



department for
education and skills
creating opportunity, releasing potential, achieving excellence

esru
Employment Studies Research Unit
University of the West of England

WARWICK INSTITUTE for
EMPLOYMENT RESEARCH **IER**

Summary report

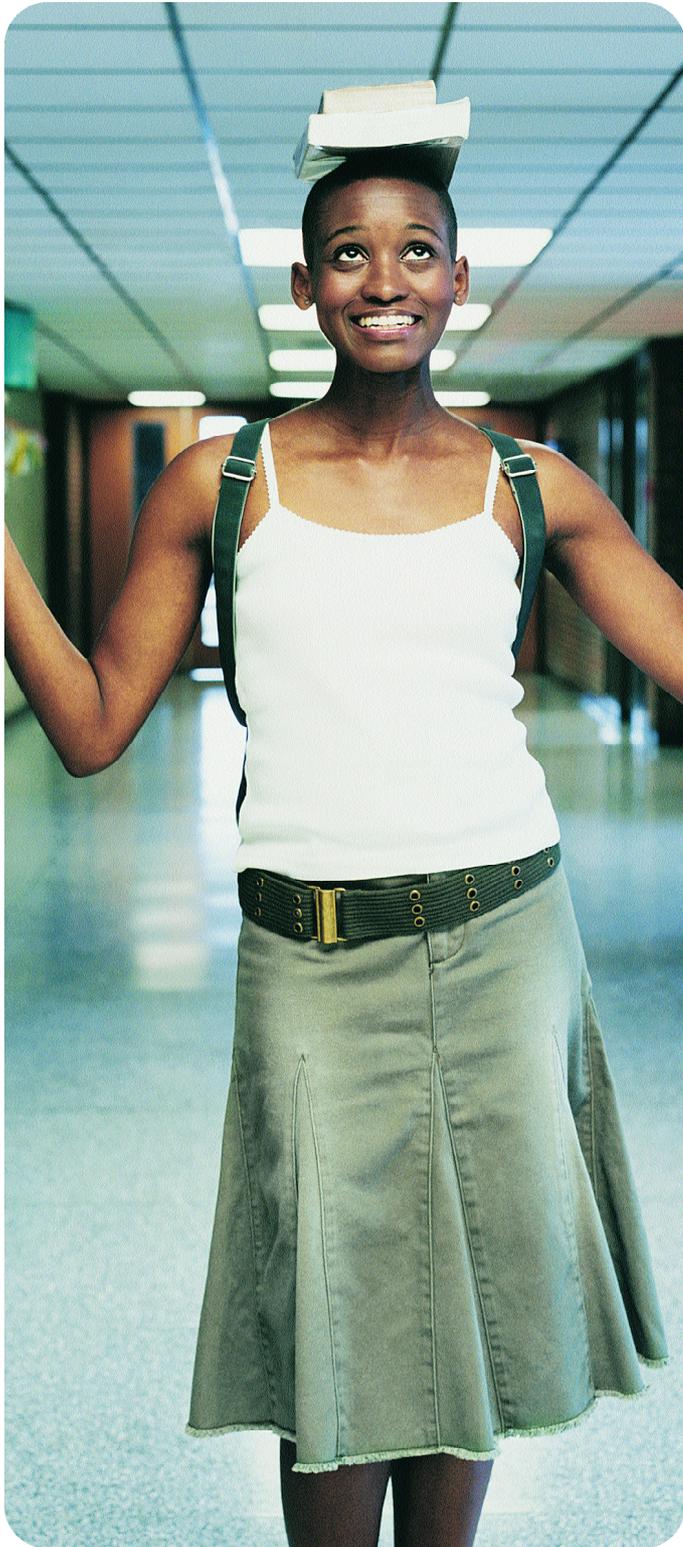
The Class of '99

A study of the early labour market experiences
of recent graduates

Kate Purcell
Peter Elias
Rhys Davies
Nick Wilton

October 2005





What's inside

Introduction	2
Methodology	3
Key findings	3
What were these highly qualified labour market entrants doing at the time of the survey?	4
What is a graduate job?	5
Are graduate employment prospects changing? Tracking and comparing the early career paths of the 1995 and 1999 cohorts	6
How useful is careers information, advice and guidance?	7
Is a degree still a good financial investment?	10
Who gets the good jobs and who has difficulties?	11
Who went one degree further.....?	12
Does student debt impact on future career development?	13
Was it worth it?	14
Conclusions	15



Introduction

This report presents findings from a detailed investigation of the early careers of graduates who gained their degrees in 1999. The study was commissioned by the DfES and conducted by an interdisciplinary team of researchers from the Employment Studies Research Unit (ESRU) at the University of the West of England and the Institute for Employment Research (IER) at the University of Warwick. The sample was drawn from those who completed undergraduate degree courses at one of 38 UK higher education institutions (HEIs), selected to be representative of the full range of UK undergraduate degree-holders (Purcell *et al.* 2005, Purcell and Elias 2004, Elias *et al.* 1999)². Comparative data from an earlier study of 1995 graduates from many of these same institutions were also explored³ to investigate change in the early labour market experiences of recent graduates.

The study examines the relationship between higher education and career development, tracking graduate, postgraduate and labour market trajectories from the point of graduation until around four years later. Career outcomes - occupation, sector of employment, earnings and subjective evaluations of career development - are related to the educational and demographic characteristics of respondents, and the extent to which members of the sample appear to have been employed in appropriate work for graduates is evaluated. The impact of higher education expansion is explored, particularly in comparing the outcomes of the earlier (1995) and more recent (1999) graduating cohorts. Has the labour market successfully absorbed the increased numbers of graduates entering the labour market at the end of the 20th Century? Does studying for a degree continue to represent a good investment of time and resources and provide access to careers rather than jobs? Do student debts affect subsequent career options? The answers to these questions are of interest to a variety of audiences, from those engaged in educational planning or with graduate recruitment to young people about to embark on a programme of higher education and to those who fund their studies.

Methodology

The data for both studies derive from self-completion postal questionnaires, from over 9,600 graduates who completed undergraduate programmes in 1995 and approximately 8,600 who finished comparable programmes in 1999. As with the 1995 sample, the Class of '99 survey findings were supplemented by qualitative data collected in a follow-up programme of interviews. For the 1999 graduating cohort, interviews were conducted with 100 respondents, disproportionately targeting graduates who had experienced difficulty in accessing appropriate employment⁴.

