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Research Report

The changing academic profession in the UK: setting the scene

June 2007



Executive summary

- This research report provides an initial analysis of issues being investigated in a current international study, *The Changing Academic Profession*, supported by Universities UK and other national higher education bodies. The research is examining the nature and extent of the changes experienced by the academic profession in recent years, the reasons for these changes and their consequences.
- The report introduces the international and institutional context for the research, including the expansion of higher education, growing demands from government and others, funding constraints, greater global competition and pressures to be more business-like. Academics themselves are becoming more internationalised, entrepreneurial and professionalised and their roles have diversified and often taken them away from their original disciplines towards new forms of identity and loyalty.
- Against this background, the report outlines current characteristics of the academic profession — ie those who teach and/or research — providing a profile of academics in the UK and describing some of the conditions of academic work.
- The report focuses on the three main themes being addressed by the study: relevance, internationalisation and management. 'Relevance' refers to the growing requirements to justify and account for the 'outputs' as well as the processes of academic work, such as the employability of graduates, the usefulness of research and the accessibility of higher education to disadvantaged students and communities.
- It is also clear that higher education will become more international, with greater mobility of students and staff, its growth as a trans-national business and increasing international collaboration in research and teaching.
- Both the demands for relevance and growing internationalism have contributed to new forms of management in higher education institutions, which have helped to shape academic work and provide some academics with opportunities to progress their careers in new ways.
- Different views of these changes and their overall impact are identified. The picture that emerges is of an academic profession facing change but also much continuity, transforming many aspects of academic work while at the same time creating an increasingly stratified higher education sector.
- A more detailed description of *The Changing Academic Profession* study is included in an annex to the report.

Preface

This research report provides an initial analysis of some of the issues being investigated in a major international study, *The Changing Academic Profession*. Supported by Universities UK and other national higher education bodies it is currently being undertaken across more than twenty countries worldwide during 2007.

The Centre for Higher Education Research and Information (CHERI) at The Open University is undertaking the UK element of this study of the changing nature of academic work and the conditions and environment in which it takes place, the drivers of these changes and the implications for the continued attractiveness of the profession. More details on this study can be found in the annex to this report.

The main report introduces the international context for the research, describes some characteristics of the academic profession in the UK and outlines the three main themes being addressed by the study: relevance, internationalisation and management in higher education. The academic profession is broadly defined as those who teach and/or research although, as the report shows, the extent to which this represents a single, homogenous profession is arguable¹.

1. Introduction – the international context

In recent years higher education has undergone significant changes in most parts of the world. It has expanded, become increasingly differentiated and subjected to increasing external expectations and controls. Public financing has often not kept pace with the rate of expansion in student numbers although in some countries tuition fees have helped to bridge the funding gap. Higher education institutions have faced an increasing challenge to both do more with less and to become more business-like in their operations. These changes have brought about transformations in the governance and management of institutions, in their internal structures and in their relationships with other parts of society². In many national systems, a private sector has become more prominent and even publicly funded institutions in some countries are increasingly dependent on market forces and regulated by them.

Alongside these institutional transformations have come changes in the backgrounds, specialisations, expectations and work roles of academic staff³. In many countries the academic profession is ageing, more accountable, more internationalised and less likely to be organised along disciplinary lines than it has been in the past. It is expected to adopt recognised professional standards in teaching, be more productive in research and more entrepreneurial in everything, for example, by ensuring that the full economic costs of research are covered by the income received. It has to balance local and national (as well as international) needs and requirements.

As a result, the very definition of an academic has become ambiguous, as have the boundaries between academic jobs and the jobs of other professionals, both within and beyond the walls of the academy. New divisions of labour within the profession suggest fragmentation and question the centrality of the teaching-research nexus, regarded by many as lying at the heart of the traditional academic role⁴. They also bring pressure for the development of new technical and professional skills, both among the profession as a whole and for new specialists within the profession (for example, academics working in distance education or workplace learning). Some of these changes have raised questions about the attractiveness of an academic career for today's graduates⁵.

