, showed a large increase (figure 2). With the expansion of the number of universities, and therefore of the number of accrediting institutions, taught master's degrees are being offered in more institutions than before the 1993 reforms.

Figure 3 shows the enrollment of graduate students in various disciplines, broken down by year. The differences on either side of 1993 can be explained by the higher education reforms implemented at that time. Figure 4 shows the differences in enrollment across various disciplines for taught (curriculum-based) programs and research-based programs.

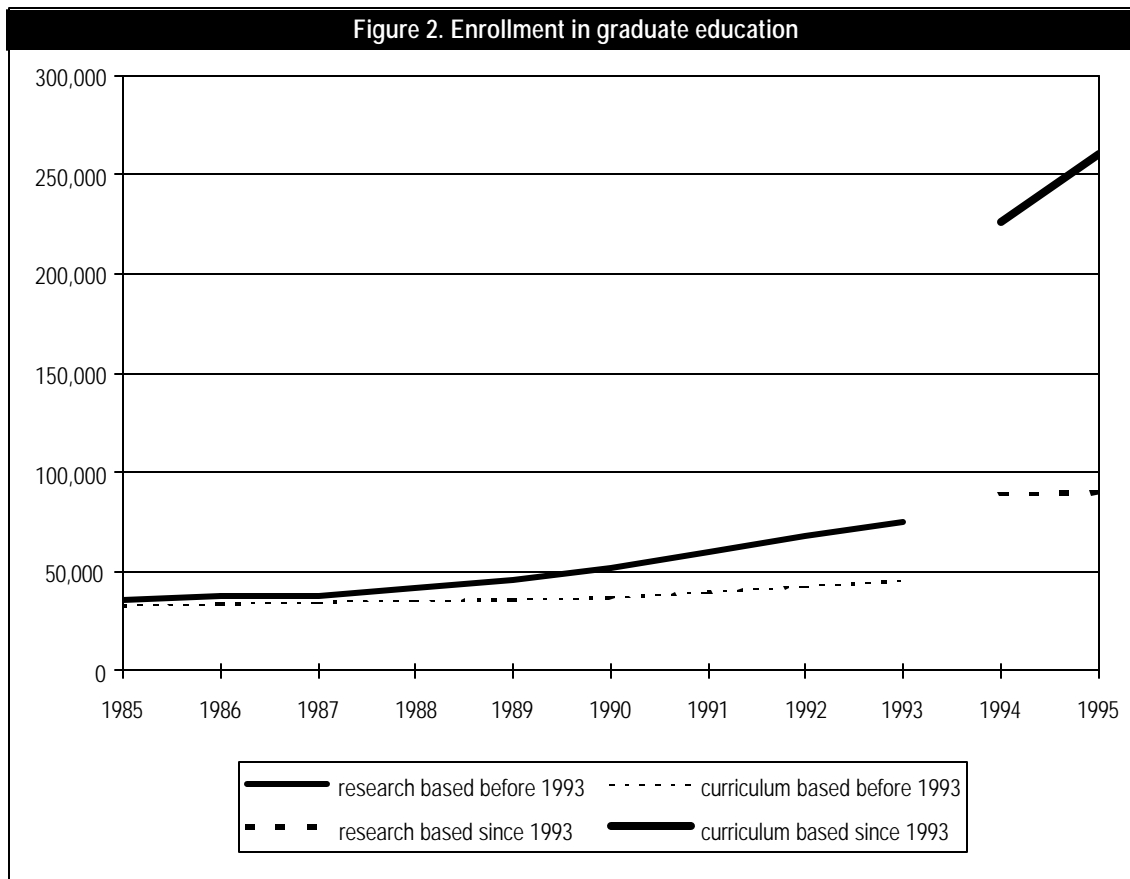
The enrollment of women in graduate education shows a steady increase in the past decade (figure 5). Currently, the numbers of male and female graduate students are practically equal.

In figure 6, doctoral degrees and total graduate degrees awarded in 1994 are presented by discipline. Figure 7 shows number of doctorates by discipline.