Key Findings

Graduate labour market integration

- Nearly 70 per cent of men and 66 per cent of women reported they were in full-time employment related to their long-term career plans and over 80 per cent of the respondents reported being either reasonably or very satisfied with their career to date.
- At the time of the survey, over 80 per cent of respondents appeared to be in appropriate jobs - as managers and senior officials, professionals or associate professionals and technical job-holders, according to the current standard occupational classification (SOC 2000) and in a 'graduate' job category, according to SOC (HE)⁵ - a new classification of occupations developed to analyse change in the graduate labour market.
- Almost half the Class of '99 who entered employment immediately following their studies were employed in non-graduate occupations, but this fell rapidly and by four years after graduation, 15 per cent of employed 1999 respondents remained in non-graduate jobs - less than had been the case for the 1995 cohort at the same stage. During their early careers, participation in non-graduate jobs was generally lower for the 1999 than the 1995 cohort.

- Assimilation into appropriate employment took longer for some graduates than others, but from the evidence of both cohorts studied in the course of this investigation, appropriate and satisfying work appears to have been obtained by over two-thirds of respondents, whichever objective criteria or subjective evaluations are applied.
- Similar patterns of movement into employment where qualifications, skills and knowledge were required over the course of early careers were evident for the graduates of 1995 and 1999.

Graduate earnings

- Graduates were found to earn a wide range of salaries, depending upon subject of study, sector of employment and a range of related variables, but overall, earnings and salary growth over the first few years of graduate employment were positive and highly significant. It appears that employers continue to be prepared to pay a premium to employ graduates, even in jobs that also employ non-graduates.
- The findings indicate, however, that the rate of increase of the earnings of those who graduated in 1999 does not appear to have kept pace with earnings increases more generally in the economy. This may be particular to this cohort, reflecting the circumstances prevailing in 2003/04 - or it may be the first indication that the graduate earnings premium is beginning to reflect a decline in the excess demand for graduate skills and knowledge that characterised the situation prevailing throughout the 1990s.
- We find that there remains a significant gender gap in pay amongst the 1999 cohort. Even after adjusting for a number of factors, 5 per cent of the average difference between male and female earnings remains unaccounted for by any other factor than gender.

Career satisfaction

- Most 1999 graduates embarked on higher education believing that their qualification and experience would improve their employment prospects but over half also saw higher education as an opportunity to achieve their potential. Only a very small minority (3.5 per cent of graduates) reported that they would choose, with hindsight, not to have entered higher education.
- Over 80 per cent of graduates surveyed reported being either reasonably or very satisfied with their careers to date. The majority of graduates did not measure the value of their degrees (and career satisfaction) purely in terms of economic returns. Overall, the vast majority of interviewees considered their undergraduate education to have been a good investment; some citing subsequent labour market success, others stressing the opportunity for personal development. However, given the close relationship between higher education and early career success, the perception of the 'worth' of holding a degree tended to be closely related to how far they were satisfied with their career development so far.

What were these highly qualified labour market entrants doing at the time of the survey?

Four years after graduation, nearly all the 1999 graduates held jobs as employees, with an additional 4 per cent of men and 3 per cent of women self-employed. Around 7 per cent of men and 8 per cent of women were in postgraduate study. Only 3 per cent of men and less than 2 per cent of women were unemployed and seeking work. Table 1 reveals that about 70 per cent of all graduates were in employment relating to their long term career plans some four years after graduating with their first degree.

The overwhelming majority of graduates worked in the service sector, with 55 per cent of female graduates employed in either education or other public services. Male graduates were also most likely to work in other public services, but were more evenly spread throughout all sectors of the economy. The most popular reason for taking their current job was 'It was exactly the type of work I wanted', followed by 'It offered interesting work' and 'I wanted to work in this region'. Significant proportions of graduates worked in gendered occupational contexts.

Table 1. Situation of 1999 graduates at the time of the survey (2003/04), by gender

	Male	Female
Full-time related to long-term career plans	69.5	65.7
Part-time related to long-term career plans	1.5	4.7
In full-time employment (other)	16.6	17.6
In part-time employment (other)	1.7	3.1
Self-employed	4.2	3.0
Postgraduate study	6.5	8.3
Unemployed and seeking work	3.2	1.9
Out of the labour force/not seeking work	0.8	1.7
Other	2.2	3.2

What is a graduate job?

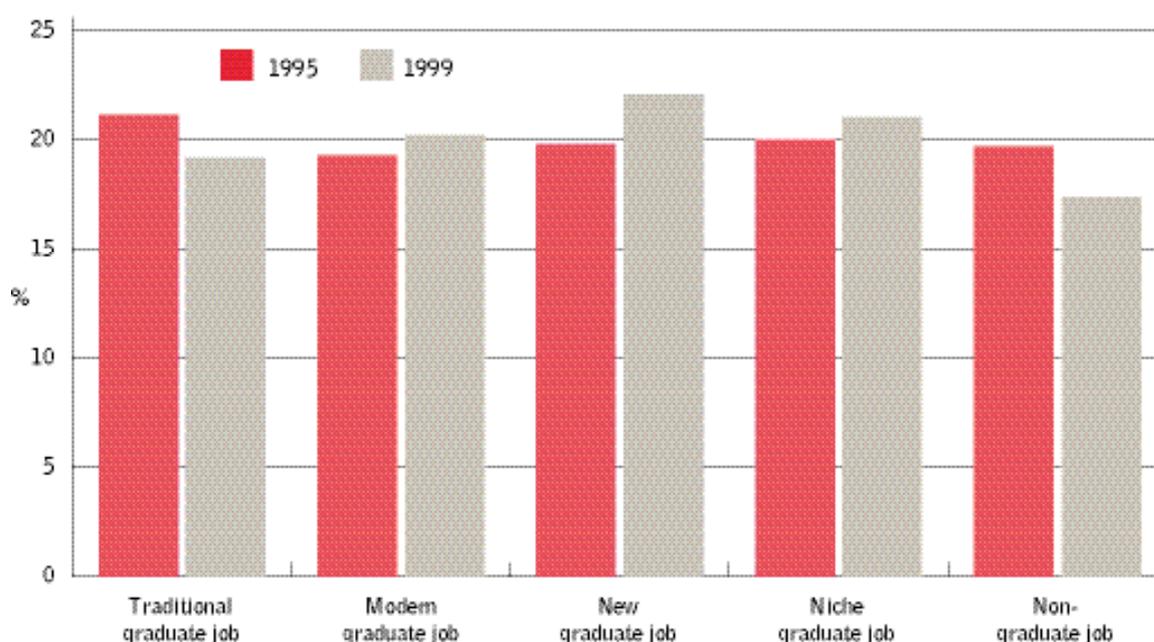
According to the SOC (HE) classification, graduates in the 1999 cohort appear to have been more likely to be in 'new graduate occupations' - jobs which have recently offered graduates opportunities to develop their careers, or which relate to recent changes in technology and/or work organisation. They were somewhat less likely to have moved into traditional graduate jobs than their 1995 peers, but also less likely to be in non-graduate jobs (see Figure 1).