With the expansion of higher education has come increasing differentiation – of institutions, of programmes and of professional roles and status. Higher education faces increasing expectations from society, and an evolution of academic work that may take academics away from their original disciplines towards new forms of identity and loyalty⁶ arising from, for example, collaboration with business or efforts to widen participation. At the same time, knowledge has come to be identified as the most vital resource of contemporary society, and many nations have taken great strides to improve their capacity for knowledge creation and application. However, the

production of knowledge now pervades many of the institutions of modern society and suggests new relationships and weaker boundaries between higher education and other economic and social institutions⁷. This new devotion to knowledge has both expanded the role of the university and challenged the coherence and viability of the traditional academic role.

2. Some characteristics of the academic profession in the UK

Notwithstanding the 'workforce' terminology recently adopted by the English funding council⁸, UK higher education is no different from other national systems in employing a sharp distinction between 'academic' and 'non-academic' staff. It is a distinction once described by an English Vice-Chancellor as being of almost 'apartheid' proportions, affecting not just contractual and remuneration packages but rights to participate in university decision-making and even access to catering facilities.

There is no automatic career progression through the standard academic career grades of 'lecturer', 'senior lecturer' and 'professor'. Many academic staff begin and end their careers as lecturers although there has been considerable grade drift in recent years with a large increase in the number of professors and senior/principal lecturers. A relatively recent study showed that, in general, while academics may see themselves as teachers, researchers or even managers, or a combination of all of these, their identities remain firmly centred in their discipline. Their academic values were often embedded in concepts of the discipline and expressed in a common language⁹.

In some countries academics are civil servants rather than being employed by the higher education institutions where they work. In contrast, in the UK there are variations in job descriptions and conditions of work between different institutions. The tensions between institutional autonomy and individual academic freedom in the UK system are probably not found in quite the same way in systems where the co-ordinating role of the state is stronger.

The growth of market competition between institutions in UK higher education and a more 'consumerist' approach to regulating the system underlie some of the changes experienced by UK academics in recent years. The National Student Survey in England, Wales and Northern Ireland is an example of efforts to improve the information about courses to potential applicants. However, lacking many of the direct controls possessed by its counterparts in continental European countries, successive UK governments have taken recourse in ever more complex mechanisms of 'steering at a distance'. The principal tools have been funding formulae and evaluation/accountability mechanisms. These have had the effect of creating more elaborate bureaucratic procedures within institutions and of producing greater competitiveness between both institutions and individual academics (to secure positional advantage in various grading schemes and funding streams).

2.1 The profile of the academic profession

There were over 164, 000 academic staff in all UK higher education institutions in 2005/06¹⁰ as shown in Table 1. Of these 83 per cent were in England, 10 per cent in Scotland, five per cent in Wales and two per cent in Northern Ireland. Within England, the funding council identified some 137,785 staff with 'academic roles only', ie not combining this with a professional/support role.

Not all were full-time employees and the total figure shrank substantially to 106,197 when the number of full-time equivalent staff was calculated. This represented just 45 per cent of the total higher education 'workforce' calculated on a full time equivalent basis. The remaining 55per cent consisted of staff with a professional/support role only' (representing 54 per cent of the whole), plus a further two per cent who combine 'professional/support and academic roles'.

Table 1: Academic staff by country and mode of employment 2005/06¹⁰

Mode	England	Wales	Scotland	Northern Ireland	All UK HEIs
Full-time	90,330	5,720	12,645	2,715	111,410
Part-time	47,455	2,430	3,370	210	53,465
All	137,785	8,150	16,015	2,925	164,875

Source: HESA, *Resources of Higher Education Institutions 2005/06*

Core academic staff – ie those lecturers/senior lecturers and above on permanent contracts – have increased by sixteen percent in the ten years since 1995/96.

The overall growth rate over this period has been 20 per cent, indicating a steeper growth in the numbers of staff on short-term contracts. The latter are mainly people on researcher grades. 72 per cent of academic staff are on lecturer scales, the balance being researchers.

Subject areas

The growth in academic staff numbers has not been evenly distributed across subjects. There has been significant growth in the following areas:

- Subjects allied to medicine (78 per cent increase since 1995/96)
- Computer science, librarianship, information science' (60 per cent)
- Creative arts and design (50 per cent)

- Business and administrative studies (37 per cent)
- Biological sciences (36 per cent)

Over the same ten-year period, there has been a decline in staff in subjects such as:

- Engineering, technology, building and architecture (-13 per cent)
- Chemistry (-11 per cent)
- Medicine / dentistry (-11 per cent)

Age distribution

The academic profession in England is an ageing profession with the proportion of staff aged over 50 having risen from 34 per cent to 41 per cent in the last 10 years. It is particularly high in education (51 per cent), mathematics (48 per cent), social and related studies (45 per cent), physics, engineering and related subjects, plus business (all 44 per cent) and humanities and languages (both 43 per cent). The proportion of professors over the age of 50 has risen from 59 per cent to 66 per cent. However, the academic profession in England is not as old as its counterparts in other English-speaking countries.