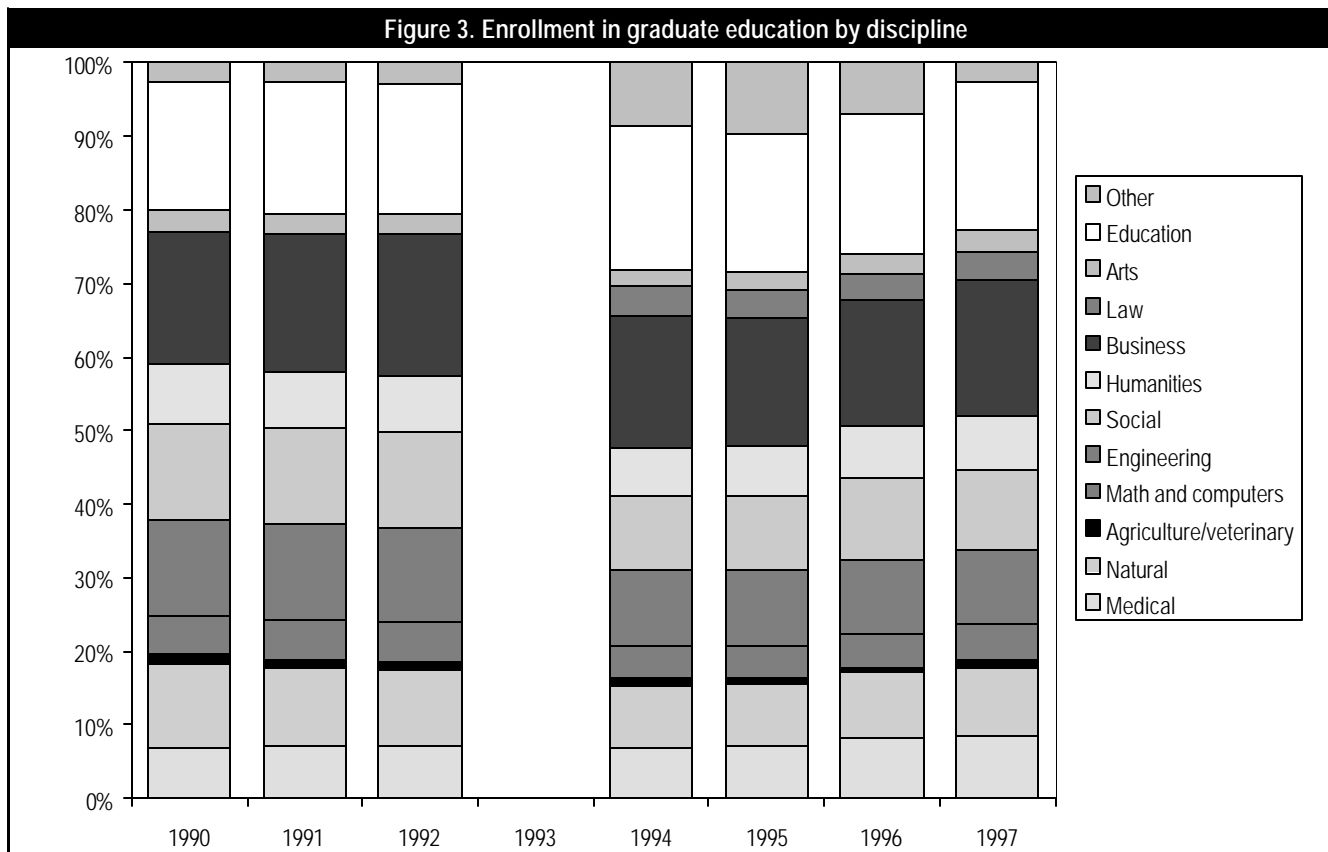
## DOCTORAL REFORMS

While government interference was relatively absent between the publication of the *Robbins Report* in 1963 and the *Swinerton-Dyer Report* in 1982, the role of government in graduate education increased considerably at the end of the 1980s. Until 1993, this was mainly through references to graduate education in general papers about higher education. The policy statements show a consistent interest in linking the number of graduate students to labor market demands. Therefore, an interest in the content of graduate education and its relevance to the needs of industry and commerce were incorporated in the policymaking process. At the same time, the relevance of basic research, which contributes to fundamental knowledge, was recognized. In this section, the reforms in British graduate education—which are still going on—are examined on the basis of the various policy documents issued in the 1980s and 1990s.

Many of the changes to the British traditional apprenticeship model have been inspired by the American graduate education system. This latter system places more emphasis on teaching as a means of introducing substantial elements of training. Furthermore, it is a system in which teams of academics act as advisors for Ph.D. projects. Some of these practices have recently appeared