The evidence supports previous findings that there is a significant difference between the 'graduate job' categories and non-graduate jobs in terms of requirement for qualifications and skills, and in the responsibilities and duties inherent in the posts described. We conclude that an undergraduate degree had been necessary to access most of the new graduate jobs and there was some evidence that increasing levels of qualifications were being

required for some of these, and possibly for modern graduate occupations as well. The majority of new and niche graduate job-holders interviewed appeared to be employed in jobs where they felt they were required to use their higher education, either directly or indirectly, so that it makes sense to label these jobs - often hybrid administrative/technical with a specialist management component - as graduate jobs that required their incumbents to manipulate or manage information, or manage people or processes⁶.

There was a correlation between the 'maturity' of SOC (HE) categories and subjective evaluations of jobs, with those in the longer-established categories (traditional graduate jobs and modern graduate jobs) more likely both to require and use degree qualifications and learning. Over two-thirds of 1999 graduates rated their current jobs as being appropriate for somebody with their qualifications and one in five rated their jobs as 'ideal'. Response was strongly correlated with SOC (HE) category of job however, with non-

Figure 1. Distribution of those in employment by SOC (HE) classification, comparing 1995 graduates 3.5 years after graduation and 1999 graduates 4 years after graduation



graduate job-holders (especially women) substantially less likely to have rated their job as appropriate and those in niche graduate jobs less likely to have done so than those in the other 'graduate job' categories.

Where respondents indicated that their degree had been a job requirement for non-graduate work, this may represent credential inflation. However, there was evidence that in some instances, it indicated areas of employment with significant graduate niches with well-trodden graduate routes into them, or areas where non-graduate work experience tends to be regarded by employers as a necessary stage for entry into an industry or profession.

Are graduate employment prospects changing? Tracking and comparing the early career paths of the 1995 and 1999 cohorts

The early career profiles of 1999 graduates are almost identical to those exhibited by the earlier cohort. However, against a background of falling unemployment generally, the experience of unemployment among the 1999 graduates during the two years after graduation was slightly lower than for the 1995 graduates. The distributions of the duration of unemployment among the 1995 and 1999 cohorts were similar, with short spells of unemployment immediately after graduation dominating. The likelihood of experiencing longer spells of unemployment varied by class of degree awarded, with those with lower grades more likely to be in this category. In terms of subject studied, arts graduates were most likely to have experienced significant unemployment while law, business, education and medicine graduates were least likely to have done so.

Employment in traditional graduate occupations was between 4 and 6 per cent lower among the 1999 graduates than in the earlier cohort, but a higher proportion of the 1999 graduates were

employed in modern and new graduate jobs. Similar patterns of movement into employment where qualifications, skills and knowledge were required over the course of early career were evident for the graduates of 1995 and 1999. This is shown in Figures 2a and 2b.

While the number of graduates employed in non-graduate employment fell over the four years since graduation, the proportions of those in such employment reporting that a degree had been required for their jobs and that they were required to use their degree skills and knowledge had increased over time. This reflects increasing blurring between graduate and non-graduate jobs; changing skills and knowledge requirements in some occupations; more diverse patterns of occupational access and graduate/non-graduate division of labour; and the emergence of new graduate occupations or occupational niches. The proportions of graduates in niche graduate jobs reporting that their degrees had been required for their jobs and that they were required to use their degree skills and knowledge had also increased over the period between graduation and survey. This suggests that graduates in such employment had been increasingly entering graduate-appropriate employment in these occupational areas.

Movement out of non-graduate employment

Working in non-graduate jobs was a common experience following labour market entry. Almost half of the *Class of '99* who were employed immediately following their studies were employed in such occupations, but subsequent 'non-graduate' employment fell rapidly and by four years after graduation, only 15 per cent of employed respondents remained in non-graduate occupations. During early careers, participation in such employment was generally lower for the 1999 than the 1995 cohort. Figure 3 shows that graduates who had studied subjects at the vocational end of the subject/discipline spectrum, such as medicine, education,

Figure 2a. The occupational evolution of employment among 1999 graduates

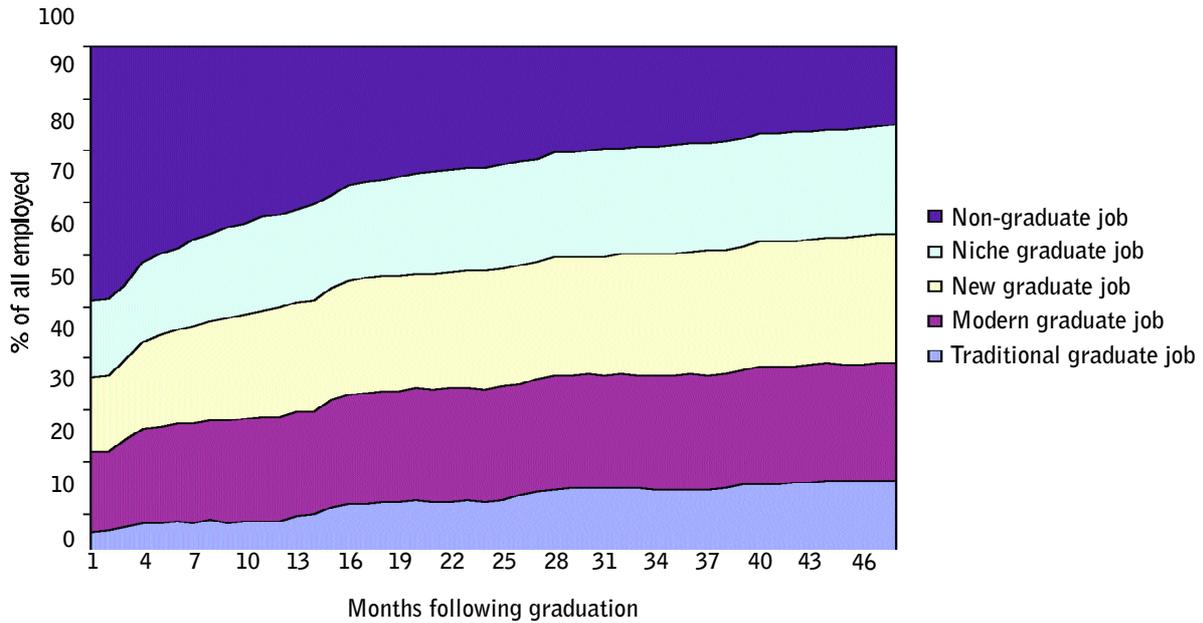
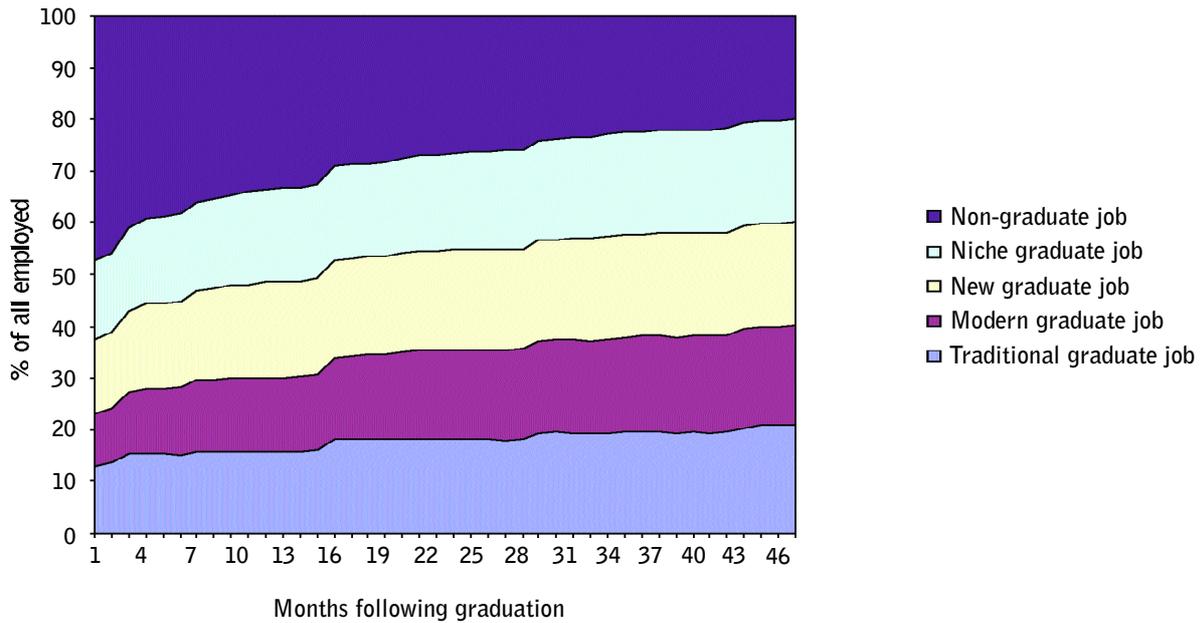