Gender

Across the UK, 42 per cent of academics are female and more than a quarter of these work part-time, compared with 16 per cent of male academics. Female academics are more likely to be on fixed-term contracts. On average, full-time female academics earn 86 per cent of the pay of their male colleagues (which is better than the national average); however, the median shows a much narrower gap¹¹. While female academics hold 41 per cent of all full-time posts in UK higher education institutions, the proportion of females holding professorial posts is only 16 per cent, and senior lecturers and researchers 31 per cent¹².

Ethnicity

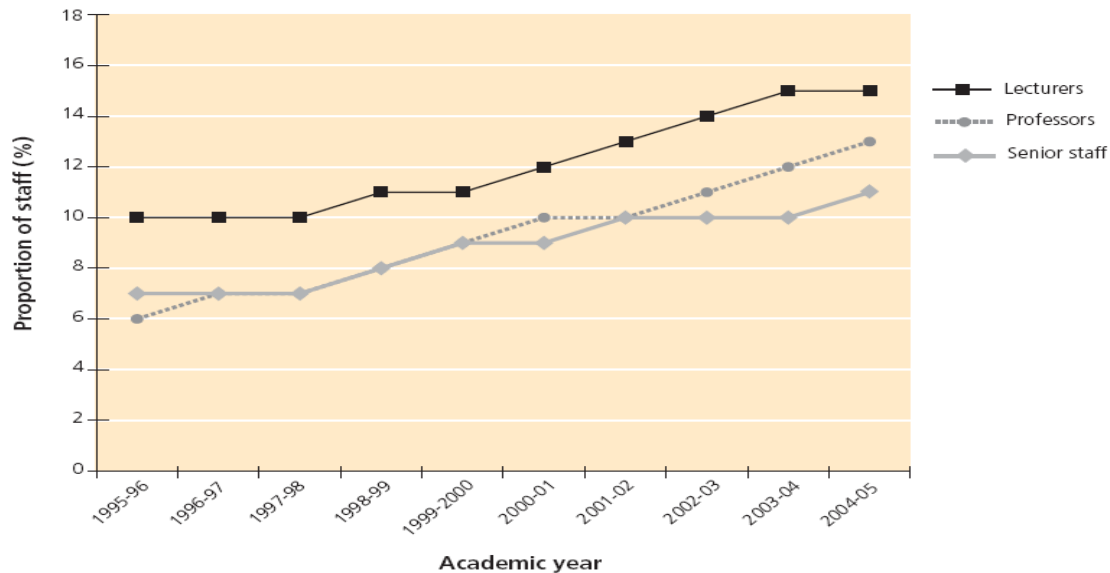
10.5 per cent of academics are from black and ethnic minority groups, which is similar to the population of black and ethnic minority postgraduates in the UK population as a whole. However, they tend to be concentrated in particular institutions¹³ and those with UK nationality are seriously under-represented. Black and ethnic minority academics earn 88 per cent of the pay of their white colleagues, although this gap narrows for those of UK nationality¹⁴. Only 4.9 per cent of senior academics are from these groups¹⁵.

Nationality

There has been a substantial growth in the proportions of foreign nationals among the academic staff of English higher education institutions, the largest growth rates being from eastern and central Europe (193 per cent), Western Europe and Scandinavia (146 per cent) and China, Japan and east Asia (108 per cent) over the 10-year period. However, the vast majority of movement takes place among junior postdoctoral staff¹⁶, and this is largely positive for the UK, with much less movement among staff later in their careers, allaying any residual fears of 'brain drain'¹⁷. Nevertheless, there is a growing dependence on non-UK nationals, accounting for 13 per cent of core academic staff in 2004/05. The equivalent figure in 1995/96 was 8 per cent, as shown in figure A (which is broken down by grade).