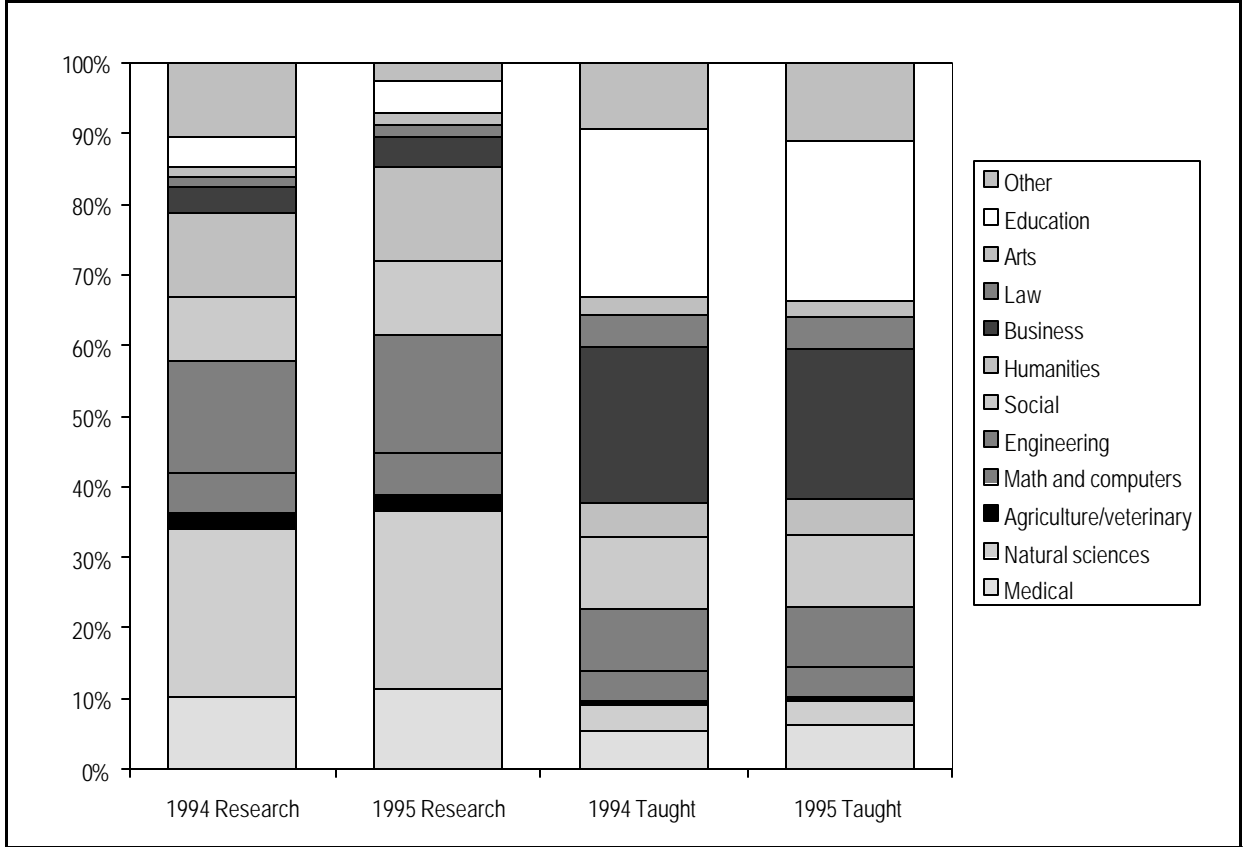


SOURCE: Higher Education Statistical Agency.



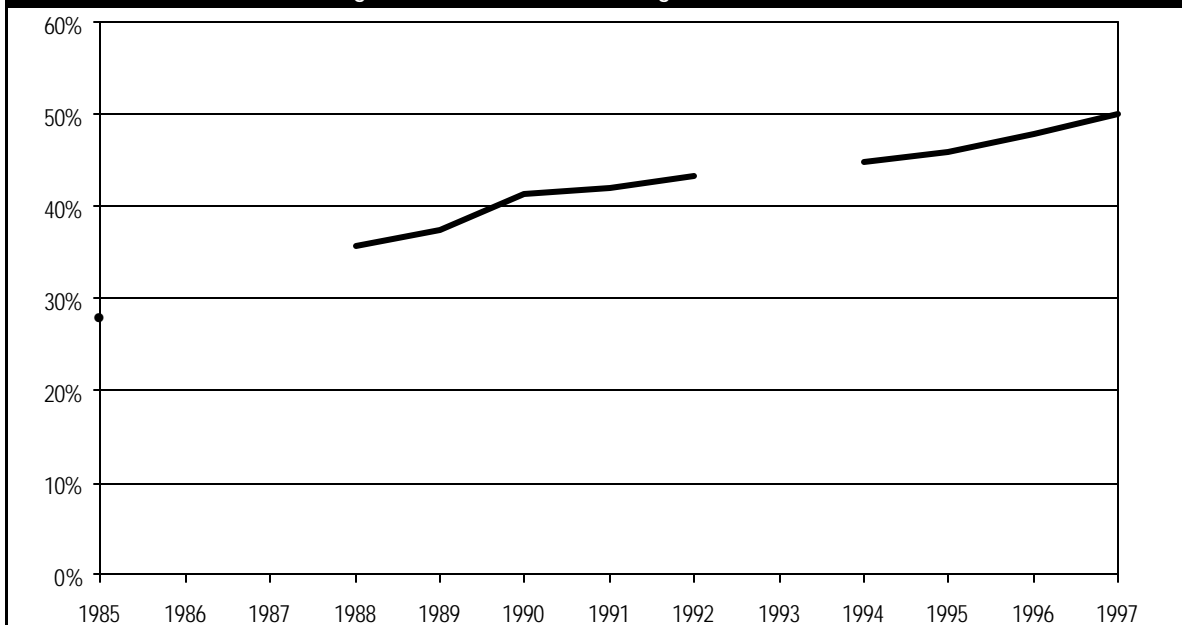
SOURCE: Higher Education Statistical Agency.

Figure 4. Postgraduate enrollment by course and discipline in 1994 and 1995



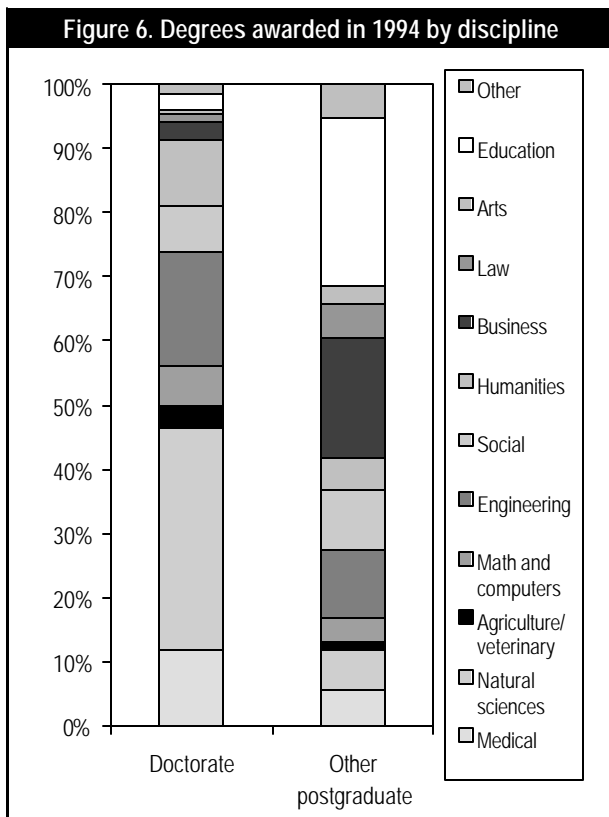
SOURCE: Higher Education Statistical Agency.