Figure 2b. The occupational evolution of employment among 1995 graduates



engineering, and mathematics and computing, were less likely to have obtained employment in non-graduate occupations following graduation, while at the other end of the subject spectrum, graduates with degrees in the humanities had relatively high levels of employment in these jobs. Female graduates were more likely than males to work in non-graduate jobs in their early

careers, as were those of both sexes who had achieved relatively low degree results.

How useful is careers information, advice and guidance?

Approximately 75 per cent of respondents reported using careers advisory services; 80 per

Figure 3. Employment share in non-graduate occupations by subject of degree

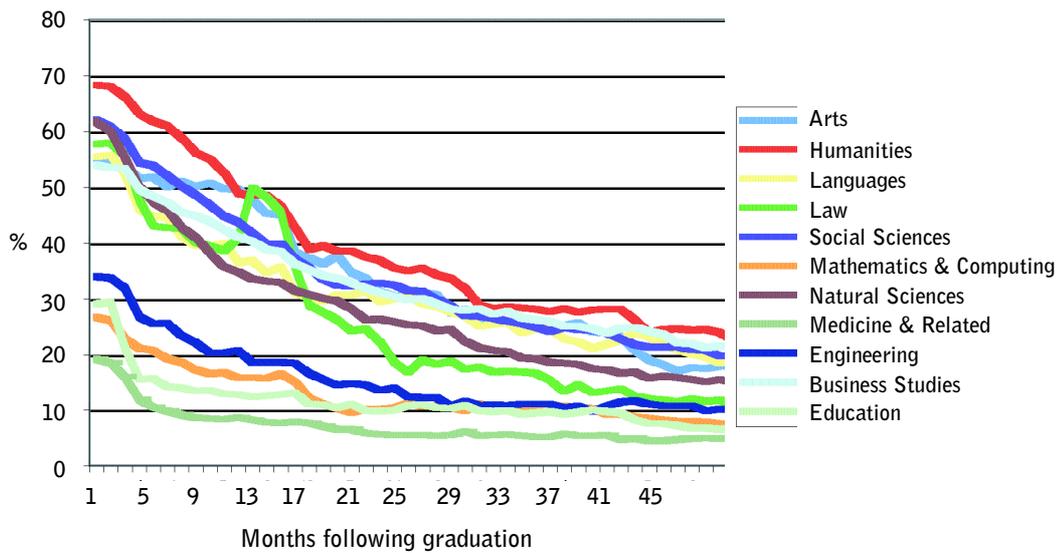
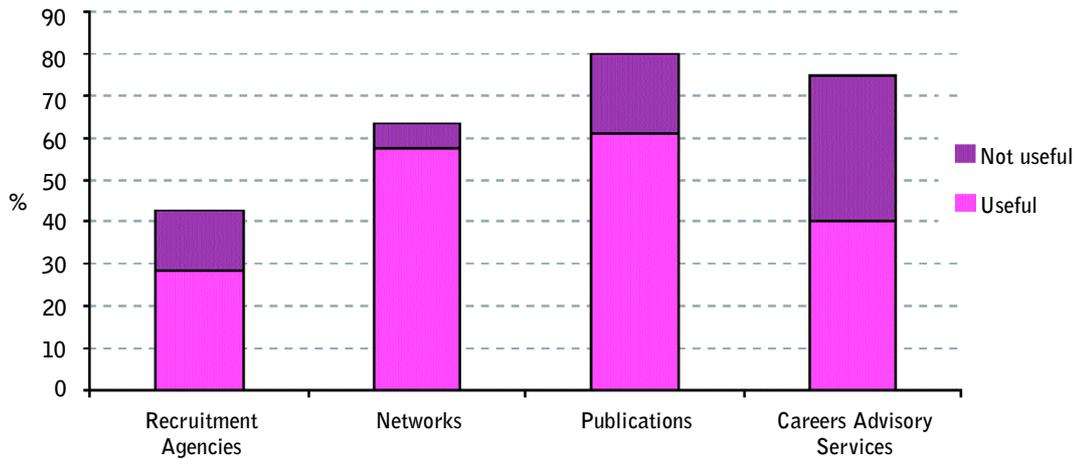


Figure 4. Proportions of graduates who reported using sources of information, advice and guidance and those who consider them to have been of use



cent used newspapers, internet sources and other publications; two-thirds had drawn upon personal contacts (- family, professional or academic, summarised as 'networks'); and 42 per cent had used recruitment agencies. Networks were considered most useful overall, which may have worrying implications for equal opportunities. Conversely, although use of careers advisory services was among the most popular approach, approximately half of all graduates who had used them had not found them particularly useful (see Figure 4).