The proportion of professors who were not UK nationals has risen from seven per cent to 11 per cent and of other senior academic staff from six per cent to 13 per cent. However, almost half of all non UK academic staff are researchers, with Chinese nationals particularly prominent. Indeed, researchers constitute three-quarters of all Chinese staff in UK higher education institutions. Of those non-UK nationals employed to teach and research, academics from the United States, Ireland and other European and English speaking countries are most prominent¹⁸.

Figure A: Proportion of permanent academic staff who were non-UK nationals¹⁹



The Higher Education Funding Council for England (HEFCE) has recently predicted an increase in academic staff recruitment by as much as 25 per cent across the UK between 2004 and 2011²⁰. It notes that the three main entry routes into academic careers are:

- Newly qualified PhD students

- Staff joining from the private or public sectors (with the latter being very important in certain subject areas)
- Staff recruited from overseas

Of those recruited from outside higher education in recent years, over 40 per cent were aged over 40, which implies a substantial influx to the sector from beyond the traditional doctorate/post-doctoral route. The report indicates that there has been low staff turnover and no major recruitment difficulties in recent years.

2.2 The conditions of academic work

The pay of higher education teaching staff (excluding researchers) compares favourably with many equivalent professional jobs in the UK although some (notably doctors and lawyers) are higher paid. UK academic pay also compares favourably with that in Sweden, Japan, Australia and New Zealand, and is similar to that in Denmark, France and Canada. Unsurprisingly, it is lower than in the United States, and this difference is particularly marked among the top earners²¹.

A recent study suggested that academic staff are somewhat less satisfied with their jobs than those in the UK workforce as a whole. The factors influencing this appeared to be salary and other earnings, qualitative aspects of the job and longer-term factors such as promotions and job security²². Research was a major source of satisfaction, although it was also the area where staff felt under increasing pressure²³. Support from peers and opportunities to participate in the wider academic community were also positively cited. Whilst teaching was not the most important factor in becoming an academic, most would prefer a job that involves teaching. Student assessment and administration (including quality assurance) tended to be viewed negatively. Being on a fixed-term contract also significantly reduced satisfaction levels. Another study concluded that job demands have increased significantly in recent years while job satisfaction and levels of support have declined²⁴.

Other relevant background characteristics of higher education in the UK include the increasing differentiation of higher education in general, and of universities in particular, over the last couple of decades. Higher education institutions in the UK now differ substantially in terms of mission, resources and functional mix. In particular, there has been a national policy of concentrating research spending on 'centres of excellence' that has seen the growth in numbers of 'teaching-only' academics in some institutions. Approximately 25 per cent of academics in the UK were employed on teaching-only contracts in 2004/05, 23 per cent on a research-only basis and 51 per cent of academics were employed to teach *and* research (the latter two being declining proportions)²⁵. It has been suggested that the rise in teaching-only contracts may be partly due to the redesignation by institutions of 'underperforming' researchers as a strategy for improving success in the periodic Research Assessment Exercise (RAE)²⁶.

The relationship between research and teaching is currently a 'hot topic' in some quarters with concerns being expressed about the impact on university teaching and academic standards of the removal of a research underpinning. The debate was stoked by the revision of the criteria for the award of 'university' title in England following the passing of the 2004 Higher Education Act. This legislation removed the requirement for the definition of a university' to include research degree awarding powers. Even among existing universities, many categorise around a quarter to one third of their academics as teaching-only. It is difficult to avoid the conclusion that the separation of research and teaching is itself the result of policy and operational decisions made over some time to distinguish the way these activities are funded, managed, assessed and rewarded²⁷.

Until recently the proportion of academics on fixed-term contracts had been increasing, with only 55 per cent employed on an open-ended or permanent basis²⁸. Two-thirds of academics on teaching-only contracts are employed on a fixed-term basis, and 91 per cent of those on research-only contracts were fixed-term. By contrast, only 16 per cent of academics employed to teach and research were on fixed-term contracts. It is interesting to note that the proportion of academics on permanent contracts is significantly lower in the research-led universities²⁹. However, new data indicate that there has been a recent decline in fixed term contract numbers.

3. Aspects of the changing profession

The international study of *The Changing Academic Profession* is focusing on three main themes arising from recent trends and challenges to the profession across more than twenty countries: relevance, internationalisation and management. This report explores each of these in the UK context.

