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# The REFLEX study: exploring graduates' views on the relationship between higher education and employment

Lore Arthur<sup>5</sup> and Brenda Little<sup>6</sup>

## Introduction

UK undergraduates spend less time on higher education and feel less well-prepared for work immediately after graduation than those in most other European countries. UK employers provide more training and give more attention to the assessment and supervision of their graduate employees than in most other countries on the European continent (Brennan, 2008a). Yet it can also be argued that UK graduates are more flexible than their continental European counterparts and accept that the transition to work is not a straightforward process. Such findings give rise to numerous, perhaps contentious, questions concerning the value of higher education in its societal context and of higher education's links to labour markets which, if considered more explicitly, could help explain such findings.

In this article we present some of the main findings from the REFLEX study exploring the relationship between higher education and employment. In particular, we look at differences between UK and other European graduates' views on this relationship and consider what reasons might underlie such differences.

Inevitably, a research project of this kind – which involved teams of researchers from different countries steeped in different intellectual and cultural traditions – meant that there were initially a number of practical issues to be resolved. For example, translating survey questions from one language into another caused endless problems (and for one partner, the survey had to be produced in three national languages – German, French and Italian). While project partners had agreed on English as a working language, the sheer variety of languages involved, though enriching, nevertheless lessened the efficiency of working across the teams. Reciprocal explanations of terminology were time consuming and difficult to realise, though sometimes, it has to be admitted, partners of a monolingual country were equally confronted with divergent ideas. Words such as 'job' or 'occupation', even 'profession' carry different meaning in different cultural contexts. However, this meant that by the end of the project participating researchers had gained a deeper understanding of the countries concerned which, in turn, is reflected in the reporting of findings on similarities and differences across Europe and elsewhere. Viewed from the UK perspective, it is some of the more comparative dimensions we want to address here.

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The REFLEX Study – full title 'The Flexible Professional in the Knowledge Society: new demands on higher education in Europe' – was a European Commission Framework VI project that examined how graduates in different European countries were prepared for the labour market.

The project was led by Professor Rolf van der Velden at the University of Maastricht. The UK REFLEX project team comprised CHERI staff and associates Lore Arthur, John Brennan, Rod Hick, Brenda Little and Alan Woodley.

Among several published outcomes from this project is a series of reports commissioned by the Higher Education Funding Council for England (HEFCE). These sought to highlight distinctive features of the relationship between higher education and the labour market in the UK when compared with other European countries.

These reports can be found at [http://www.hefce.ac.uk/pubs/rdreports/2008/rd22\\_08/](http://www.hefce.ac.uk/pubs/rdreports/2008/rd22_08/)

A further report entitled 'Employer and higher education perspectives on graduates in the knowledge society' (based on a qualitative study undertaken in France, Germany, the Netherlands, Norway and the UK in 2005) can be found at

<http://www.open.ac.uk/cheri/documents/qualitative-report-final-version.pdf>.

## Contexts matter

Educational historians have traditionally referred to the 'Humboldtian', the 'Napoleonic' and the 'Anglo-Saxon' traditions within European higher education (and which were exported around the world during the colonial period). Gellert (1993) refers to them as the 'research', the 'training' and the 'personality' models, respectively. While these models refer effectively to the elite higher education systems of more than a century ago, they may still have relevance to an understanding of differences in the relationships between higher education and employment in different countries (Brennan, 2008b). In Germany, indeed, as in all countries whose tertiary education was based on the German model of higher education, the tension between *Bildung* (personal development) and *Ausbildung* (training) was, and still is, a cause of concern. Humboldtian values embrace academic freedom to teach and research together with the freedom to learn without much interference from policy makers. Such values underlie an occupation-led education system coupled with occupation-specific competences, leading to content-specific qualifications (see, for example, Maurice, Sellier and Silvestre, 1982). It is a system which is still marked by institutional stratification and distinct boundaries between vocational education and training and university higher education. In continental Europe, generally, vocational credentials and qualifications tend to be more tightly linked to the area of work, to vocational institutions and their traditions. Though some note palpable change in their informal status and a significant shift in traditional universities, structural boundaries are not easily eroded (Scott, 2008). For example, in the stratified binary systems of post-compulsory education entry to most jobs is highly regulated through precise qualification requirements generally obtained *within* the education system. Many continental graduates, therefore, when leaving higher education are more fully formed as professionals than those in the UK (Arthur et al., 2007). The traditionally longer first degree courses in continental European higher education systems allow the inclusion of a greater volume of occupationally-relevant preparation.

The Anglo-Saxon model of tertiary education, by contrast, is characterised by a less well-developed system of vocational education and training and a higher education system which, in the main, provides a broad educational 'liberal' base with less emphasis on subject-specific, skills-related content; it is a system with a 'loose fit' between higher education and a graduate's subsequent area of work (Little, 2001). Thus, UK graduates' professional formation is likely to take place *after* completion of the relatively short first degree - either through further study or through employment (or a mixture of both).