Figure 5. Female enrollment in graduate education



SOURCE: Higher Education Statistical Agency.

Figure 6. Degrees awarded in 1994 by discipline



SOURCE: Higher Education Statistical Agency.

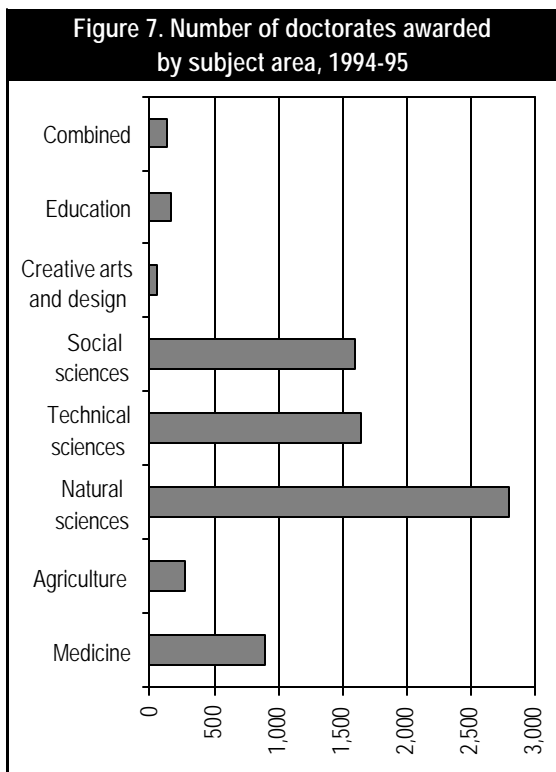
in the United Kingdom, as efforts have been made to incorporate coursework into the Ph.D. program. These courses are designed to broaden students' perceptions of their disciplines, but also to teach the research skills needed to complete a research thesis. Since the *Swinnerton-Dyer Report*, the debate about research training—and hence the criticism about the traditional model—has mainly been about the length of time to degree and the poor submission rates of Ph.D. theses, and about the elements of training to be incorporated into the Ph.D. program. These are addressed below.

### SUBMISSION RATES AND PROGRAM LENGTH

In its report, the Advisory Board of Research Councils recommended that full-time Ph.D. students should complete their program within 4 years. The traditional Ph.D. was being criticized as overly ambitious, and the board suggested that topics should be defined so that completion within a 4-year period would become feasible. The reasons the report gave for poor completion rates were as follows (ABRC 1982):

- poor supervision, especially in the early stages;
- lack of adequate knowledge of research techniques; and
- low student motivation.

Figure 7. Number of doctorates awarded by subject area, 1994-95



SOURCE: Higher Education Statistical Agency (1998c).

Since the publication of the report, the research councils have introduced a sanctions policy to improve national submission rates by disqualifying departments or universities with a low number of students submitting a thesis within 4 years of receiving financial support. The attention to submission rates was caused by reasons concerning funding of graduate education and by the future employment prospects of Ph.D.s (Burgess et al. 1995). Concern has been expressed about the large amount of government funding used to support research students for 3 years of full-time study when the return on this investment, in terms of completed Ph.D.s, is low. Furthermore, it was recognized that, in an environment of limited job opportunities in higher education, it was in the students' best interest to complete as quickly as possible.

## TRAINING PROCESS IN THE PH.D. PROGRAM

The question of whether the education and training process in the Ph.D. program should be emphasized has been a much-debated issue. According to the Committee of Vice Chancellors and Principals of British universities, the Ph.D. should be both a *product*—an original contribution to knowledge—and a *process*, involving the training of a researcher. The only way to accomplish this goal within 4 years is to define the thesis topic carefully and to accept the notion of a Ph.D. program with formal training elements complementing the original research work. This structure was regarded as a way of broadening the narrow, traditional Ph.D., while helping to improve completion rates. Critics of this approach note that it is difficult to combine both formal training elements and research into a coherent package. There have also been suggestions that the Ph.D. thesis should be replaced by a series of research papers on a variety of topics linked to a central theme. However, the idea of a single thesis making a substantial contribution to a discipline is considered a powerful concept which seems likely to remain dominant (ABRC 1982).

The main participants in this debate were the funding councils and the higher education institutions. Much of the pressure to reform the graduate research training process in the 1980s came from agencies responsible for funding training rather than from the universities that provided the training. There was considerable opposition within universities to the introduction of the research councils' sanctions policy and considerable argument about the nature of the Ph.D. Now that a consensus has been reached over the fundamental requirements of the Ph.D. (an original contribution to knowledge carried out as part of a research training process in a fixed period of time), the debate has moved on to the functioning of institutional policies and practices. Questions have been raised as to whether these policies sufficiently contribute to the production of trained researchers. The academic structures of most institutions were developed primarily to cater to undergraduates. Graduate education is mainly still managed as an extension of undergraduate programs, often without the necessary resources. In addition to its structure, the size of graduate training programs might create problems. Many departments are too small to support a doctoral program with a thriving graduate community (Burgess et al. 1995).