Relevance

'Relevance' in research and teaching is increasingly required in order to justify the flow of public resources into higher education: "...governments view higher education as an important driver of economic growth, both through the graduates that it develops and the new knowledge created by research"³⁰. But gradually, public resources are being augmented – if not actually replaced – by private funds, whether from students in the form of tuition fees or from enterprises commissioning research or, more broadly, 'knowledge' transfer. What is 'relevant' here reflects the objectives of higher education's 'stakeholders'. If students are concerned about their job prospects after graduation, the argument goes, then universities and their academic staff must attend to these concerns in the design and teaching of their programmes. If a firm funds research and consultancy in order to solve a problem, then the results will be judged in terms of the needs of the company rather than its academic excellence. The demand for relevance is frequently heard but its definition can vary substantially. Relevance is not necessarily 'short-term', although frequently it is. It is not necessarily about wealth creation – whether for the nation, a region or an individual – although, again, frequently it is. Relevance also embraces a social justice agenda through the expectation that higher education will contribute to social equity and mobility through widening and expanding access and creating links with communities.

The point about 'relevance' is that it is generally defined by other people. Academics may claim it for their teaching or research, but it is increasingly for others to assess the validity of these claims. There are a growing number of mechanisms within UK higher education through which relevance is assessed and promoted. Some of these have to do with markets – the need to attract students to courses and the need to obtain research funding. Others have to do with the 'machineries of steerage' that have been introduced by governments and their agencies in recent years. Yet, insofar as most academics would prefer to see their activities as being 'not entirely useless', the debate about relevance is perhaps better seen as a battle over its definition than about its desirability.

Relevance is also assessed and promoted through the criteria used in the various national systems of evaluation and quality assessment. In teaching, there has been a growing emphasis on the articulation of learning outcomes – and the value of these to students' future (working) lives. Curricula are described and justified in these terms. In research, the UK research councils – also needing to justify their receipt of public monies – dispense increasing proportions of their

research grants through special schemes and initiatives created to meet some perceived public need. Funding requirements also mean that research projects increasingly identify 'user groups', have 'dissemination strategies' and their steering groups contain rather more users and policy makers than researchers and academics. One of the few remaining counter pressures to this is the evaluation of research by discipline-specific peer review, although even this is being redefined in the context of the decision to end the Research Assessment Exercise.

As more students are enrolled in a larger system their expectations are also changing in response to wider social transformations, such as their use of technology and familiarity with part-time paid work. They are increasingly being regarded as consumers, or even customers, who demand up-to-date information about educational 'goods', '24/7' access to facilities, quality services and personalised treatment. The 'top-up' fees debate and increased parental interest have, tended to shift the focus onto qualifications acquired and job prospects and away from the learning process. This subtly redefines what is regarded as relevant. Together with a broader intake of students from a wider range of backgrounds and different previous experiences, these developments raise questions about the nature and extent of support for learning and traditional notions of the 'independent learner'.

There are strong interdependencies between the goals of higher education, the rules for distributing resources, and the nature of academic work. The changes associated with movement from the 'traditional academy' with its stress on basic research and disciplinary teaching to the 'relevant academy' are largely uncharted and are likely to have unanticipated consequences. There is a need to understand how these changes influence academic value systems and work practices and affect the nature and locus of control and power in academe. It is also important to understand how these tensions work out in higher education institutions and in countries with different economic, political and cultural traditions as well as varied contemporary circumstances.

3.2 Internationalisation

National (and local and regional) traditions and socio-economic circumstances continue to play an important role in shaping academic life and have a major impact on the attractiveness of jobs in the profession. Yet today's global trends, with their emphasis on knowledge production and information flow, play an increasingly important part in the push towards the internationalisation of higher education³¹.

The international mobility of students and staff has grown, new technologies connect scholarly communities around the world, curricula and credentials are required to have international currency, and English has become the new *lingua franca* of the international community. Competition between higher education institutions has intensified and extends beyond the borders of the nation state. In particular, the research elite of institutions increasingly sees its rivals, collaborators and reference groups in institutions across continents. Many institutions face the challenge of balancing the international with the local, the regional and the national.