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## Evaluating findings

The REFLEX study was undertaken against the implementation of the Bologna Agreement (1999) which has as its aim the establishment of a common structure of European higher education qualifications based on two main cycles, undergraduate (culminating in a Bachelor degree) and graduate (leading to a Masters degree). This has meant that higher education institutions in most countries, excluding the UK, have been involved in structural reforms, albeit at different stages of development. However, as the REFLEX study surveyed people who had graduated in 1999/2000, the data reported from the study predates the Bologna reforms. UK graduates in the sample, therefore, had completed their initial higher education with a Bachelors degree while most other respondents had obtained a Masters-equivalent qualification (pre-Bologna). Most UK respondents were also much younger than their European counterparts – almost three quarters were aged between 20-24 on graduation, compared to less than half of European graduates overall.

The relationship between study at higher education and preparation for work and employment gained after graduation can be viewed in terms of ‘match’ or ‘mis-match’, i.e. higher education prepares students well for work or not (Storen and Arnerson, 2007). This means that graduates may be employed according to their subject specificity and the level of education obtained, or they may be generalists where subject knowledge matters less. In extreme cases, neither the subject knowledge nor the level of education equates to the first job obtained after graduation. As the overall REFLEX project report to the EC notes:

‘... in addition to countries and fields of study that are known from earlier research to produce graduates who often find it difficult to find work that matches their capabilities (humanities, Southern European countries), the UK stands out as a country where many graduates fail to utilise their skills.’ (Allen and van der Velden, 2007: ix)

Whilst it is true that the UK did stand out in these and other respects, it must be emphasised that a clear majority of UK graduates (as did European graduates overall) considered that their first jobs on graduation *did* require a tertiary level of education, *did* require study in a particular field and *did* utilise the graduate’s skills and knowledge acquired during higher education. But, as Table 1 shows, there was only a loose link between first job and higher education for a third or more of UK graduates.

It has previously been suggested that the above data might indicate that UK graduates take less employment-related knowledge, skill and competence into the labour market, but it might also suggest that UK employers require less of their graduate entrants (Brennan, 2008b). It may also reflect the fact that in many continental European countries entry to jobs is highly regulated through precise qualification requirements generally obtained *within* the education system. And we should not overlook the fact that within the UK a large proportion of

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Table 1: The relationship between higher education and the first job after graduation (%)

Graduates considered their first job after graduation	Europe	UK
... required an education level below tertiary level	18	38
... did not require a particular field of study	13	35
... did not/hardly utilize(d) knowledge and skills	19	33

graduate jobs are advertised on the basis of ‘any discipline’. This may imply that a fit between field of study and subsequent job is not a prime concern to UK employers. In fact, a recent survey of almost 600 employers found around three quarters cited graduates’ employability skills and positive attitudes as the most important factors in recruitment; just over a half ranked relevant work experience as important, but only four in ten considered subject of degree was important, though this varied by area of employment (CBI/UUK, 2009). Further, such signals from the labour market may encourage graduates to look beyond their own field of study when applying for jobs. Also, what we cannot know from such bald data is whether those who felt their first job required a lower level of education had, nevertheless, been able to put their graduate skills to good use to change and ‘grow’ their first job, and/or introduce new ideas and ways of working into their work role and those of others.

We referred above to the underlying traditions of different higher education systems, and in particular the greater volume of occupationally-relevant preparation within higher education programmes in continental European systems. One particularly striking difference between the UK and most other European countries was the extent to which graduates had undertaken work placements/internships during higher education. Overall, more than half (55 per cent) of European graduates overall had undertaken a placement during higher education; and in Finland, Germany and the Netherlands the overwhelming majority had done so (around 80 per cent). But less than a third (29 per cent) of UK graduates reported having undertaken a placement. Further, it seems that the incidence of internships within higher education programmes did have an effect on graduates’ initial jobs:

‘... graduates who followed a program (sic) that stressed internship ...were more positive in their evaluation of the programme providing a good basis to start working. However we found no effect on the development of competences, nor did we find any effect on current employment chances or earnings. This seems to indicate that its role is mainly in providing a smooth allocation to jobs, rather than in developing professional expertise.’ (Allen and van der Velden, 2007: 277)

But what of differences, stark or otherwise, between the *current* employment of graduates in the different countries? Table 2 shows the relationship between graduates’ higher education and their current employment, five years after graduation.

Clearly, there are some differences between UK graduates and European graduates overall in terms of the relationship between higher education and current employment, but they are no longer as stark as the differences seen in relation to graduates’ initial employment: – the match no longer seems quite so loose.