After the release of the *Swinerton-Dyer Report*, the government remained rather quiet about graduate education until the early 1990s. In a 1993 White Paper on Research, *Realising Our Potential*, the Technology Foresight Initiative was announced; its intent was to bring together the industrial community and the communities of science and engineering. In this report, attention is paid to the relationship between higher education and the research base. Part of the Technology Foresight Program was a wide-ranging consultation of panels representing key sectors of the economy. Although many issues raised by this consultation have a general rather than a specific relevance to graduate education, some of the wider concerns might have implications for graduates in terms of funding structures and priorities for research topics. The specific objectives of the Technology Foresight Program were as follows:

- to encourage close interaction and networking between the science, engineering, academic, business, and government communities;
- to build a common understanding between these communities of the challenges, concerns, and emerging opportunities in markets and technologies; and
- to provide guidance on priority areas of the 1993 white paper.

In the mid-1990s, two committees were key in the development of graduate education. Their reports were named after their chairmen: the *Harris Report* (HEFCE, CVCP, and SCOP 1996) and the *Dearing Report* (National Committee of Inquiry Into Higher Education 1997). The *Harris Report* focused solely on graduate education and recommended a framework of degrees, specifying the length, level, and title of each program; it also noted that there should be sufficient public funding to support graduate students. The *Dearing Report*, on the other hand, focused on the entire higher education sector and hardly mentioned graduate education in particular. It did, however, endorse the recommendations of the Harris Committee. One of the recommendations in this latter report was to develop a framework of standardized degrees and qualifications, and to increase the transferability of credits between institutions. It was put forward that master's degrees should be standardized and awarded only at the

graduate level. The standardization of degrees should prevent this diverging range of recognition of degrees. The committee further recommended taught program degrees.

According to Blume (1995, p. 29), “graduate training is being gradually decoupled from its traditional association with an academic career toward education and training.” The U.K. research councils have developed a number of schemes, which include a variety of relationships between students, industry, and educational institutions. The production of original research, however, remains central to the purpose of graduate education. The current challenge is to ensure high-quality training in research (given political priorities and financial constraints) that emphasizes both product and process (Burgess, Band, and Pole 1998).

In general, one might say that universities have made efforts to reform graduate education. There has been a move away from the apprenticeship model toward a program of research training that includes coursework, the appointment of joint supervisors, and a careful monitoring of progress by a research committee. Most institutions now have strict limits on the length of the research thesis. To ensure and control the quality of graduate education, some institutions have looked at the American graduate school model. In the early 1990s, a few graduate schools were established in the United Kingdom; presently, there are indications that certain other institutions will also change the administration of graduate education. In 1992, the chairman of the Advisory Board of Research Councils stated that (Ince 1992, p. 18):

The idea of British graduate schools represented a strand of thinking which is now becoming quite common. A new center of gravity has to be found which gives a greater role to the research mentality. Leading universities increasingly need to be places that think of themselves as producers of research and as centers of systematic research training instead of places that happen to do some research and research training alongside their undergraduate training.

Changes in this direction are being made, but are still in progress.

## PATTERNS OF SUPPORT

Public funding for graduate education comes mainly from two sources: the funding councils and the research councils. The funding councils do not provide financial

support for graduate students but provide the capital and some of the equipment for both research and teaching. The research councils make grants available for research and studentships for graduate education. Sources of support for postgraduate students in 1996-97 are shown in table 1.

Source	Full-time	Part-time
Total.....	7,629	13,551
No award or financial backing.....	3,344	6,308
UK LEA mandatory/discretionary awards.....	2,095	333
Institutional waiver of support costs.....	296	426
Local government.....	8	1
Research councils and British Academy.....	593	18
Charities and international agencies.....	60	39
Governmental authorities.....	440	1,152
EU Commission.....	65	103
Other overseas sources.....	63	13
UK industry and commerce.....	202	3,867
Absent/no fees.....	29	176
Unknown.....	434	1,115

SOURCE: Higher Education Statistical Agency (1998).

The research councils are public bodies funded by the government. The roles of the three principal public funding bodies before 1993 are explained below.