International students are a vital part of UK higher education, with some institutions virtually dependent on them for their survival³² particularly on postgraduate courses in some subjects; students from other countries can often constitute a majority. Such students need to be recruited in an increasingly competitive international market. Sometimes their language skills need to be improved and sometimes courses may need to be adapted to take account of the wide range of student backgrounds. Collaboration in the Erasmus and other student exchange schemes is another way in which many academic staff become involved in the internationalisation of the teaching function.

Research activity in the UK has always had a strong international dimension to it, both in terms of collaboration with overseas research teams and in setting standards of excellence. This element now more important than ever with the national Research Assessment Exercise offering the greatest recognition and reward to those whose achievements are deemed to possess international excellence.

Much of the above could probably be said of academics working in many other countries. Some specifically UK aspects worth noting include the role of the English language. This makes it much easier for UK academics to internationalise themselves and it is also one of the reasons for the popularity of the UK as a destination for international students. However, this advantage may be diminishing as English becomes more widely adopted across Europe. Another aspect of language is the role it sometimes plays in creating a somewhat narrow definition of 'international' as comprising a very small number of English-speaking former colonies. Some 'international' conferences and entire journals can be found that limit themselves to the UK, Australia, Canada and New Zealand with an occasional American squeezed in. Shared histories and traditions can provide some explanation of this phenomenon although it rather flies in the face of other globalising trends.

3.3 Management

In academic teaching and research, where professional values are traditionally firmly woven into the very fabric of knowledge production and dissemination, attempts to introduce change are sometimes received with scepticism and opposition. Universities have tended to be perceived as rather conservative institutions to which change, if it comes at all, comes slowly and painfully³³. The current reality is rather different with wide-ranging changes in university management having taken place in the UK in the last twenty years. Greater professionalisation in management is increasingly regarded as necessary to enable higher education institutions to respond effectively to – or even to survive within – a rapidly changing external environment. Specialist managers — in finance, estates and human resources for example — have been appointed in universities and the training and support of academic managers has grown. Governance arrangements have been reformed, with governing bodies reduced in size and the proportion of external members increased.

The management of academic work helps define the nature of academic roles — including the division of labour within the academy, with a growth of newly professionalised ‘support’ roles and, as noted above, a possible breakdown of the traditional teaching-research nexus. Relatively new systemic and institutional processes such as quality assurance have been introduced which also change traditional distributions of power and values within academe and may be a force for change in academic practice³⁴. There is much rhetoric about ‘managerialism’ and control in today’s higher education but also a need to distinguish the rhetoric from the realities of academics’ responses to such managerial practices.

The tensions found in respect of the management of change in higher education are to be found both within and beyond the walls of individual institutions. Within them, they may challenge traditional hierarchies and notions of professorial authority³⁵. They may see the emergence of a professional cadre of full-time managers and a shifting of levels of decision-making between individual academics, basic academic units, faculties and central authorities. The direction of the shift seems always to be in favour of the latter. Beyond the walls of institutions, the expectations of ministries, of new intermediary bodies and of resource-bearing clients bring further pressures for change.

A number of views can be discerned about recent attempts at the management of change in higher education and the responses of academics to such changes. One view would see a victory of managerial values over professional ones with academics losing control over both the overall goals of their work practices and of their technical tasks. Another view would see the survival of traditional academic values against the managerial approach. This does not imply that academic roles fail to change, but that change does not automatically mean that core interests and values are weakened. ‘Compliance’ may be sufficient to satisfy the requirements of managers and consumers while academic work proceeds largely unaffected. A third view would see a ‘marriage’ between traditional professionalism and new managerialism with academics losing some control over the goals and social purposes of their work but retaining considerable autonomy over their practical and technical tasks. The desirability or otherwise of these three different positions is also subject to a range of different views.

As a consequence of these changes, and the trends sketched in Section 2, it is likely that the *Changing Academic Profession* study will uncover the emergence of a multiplicity of forms of academic career and professional activity. If the United States is an example of future developments, it seems that these will be characterised by different conditions of employment, differentiation in the nature and scope of work responsibilities, demographic distinctions between groups of academic and changes in the career paths that different individuals will take³⁶. All this points to greater specialisation and differentiation in a profession that has expanded significantly recently and is expected to keep on doing so.