In terms of the diversity of sources and propensity to use them among different categories of students, those from a managerial and professional social class background reported making greater use of networks and careers advisory services than those from lower socio-economic groups. To some extent, this is likely to reflect the fact that graduates of new universities reported a lower propensity to have used careers advisory services than those from old universities. There were considerable differences in patterns of use and reported

usefulness of the different sources of advice and information according to age of respondent and degree subject, with vocational graduates less likely to have required or sought information and guidance and those, paradoxically, with greatest need for guidance (for example, those with poor degree results and less immediately-marketable degree subjects) least likely to have accessed it or found it useful.

The qualitative data illustrated how recruitment agencies had been an important source of jobs and information about careers for 1999 graduates, especially for those in the newer areas of graduate employment such as ICT and specialist areas of management and business services. Compared to their 1995 peers, 1999 graduates were more likely to be in permanent employment throughout the period following graduation, but career trajectories and the qualitative interviews highlighted the importance of temporary and fixed-term employment in the early stage of graduate careers. This was not necessarily inappropriate employment.

The interviews provided evidence that pro-activity and persistence in pursuing career opportunities tended to have secured desired career goals. They also supported the survey findings that work placement and prior experience were positively correlated with entry into graduate-level employment. The accounts provided by respondents provided testimony to the diversity of characteristics, circumstance, expectations and aspirations of the graduate labour supply, and to the different degrees to which different categories of graduates have access to information and advice, both through formal and informal channels, that can help them to access employment opportunities and make wise career decisions.

For some, postgraduate education was part of the protracted nature of integration into the labour market. At one extreme, we interviewed a graduate who had completed a psychology

degree in 1999 during which she decided to pursue a career as an educational psychologist. After completing a PGCE immediately after graduating (as was required to be able to develop her career), she worked in two schools to fulfil the requirements for teaching experience to obtain a scarce funded place on a Masters course in educational psychology. During her three years of teaching, she obtained funding from her LEA to do her own research and contribute to her professional development. She also displayed considerable mobility in order to achieve her ambitions, moving from South Wales to the South West and on to the East Midlands. In response to the question of whether she had planned her career to date, she said:

'Yes, I don't know whether I was just lucky in finding out what it was I wanted and could pursue it and there was a path to go down. Some people are still floundering in their thirties as to what it is they want. I was definitely sure... that it fitted everything I wanted out of a career. I think I definitely have planned my career to do that, I just hope it's not going to be a huge disappointment next year when I finally get a job! There's nothing about the job that I don't like, so it just seemed like the perfect job for me really. I think I was lucky that I found [this occupation] and I think I was the type of person that wanted to follow a plan so that there was some security.'
(female social science graduate, full-time postgraduate student)

Conversely, not all those interviewed had had such clear ambitions.

'I don't think I've done a particularly good job of planning a career. I think I have just taken opportunities as they've been presented to me and gone with the flow because of other circumstances that were going on in my personal life, whether it was going travelling or needing money, paying off student loans, whatever. At the moment, I am trying to further myself in this organisation, as hard as it actually is, by trying to get some internal training, trying to get some

supervisory experience, things like that. As far as planning my career is concerned, I am trying to get as much experience in various different areas as I possibly can while I am working here, so that when I leave I will have a bit more experience behind me to go and work for a different company, maybe in a different environment, doing a different job; I don't know. As far as knowing where I want to be in 5 years time, I have absolutely no idea.'

(female humanities graduate, assistant to IT finance manager, manufacturing, £27k-£30k, non-graduate job)

Assimilation into appropriate employment takes longer for some graduates than others, but from the evidence of both cohorts studied in the course of this investigation, appropriate and satisfying work appears to have been obtained by the overwhelming majority of those entering the labour market in the late 1990s. However, the interview programme provided detailed supporting evidence that reinforced and explicated the survey findings, illustrating how graduate careers are by no means homogeneous. Graduates achieved varying degrees of success and encountered a wide range of opportunities and obstacles in their career development, reflecting the growing diversity of the graduate labour market.

Is a degree still a good financial investment?

Perhaps the most important result that emerges from the analysis is provided by the comparison between the earnings achieved by 1995 and 1999 cohorts. After making adjustments to account for differences in the timing of data collection, the findings indicate that the earnings of the later cohort do not appear to have kept pace with earnings increases more generally in the economy. This may be particular to this cohort, reflecting the circumstances prevailing in

2003/04 - or it may be the first indication that the graduate earnings premium, which in the UK remains high by international standards, is beginning to reflect a decline in the excess demand for graduate skills and knowledge that characterised the situation prevailing throughout the 1990s.

The gender pay gap

First, there is evidence of a significant gender gap in the earnings of recent graduates. Some three to four years after graduation, women graduates working full-time reported earnings that were approximately 15 per cent lower than those reported by male graduates. In part this reflects a number of factors which are well known, if not well understood. Men work longer hours, they occupy sectors which command higher earnings generally (insurance, business, finance, information technology, etc.) and they tend to work in the private sector rather than the public or not-for-profit sectors. Adjusting for these factors, we find that there remains a significant gender gap in pay. Part of this reflects the impact of gender segmentation at the workplace (women tend to work in workplaces where their kind of work is undertaken by other women, and this has a negative impact on their earnings). Figure 5 reveals this clearly, showing the average earnings of male and female graduates according to their assessment of the extent of gender segmentation at their workplace and for their kind of work.

In workplaces where the work undertaken by the graduate is done almost exclusively or mainly by men, both men and women graduates have higher average earnings. Nearly half of all the male graduates in our sample reported that they worked in such male gendered environments, compared with only 16 per cent of the female graduates. About 40 per cent of the female graduates stated that they worked in workplaces where their kind of work was undertaken mainly or exclusively by women.