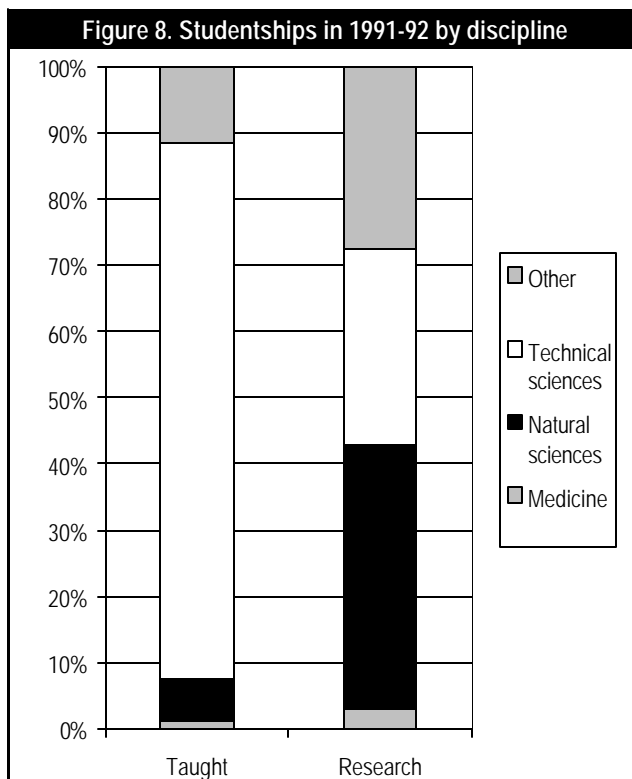
- **Economic and Social Research Council (ESRC).** The ESRC makes available approximately 300 research awards for full-time graduate research training (M.Phil. or Ph.D.) in the social sciences at recognized institutions. The council makes a distinction between so-called “Mode A” and “Mode B” departments. Mode A departments have demonstrated that they can provide formal training in research methods and techniques in the first or foundation year of the program, according to ESRC guidelines. They accept ESRC-funded students without previous graduate research training for full 3-year awards. Mode B departments can only take ESRC-funded students with a foundation in research training; usually, these students have completed a master’s program that teaches research methods.
- **Science and Engineering Research Council (SERC).** The SERC awards approximately 2,355 research studentships each year. There are two types of awards: standard awards and the Coop-



erative Awards in Science and Engineering (CASE). Standard awards are allocated by the SERC as quotas to departments in institutions, which nominate eligible candidates. A small number are awarded to individuals on a competitive basis. The cooperative awards give students experience in research in an industrial environment.

- **British Academy.** Before 1992, the British Academy gave approximately 500 major studentships each year through its national awards competition. The majority of these provided 3 years of funding for research students in the humanities. Since 1992, the total number of awards as well as the number of 3-year awards have increased. Of the 400 3-year awards offered each year, 100 would be available to students without postgraduate experience and 300 would be restricted to students with 1 year's postgraduate research training.

Other research councils are the Medical Council and the Natural Environment Research Council. The research councils' studentships vary across disciplines. Figure 8 shows the number of studentships in 1991-92 by discipline.



SOURCE: Office for Science and Technology (OST). Annual Review of Postgraduate Awards 1992/1993. Unpublished.

Although the ESRC started to fund part-time students through a national competition, most part-time graduate students finance their own studies or are financed by their employers. The latter source of support is more common for taught master's degrees than for research master's or Ph.D.s because of the link between master's degrees and employment. Some universities provide their own studentships, which are mainly awarded to students who have been unsuccessful in the research councils' or British Academy's competitions. A studentship generally involves a maintenance award (equivalent to a research council or British Academy grant), together with payment of fees (Burgess et al. 1995). Furthermore, universities employ graduate students as class teachers or have developed teaching assistant programs.

Following the publication of the government white paper *Realising Our Potential* in May 1993, the research councils' system of funding has changed. There are now six research councils, five that provide funding for sciences and technology, and one funding the economic and social sciences:

- Biotechnology and Biological Sciences Research Council,
- Engineering and Physical Sciences Research Council,
- Medical Research Council,
- Natural Environment Research Council,
- Particle Physics and Astronomy Research Council, and
- Economic and Social Research Council.

In addition, the British Academy looks after the humanities.

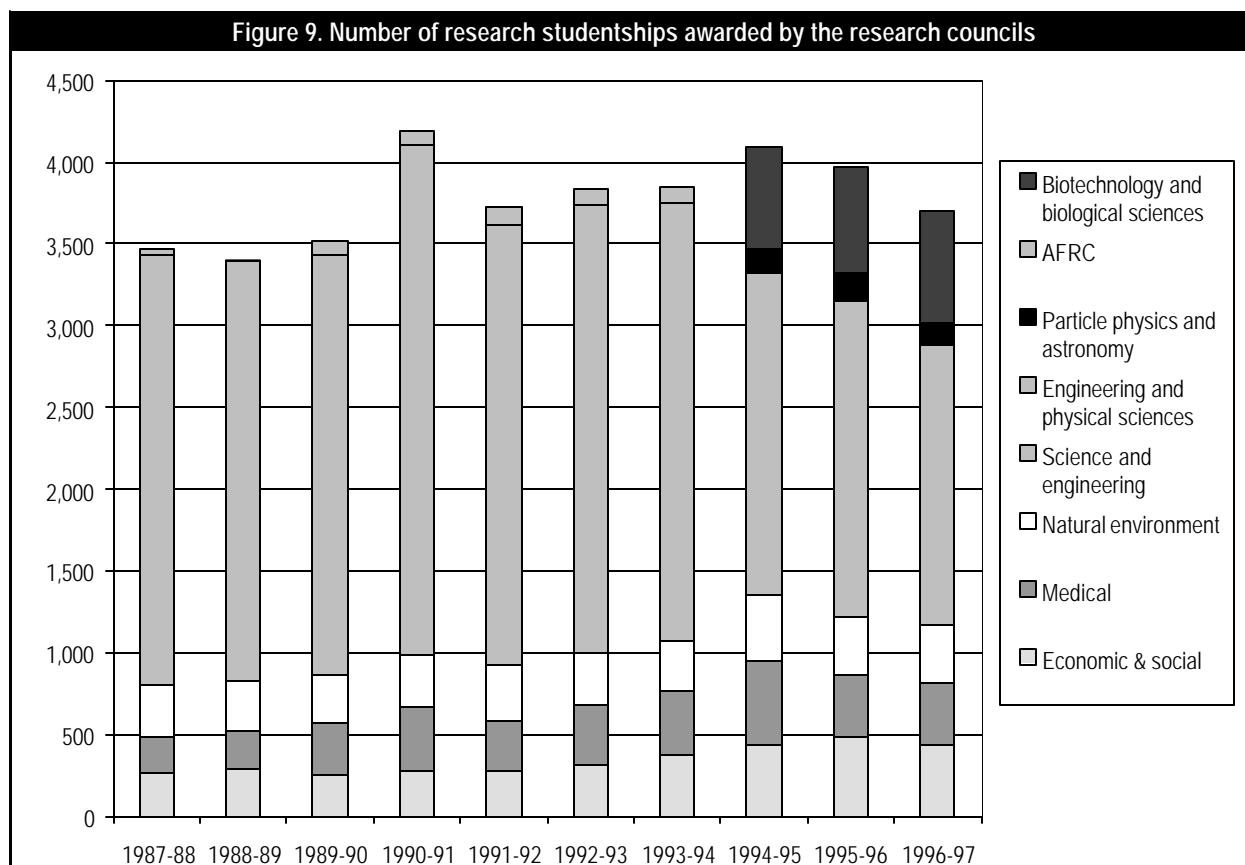
The six councils are government agencies reporting to the Office of Science and Technology; they grant funding for individual postgraduates. The competition for research funding is intense, with only a small percentage of candidates making successful applications. There are three types of funding given by the research councils (CSU 1998): advanced course studentships, which are master's level taught courses; research master's training awards; and standard research studentships, which are for Ph.D. or M.Phil. students for programs of up to 3 years full time