CHERI’s overview report to HEFCE notes that while differences in graduates’ perceptions of the appropriateness of jobs largely

One particularly striking difference between the UK and most other European countries was the extent to which graduates had undertaken work placements/internships during higher education

Table 2: The relationship between higher education and current job, five years after graduation (%)

Graduates considered their current job	Europe	UK
... required an education level below tertiary level	10	15
... did not require a particular field of study	9	20
... did not/hardly utilize(d) knowledge and skills	9	14

disappear over the five years after graduation, differences remain in the perceived relevance of higher education to work. UK graduates were less likely than European graduates overall to consider their study programme was a good basis for starting work, for further learning on the job and for performing current work tasks. As the editors of the main REFLEX project report to the EC note:

‘... (the) UK stands out as a country where graduates find it difficult to find a job that fully utilises their skills (...) It is not clear whether this is caused by the weaker link between higher education programs and specific areas of employment in the UK or with the fact that most UK higher education graduates have followed programs that are much shorter in duration than most programs in continental Europe. But the fact that UK graduates have not been able to catch up in the first five years after graduation and more often indicate that their study program did not provide a good basis for starting work, to further learning on the job or to perform current work tasks deserves serious attention.’ (Allen and van der Velden, 2007: 274)

But an alternative explanation put forward in CHERI’s overview report to HEFCE is that UK graduates may well have prepared themselves for work by other means (including through employers providing more initial formal training in their first jobs). And, of course, work-related training does not stop after graduates’ initial experiences in work; 69 per cent of UK graduates (compared to 63 per cent across Europe as a whole) had undertaken some work-related training within the previous 12 months. Whilst the incidence of such training varied between employment sectors, in each of the main sectors of employment (business, education, health and social work, manufacturing, public administration) UK graduates were more likely to have experienced such training. But whether this is an indication of UK graduates having a greater need for such training (which could reflect a lack of relevant knowledge and skills) or employers’ desire for employees to develop a new/broader range of knowledge and skills is not clear from the data. The single most important reason cited by graduates for undertaking such training was to update their knowledge for their current work, but UK graduates were slightly less likely to give this reason (60 per cent compared to 66 per cent overall). The other important reason cited by a quarter of European graduates was to enhance their own career, but UK graduates were much more likely to cite this reason for work-related training (a third did so). This greater emphasis on ‘enhancing career’ may reflect, yet again, the looser linkage between higher education and employment such that some five years after graduation many UK graduates are more likely to be still developing their own career pathways (Little, 2008).

There is also a suggestion that too close a match between higher education and subsequent job may affect graduates’ capacity to be flexible in the workplace. The REFLEX study found that UK and Dutch graduates were more likely than others to be exposed to

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changes in work tasks and the corresponding need for functional flexibility – and as the authors concede:

‘... being very flexible, in the sense of being prepared to take on work outside of one’s own specific area of training can in fact hamper the possibility to fully utilise all of one’s skills as – by definition – only a part of these skills will be put to use in any job.’ (Allen and van der Velden, 2007: 270)

Such flexibility (whether supplied by graduates and/or demanded by employers) and the traditional UK looseness of fit between higher education and employment may in fact be a positive outcome and suit both parties (graduates and employers) in the sense that, within the UK’s more open and flexible labour market, possession of the right credential is less crucial ‘leaving more space for the operation of a whole set of social and cultural factors’ in the job allocation process (Arthur et al., 2007: 6). It might also indicate that UK employers use higher education more as a selection, rather than a training ‘tool’. As noted in CHERI’s overview report to HEFCE:

‘...one interpretation of this research is that higher education in the UK provides an academic foundation for employment which is built on after graduation by professional training largely provided by employers. But in the rest of Europe, the much longer time spent in higher education permits the combination of both academic and professional education within higher education.’ (Brennan, 2008a: 4)

Such observations bring to the fore a number of questions arising from the REFLEX study’s findings, including:

- is the actual productivity of UK graduates different in any ways from the equivalent graduates in equivalent jobs in other European countries?
- do we need to question the equivalences between UK and other European graduates and graduate jobs which reflect different national traditions and cultures?

In terms of graduate employability, it may be that within the UK, with its shorter initial period of higher education, more attention should be paid to the contribution made in the years immediately after the first degree through, for example, employer training, postgraduate courses, and early work experiences.

Of course, the intended greater harmonisation between European higher education systems and concomitant structural reforms following the implementation of the Bologna Agreement may well result in rather more continental European graduates having a shorter initial period of higher education – more akin to the UK first degree – than is currently the case. So a further question arises for higher education policy makers across Europe, namely, what are the likely consequences of trends towards convergence and greater harmonisation between higher education and labour markets, arising both from the Bologna Process and larger trends towards global knowledge economies?

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