Figure 5. Average annual gross earnings by workplace gender segmentation

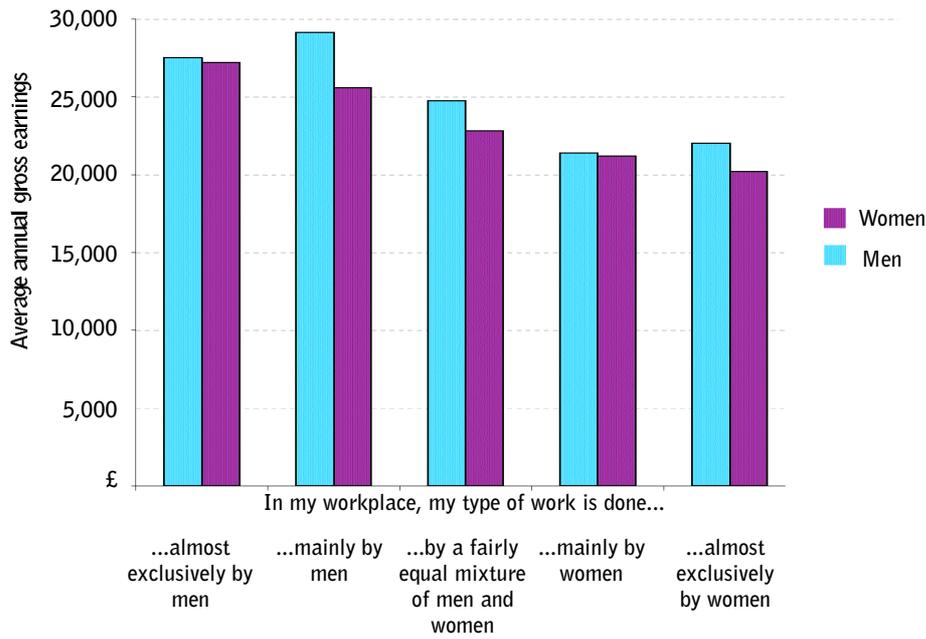
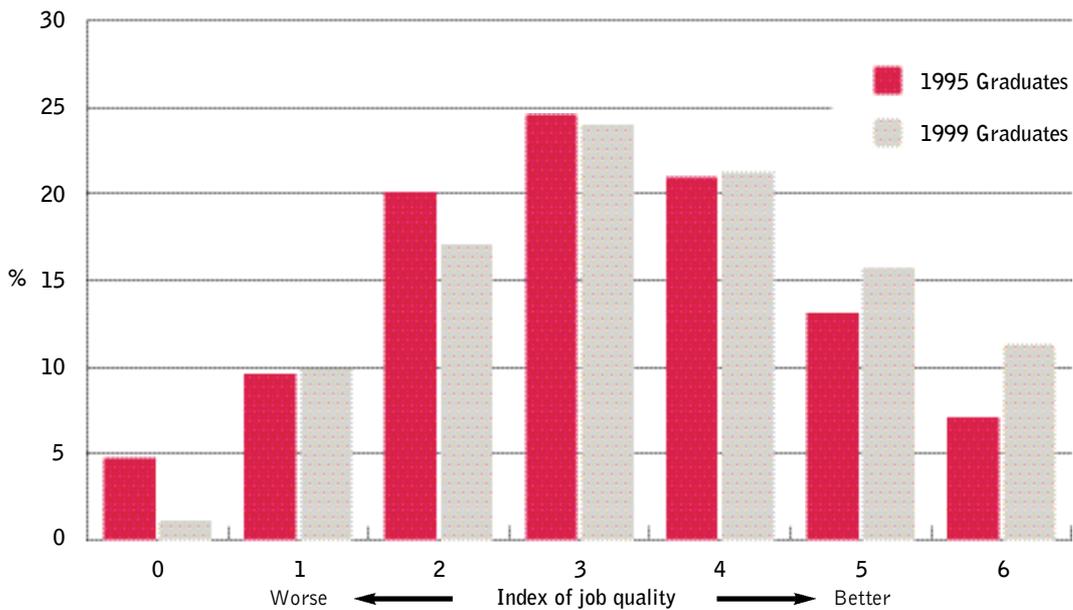


Figure 6. Index of job quality: comparing the 1995 and 1999 cohorts



In addition to the impact on earnings of working in gendered occupational environments, a significant residual part of the average difference in earnings between male and female graduates (5 per cent) remains unaccounted for by any other factor than the gender of the graduate.

Who gets the good jobs and who has difficulties?

As far as subjective assessment of job quality was concerned, the 1999 cohort reported generally higher levels of positive job attributes than the 1995 graduates. Figure 6 shows the distribution of an index of job quality for the two

cohorts, constructed from positive responses to a range of attributes the graduates indicated they had in the jobs they held at the time of the survey. Despite the evidence of a decline in the real earnings of graduates between 1995 and 1999, no decline was observed in the proportion of respondents indicating that their job provided a competitive salary. It is concluded that the different expectations held by members of the diverse graduate labour supply and alternative options available to them need to be taken account of in evaluating labour market outcomes.

For the *Class of '99*, a number of factors related to an increased likelihood of being employed in a non-graduate occupation. In terms of personal characteristics, females were approximately a fifth more likely than males to be employed in such jobs four years after graduation, and those who reported that they had a long term illness or disability were more than twice as likely to be employed in a non-graduate occupation as those with no such restriction. Graduates who had remained in the region in which they lived immediately before studying for their 1999 qualification were more likely to be employed in non-graduate occupations.

In terms of subject studied, graduates with degrees in medicine and related subjects, education, engineering and law were least likely to be employed in non-graduate occupations and those with degrees in the humanities and languages most likely. Educational attainment at A-level, type of HEI attended and degree performance were important determinants of likelihood of being in such a job. These findings reveal the extent to which employers take into account not only performance of individuals at degree level, but also previous academic achievement and the type of institution where graduates have studied. Respondents who had undertaken a work placement integral to their course or had undertaken work to gain useful career related experience while studying, were

less likely to be employed in a non-graduate occupation.

Who went one degree further?

Well over half the sample (57 per cent) reported having taken some form of career-related training or education since graduation. Comparing the 1995 and 1999 graduates 3.5 and 4 years after graduation respectively, similar broad patterns of the uptake of further education and training were reported. There was little gender difference in the propensity to undertake different forms of postgraduate training or education, apart from the fact that a higher proportion of women reported taking PGCEs. Different patterns of propensity to undertake various forms of postgraduate training or education were evident, however, according to age, SOC (HE) category of current job, undergraduate institution of study and subject of study. There was no significant difference according to social class background, even in the case of the likelihood of respondents having undertaken a Masters degree.

The probability of a graduate having undertaken a Masters degree since graduation in 1999 was positively linked to, amongst other factors, having graduated under the age of thirty, having a degree in humanities, social science, natural science or engineering, having left university with no debt and having attended a pre-1992 university.

Those graduates who had undertaken postgraduate education and training had done so for a variety of reasons, including to fulfil entry requirements for a particular occupation or achieve progression within an occupation or organisation (sometimes out of non-graduate employment), as a means of putting off career





decisions and to 'buy time', in order to 're-orientate' career in a different direction, or to widen their career options. There was broad similarity between men and women across the sample in the reasons given for undertaking further education and training, although women were slightly more likely to indicate specific career objectives and men more likely to indicate a desire to improve employment prospects more generally. There were differences in individual motivation to undertake further education and training according to the age of respondent, subject of study and current occupation but there was little difference in motivation according to type of institution attended at undergraduate level.