or 5 years part time. Some of the research councils give CASEs, which are similar to standard research studentships but involve cooperation with a partner in industry. The research councils set their own level of payment, but all awards for British students include tuition fees (a payment straight to the institutions); a maintenance grant; and a contribution toward travel, fieldwork, materials, and other expenses.

To qualify for a full award, candidates should be resident in the United Kingdom and possess a first-class or an upper second-class degree (a lower second-class degree is the minimum requirement for an advanced course studentship from the Natural Environment Research Council or Engineering and Physical Sciences Research Council). Each council regularly reviews academic departments and programs, and allocates advanced course studentships through a quota system to the departments of the approved programs. The departments can select the candidates they believe to be most qualified. Figure 9 shows the number of research council studentships from 1987-88 until 1996-97.

## EMPLOYMENT PATTERNS

For most of those who start a graduate program, an academic career remains the central objective (Becher, Henkel, and Kogan 1994). The strength of this aspiration, however, varies by discipline. In the humanities and social sciences, academic careers are the prime goal of those who register for doctorates. Although this goal is also strong in the natural sciences and technology, the aspiration level in these disciplines is lower when there are good employment possibilities in commercial or other nonacademic activities. Especially in many branches of chemistry and biochemistry, doctoral training is considered applicable to both theoretical and applied areas. Various studies of the employment of social science Ph.D.s show that employers generally do not consider a doctorate to be a significant advantage (Pearson et al. 1991). Employment trends for people with a Ph.D. degree in the social sciences indicate that higher education is the major employer. A larger proportion of those holding a taught master's than of Ph.D. recipients go into industry and commerce or the public sector; a smaller proportion enters academic life (table 2).



SOURCE: Office for Science and Technology (OST). Annual Review of Postgraduate Awards. Unpublished.

**Table 2. First employment destinations of Ph.D. and Master's degree recipients, 1989 and 1992 (percentages)**

Destination	Ph.D.		Master's	
	1989	1992	1989	1992
Permanent academic appointment.....	4.2	3.6	2.0	2.0
Fixed term academic appointment.....	23.1	22.5	5.0	4.0
Further training.....	1.6	2.6	9.5	9.0
(School) - teacher training.....	1.0	1.1	0.8	1.0
Private sector (industry or commerce).....	22.7	17.7	35.7	29.0
Government or other public sector.....	5.5	6.1	9.5	9.0
Other employment.....	1.8	1.8	1.0	2.0
Not employed.....	7.0	8.6	3.0	3.0
Unknown.....	22.6	25.4	28.5	38.0
Overseas.....	10.6	10.6	4.0	3.0

SOURCE: Office for Science and Technology (OST). Annual Review of Postgraduate Awards. Unpublished.

The first destinations of U.K. resident postgraduates in 1996-97 are shown in table 3.

One of the primary purposes of the Ph.D. is still considered to be the preparation of the future generation of academics. The limited number of vacancies available, however, largely frustrates this aim. At the same time, outside the research context, the Ph.D. does not appear to enhance job prospects. Employers are likely to be more impressed with the promise of all-around capability of a master's degree-holder than with the more narrowly focused competency associated with doctoral qualifications.

For the most part, research education is a risky investment. On the one hand, the advantage of a Ph.D. compared to undergraduate degrees is absent in a whole range of nonacademic occupations. On the other hand, only a minority of Ph.D.s are given the opportunity to secure their most preferred employment. The policies

**Table 3. First employment destinations of U.K. resident postgraduates, 1996-97**

Destination	Doctorate degree	Other postgraduates
Entered work.....	3,356	8,258
Returned to/remained with previous employer.....	573	1,802
Self-employed.....	83	450
Entered study or training.....	163	2,022
Seeking employment or training.....	97	687
Not available for employment/studies/training.....	83	350
Percentage with known destinations.....	77.5	73.2

SOURCE: Higher Education Statistical Agency (1998a).

proposed in the 1993 white paper could reduce some of these uncertainties. The taught master's program can function as a selection mechanism through which all potential doctoral students should pass. The resulting fewer entrants will in this way find less competition for academic posts. In fact, their employment possibilities will be even better, since more academic posts will become available due to a large outflow of retired academics. By increasing the number of master's degrees and reducing the number of Ph.D.s in areas where there is a surplus of Ph.D.s as compared with academic labor market requirements, the connection with the labor market should be recovered.

## PATTERNS OF INTERNATIONAL MOBILITY

In 1991, over 46 percent of the graduate students in British institutions were from overseas. The large increase in overseas full-time graduate students, both in absolute numbers and in comparison with U.K. students, is shown in table 4.

In the 1990s, the relative number of all overseas full-time postgraduate students decreased. British postgraduate education, however, remained an attractive destination for European Union (EU) students. In 1994, 9 percent of full-time postgraduate students were from non-British EU countries (figure 10). This was mainly because students from EU countries were eligible for tuition fees

**Table 4. Numbers of U.K. and overseas students from 1981-82 to 1990-91**

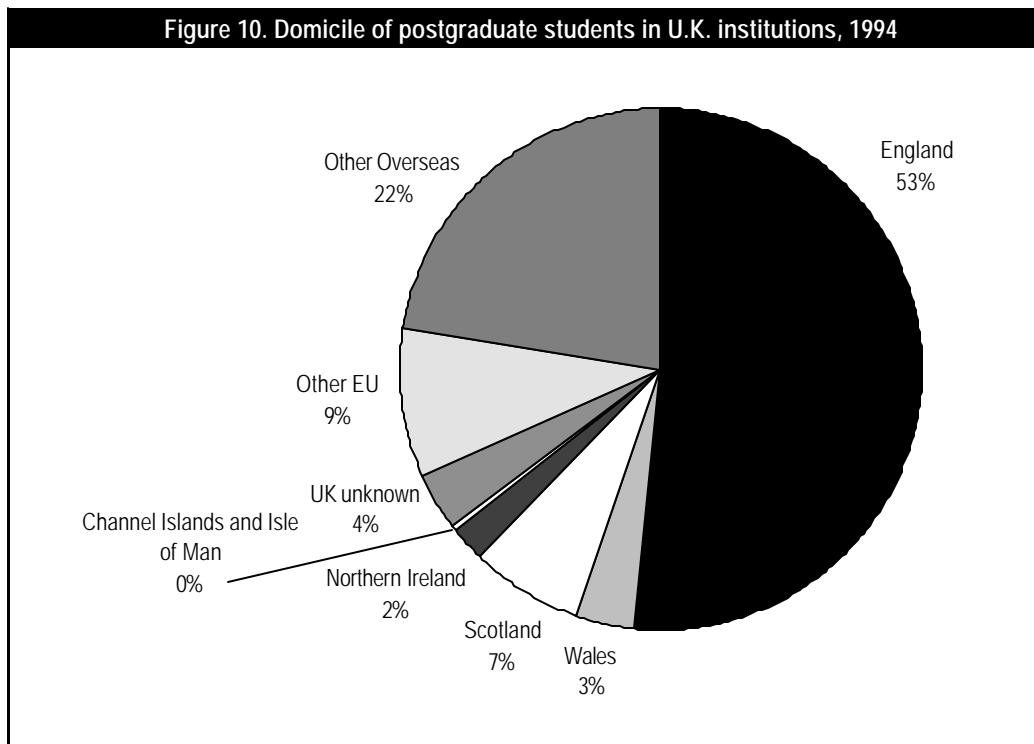
Year	Total students in postgraduate program	Number of U.K. students	Number of overseas students	Overseas students as percentage of total
1981-82	34,276	20,941	13,335	38.9
1982-83	33,903	20,610	13,293	39.2
1983-84	35,928	21,582	14,346	39.9
1984-85	37,563	22,377	15,186	40.4
1985-86	40,498	23,384	17,114	42.3
1986-87	42,824	24,144	18,680	43.6
1987-88	43,733	23,465	19,268	44.1
1988-89	44,175	23,899	20,276	45.9
1989-90	45,644	24,247	21,397	46.9
1990-91	49,950	26,537	23,413	46.9

SOURCE: Office for Science and Technology (OST). Annual Review of Postgraduate Awards. Unpublished.

at U.K. rates. In four subject areas, overseas students even outnumbered British students: veterinary science, agriculture and related studies, business and financial studies, and engineering and technology.

The internationalization of graduate education in the United Kingdom has raised several policy questions. Some

programs are fashioned deliberately to meet the needs of overseas students. In some cases, it is expected that programs would not even be viable without overseas students. Because departments gain no financial advantage from overseas students—and, in some cases, might even lose money offering these programs—a ceiling may be placed on EU admissions.



SOURCE: Higher Education Statistical Agency (1998c).

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