Almost half of all survey respondents expected that they would study full or part-time for further qualifications in the next five years. The qualitative data suggested that the majority recognised the need for further training and education and continuous professional development to achieve longer-term career goals.

Does student debt impact on future career development?

Seventy-seven per cent of the respondents reported that they had some kind of repayable debt on completion of their 1999 studies. Among those with debt, the mean total amount of repayable debt was estimated to be £6,205, with the median level of repayable debt estimated to be lower, at £5,500. Debts from the Student Loans Company accounted for 66 per cent of all repayable debts. Students with degrees in arts were most likely to report that they had repayable debt at the end of their studies and

had the highest levels of debt. Those with degrees in mathematics and computing, medicine and related subjects, and business studies were least likely to report that they had repayable debt at the end of their studies.

The survey revealed that 92 per cent of respondents had undertaken paid work while studying for their 1999 qualification. Across all groups of respondents, 85 per cent indicated that they undertook paid work during the vacations while 47 per cent had undertaken paid work during the term time. The incidence of term time working was more prevalent among respondents from lower social class backgrounds. Undertaking paid employment while studying was associated with poorer levels of academic performance, although this was dependent upon when the work was undertaken. Taking account of all other variables, those who worked during term time were approximately a third less likely to have gained a 'good' degree (First or Upper Second Class Honours) compared to those who undertook no paid work during the course of their studies. Working during the vacation did not appear to have had a detrimental effect upon degree performance.

A quarter of those with repayable debts indicated that their choices following graduation had been limited in some way by their debts. Among this group of respondents there were lower levels of participation in further full time study, as Figure 7 shows. A persistently higher level of employment in non-graduate occupations was also found among this group compared to those who had either no debt or those who indicated that their debts had not effected their options. There appeared to be no difference in participation in further study or employment in non-graduate occupations by level of debt. Therefore, it is not the absolute level of debt *per se* that is associated with subsequent career profiles but how graduates are affected by this debt. The mechanisms through which debt may affect an individual's choices are complex and

Figure 7. Debt and the rate of participation in further study

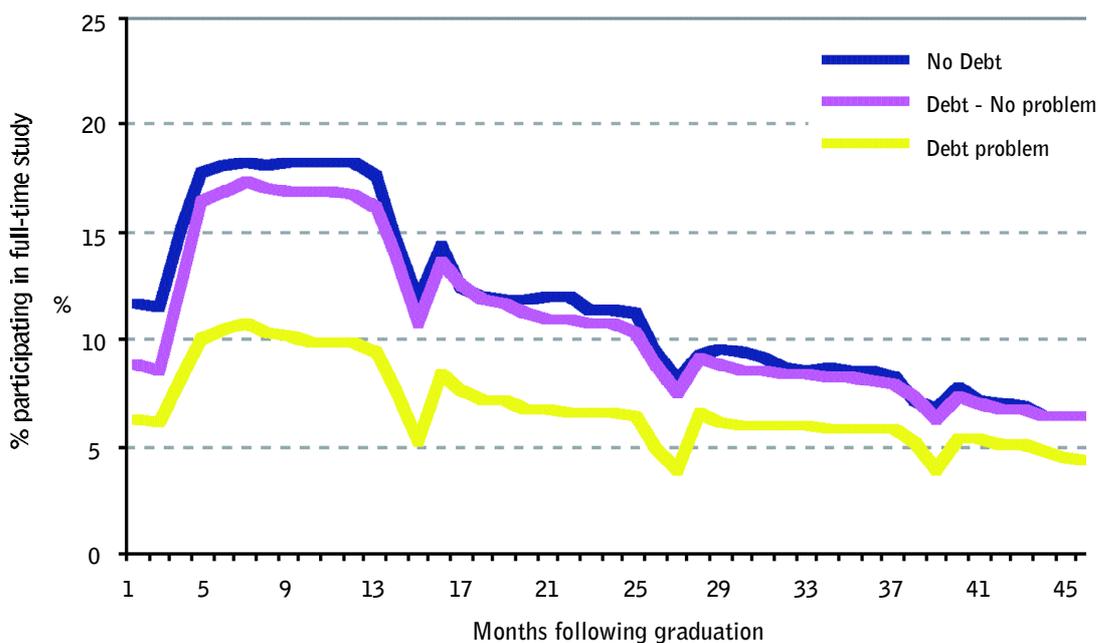
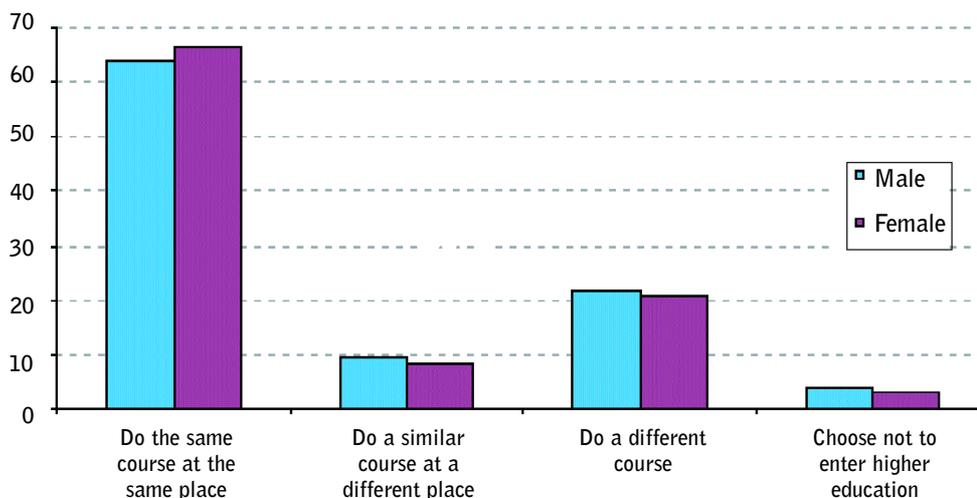


Figure 8. Extent to which respondents would, with hindsight, do degree again, by gender



not uniform across different groups of respondents.

Was it worth it?

Most 1999 graduates embarked on higher education believing that their qualification and experience would improve their employment prospects but over half also saw higher education as an opportunity to achieve their potential.

Figure 8 shows the responses to the question as to whether the respondent would, with the benefit of hindsight, enter higher education and take their degree again. Only a very small minority (3.5 per cent of graduates) reported that they would choose, with hindsight, not to have entered higher education. Members of this minority were more likely to be male, to have achieved a lower degree grade, to have come from a lower socio-economic group, to have attended a new university and to have had their

career options affected by student debt. They also reported higher expectations that going to university would improve their job prospects, but less likelihood of having had a particular career in mind when choosing to enter higher education.

The interview respondents gave a wide range of responses when asked what they valued most about their undergraduate experience. Four broad themes were discernible; labour market advantage, skills development, academic and intellectual stimulation and achievement, and social and personal development.

Over 80 per cent of graduates surveyed reported being either reasonably or very satisfied with their career to date but the majority of graduates did not measure the value of their degrees (and career satisfaction) purely in terms of economic returns. Overall, the vast majority of interviewees considered their undergraduate education to have been a good investment - some citing subsequent labour market success and access to employment or further education and training, others stressing the opportunity for personal development. However, given the close relationship between higher education and early career success, the perception of the 'worth' of holding a degree tended to be closely related to how satisfied they were with their career development.

Conclusions

Between 1984 and 2003, UK higher education expanded student numbers by more than 300 per cent⁷. By the end of the 1990s, well over 30 per cent of young people were continuing into tertiary education, along with increasing numbers of adults opting for 'second chance' access to higher education. Consequently, the graduate labour market for the new entrants is now different to that of 10-15 years earlier, and access to employment opportunities more

broadly has been profoundly affected by higher education expansion. At the same time, the impact of economic restructuring and technology - particularly information and communication technology - has been affecting the skills that employers require, their labour force planning and their construction of jobs. This research has indicated that graduates do a much wider range of jobs than in the past, when graduates constituted an elite minority - and there is enormous diversity in the kinds of jobs graduates do and the financial returns and intrinsic satisfaction that 'graduate jobs' offer. The argument that excess supply has led to declining returns to higher education ignores the fact that the 'graduate population' resulting from the move to mass higher education is not the same as the graduate population produced under an elite system, in that it is not only larger but also much more diverse. Furthermore, it includes within it the 10 per cent equivalent of the 'elite' population who accessed higher education in previous generations: the high achieving socially-advantaged or lucky graduates upon whose higher average returns the apparent decline in the graduate earnings premium is calculated.

As a result of these changes, the graduate labour supply is not simply a larger version of the earlier one: its composition is fundamentally different. In order to assess both the individual and social returns to HE, the questions then, should surely be firstly;

- has the premium gained by 'the top ten per cent' risen, fallen or remained stable; and secondly,
- have first-generation graduates from socially or educationally-disadvantaged backgrounds gained financial or career advantages relative to their peers without degrees; and finally,
- has the gender gap between graduate women and men, and the relative earnings premiums earned by earlier and more recent cohorts of male and female graduates, narrowed, widened, or remained stable?

In other words, we need to disaggregate the graduate population that forms the increasingly diverse graduate labour market in order to make sense of the evidence. The *Class of '99* research findings described in this report and our earlier programme of research titled *Graduate Career Seven Years On* research⁸ go some way towards doing this. While we find some evidence from the recent cohort that the financial returns to a first degree are, on average, falling, gaining a degree still provides significant financial benefits. But not all those who enrol on a higher education programme aspire to enter 'fast track' posts in industry and

by no means all graduates are motivated primarily by a desire to maximise their earnings. It is important to evaluate the impact of higher education policy, particularly widening access to undergraduate programmes, in the light of the expectations, experiences and alternatives available to the diverse range of recent graduates now entering the labour market. The fit between the supply of graduates and employers' demand for their knowledge and skills clearly falls some way short of ideal, but can only be improved in the light of robust evidence from research such as this.

Notes

- 1 The study was jointly directed by Professor Kate Purcell at the Employment Studies Research Unit, UWE and Professor Peter Elias at the Institute for Employment Research at the University of Warwick, working with Rhys Davies at IER and Nick Wilton at ESRU.
- 2 These projects - *Seven Years On* and *The Class of '99* - incorporated a questionnaire survey and detailed follow-up qualitative interviews. In summary, the final survey dataset of the wider *Class of '99* project included 9326 usable responses (Of these, 8571 respondents completed first degrees in 1999 and the others completed HND and DipHE qualifications). The *Seven Years On* dataset included approximately 4500 useable responses from graduates who completed their undergraduate degree in 1995. The full report of the study is published on www.dfes.gov.uk (full ref to be added) and available in hard copy from....
- 3 The 1995 cohort were followed up at Christmas 1998, with a second mailing in early Spring: the 1999 cohort survey was conducted in late Spring and early summer 2003. Consequently, the average length of time in the labour market was slightly later for the latter, closer to 4 years.
- 4 Additional interviews were conducted with respondents who had obtained teaching qualifications, and a separate report *Education as a Graduate Career: entry to and exit from teaching as a profession*, by the same authors, is being published by the DfES. <http://www.dfes.gov.uk/publications/> The career outcomes of Northern Ireland domiciled graduates who studied at Northern Ireland universities, included in this sample, are analysed separately by the authors in a report to the Department of Employment and Learning Northern Ireland's graduates: the classes of '95 and '99 (DELNI 2005 forthcoming).
- 5 See Elias, P. and K. Purcell (2004) 'Is mass higher education working? Evidence from the labour market experiences of recent graduates' in *National Institute Economic Review*, No.190:60-74, for a detailed summary of these occupations.
- 6 See Elias, P. and K. Purcell (2004) 'Is mass higher education working? Evidence from the labour market experiences of recent graduates' in *National Institute Economic Review*, No.190:60-74, for a detailed summary of these occupations.
- 7 The total number of home-domiciled higher education students in the UK increased by almost two-thirds between 1991/92 and 2003/04. Overall, there were over 1.8 million higher education students in the UK in 2003/04, of which just over a million were on first degree courses. (HESA, 2002)
- 8 Elias, P. and K. Purcell (forthcoming, Palgrave Macmillan 2006) *Graduate Careers Seven Years On*; and Purcell, K. and P. Elias (2004) *Graduate Careers Seven Years On: The Short Report*, Manchester: HECSU; and see www.uwe.ac.uk/bbs/research/esru/7-up.shtml and www.warwick.ac.uk/go/ier/glmf

The full report of *The Class of '99: a study of the early labour market experience of recent graduates* and a report focusing on the responses of 1999 and 1995 graduates who obtained teaching qualifications - *Education as a Graduate Career - entry and exit from teaching as a profession* are available at www.dfes.gov.uk/research/

An analysis of the responses of 1995 and 1999 graduates who studied at universities in Northern Ireland - *Northern Ireland's Graduates: the classes of '95 and '99* - was conducted by the authors on behalf of the Department of Employment and Learning, Northern Ireland (DELNI) and can be accessed at www.delni.gov.uk/statistics

Other related research by the authors of this report can be found at www.uwe.ac.uk/bbs/research/esru/research.shtml and www.warwick.ac.uk/go/gjmf

The Higher Education Careers Services Unit is undertaking a major national enquiry of applicants to higher education in 2005 and 2006. The core of this study, directed by Kate Purcell and Peter Elias, will follow applicants over the subsequent five years. Further details can be found at www.hecsu.ac.uk