4. Conclusion

Academics are faced by many (and sometimes competing) pressures related to the themes of relevance, internationalisation and managerialism. Many aspects of deeply entrenched professional practice continue while minor shifts and major changes occur throughout the sector. This is partially because academics differ in their degrees of acceptance to such trends and may adopt a range of strategies including subversion and accommodation. Differences may reflect status within the academic hierarchy, subject characteristics and generational variation when younger academics enter higher education with different expectations and experience new forms of socialisation.

There is of course also plenty of compliance to be found in UK universities in response to external pressures.

In relation to the 'shape' of the profession, some elements of traditional hierarchies such as status based on age and length of service may be eroding while other elements, eg placing a high value on 'entrepreneurial' skills, are emerging. At the same time, some elements such as institutional reputation and status are being reinforced and recast in different ways. The picture thus emerges of an academic profession facing change but also much continuity, transforming many aspects of academic work while at the same time creating an increasingly stratified sector.

Annex A: The *Changing Academic Profession* study

The international study on which this research report is based aims to examine the nature and extent of the changes experienced by the academic profession in the last twenty years, drawing in part on comparisons of current developments with those documented in the *First International Survey of the Academic Profession* conducted in 1991³⁷. The core of the research is a survey of academics in over twenty countries worldwide, from Australia to Mexico, China to South Africa and India to Russia. The whole of North America is included, together with seven European countries. The UK survey was conducted in March 2007, together with related studies, by the Centre for Higher Education Research and Information (CHERI) at The Open University.

The *Changing Academic Profession* study is exploring both the reasons for the changes in the academic profession and their consequences. Furthermore, it considers the implications of the changes for:

- The attractiveness of the academic profession as a career.
- The ability of the academic community to contribute to the further development of knowledge societies.
- The attainment of national goals.

Comparisons will be made between different national higher education systems, institutional types, disciplines and generations of academics. The findings from the study could help to inform policies on international and national recruitment, academic roles and the management of key academic functions, among other areas that may be of interest to higher education institutions.

The study seeks to address six research questions:

- To what extent is the nature of academic work changing?
- What are the external and internal drivers of these changes?
- To what extent do changes differ between countries and types of higher education institution?
- How do the academic professions respond to changes in their external and internal environment?
- What are the consequences for the attractiveness of an academic career?

- What are the consequences for the capacity of academics to contribute to the further development of knowledge societies and the attainment of national goals?

A model of change in the academic profession

The study is utilising a model for the analysis of the academic profession that identifies six aspects of change, addressing the drivers, conditions, beliefs, roles and practices, outputs and outcomes.

First, the **drivers** of change: In a broad sense, these are principally the structures and ideologies of the knowledge society, leading to commodification, competition, internationalisation, expansion and differentiation. These are the factors that have fuelled expansion and encouraged diversification and differentiation among higher education institutions.

Second, the **conditions** under which changes occur. These include factors such as infrastructures, salaries, institutional diversity, terms of employment and hierarchies (old and new). They include resource issues such as multiple funding sources, emphasis on cost-recovery and the financial contribution of academic units to growing institutional overheads and bureaucracies.

Third, there are the **beliefs** of academics. They may be stable or changing, confident or threatened. There are the identities, loyalties, motivations (intrinsic and instrumental), career aspirations, and individual and collective orientations that drive individual academics and shape their relationships and behaviour.

Fourth, there are the **roles and practices** of academic life. These include the teaching-research nexus, the place of public service, the division of labour involving the 'unbundling' of traditional roles and the creation of new specialist roles, the need for new specialist skills and the creation of a cadre of management professionals.

Fifth, there are the **outputs** arising from these changes. These may be regarded negatively, for example, in the loss of collegiality and declining prestige and conditions of work. They can also be regarded more positively, or at least neutrally, for example as the undermining of traditional and constraining hierarchies, a shift from internal to external controls, a move from individual to collective work, greater productivity, a blurring of boundaries (both within higher education institutions and between them and other organisations/institutions in society). Whether such changes are regarded as positive or negative depends on one's vantage point but also on an analysis of the societal impact of these changes, of their social, economic and cultural consequences.

Sixth, and finally, there are the **outcomes** of change for the academy itself. Will we find – at the end of the study — a more responsive, socially useful academy **or** an undermined academy **or** a more differentiated academy? We may, of course, find different things in different places.

Of course, these six aspects are interconnected. Methodological challenges will include the need to reveal these interconnections. They will also concern the extent to which the 'perceptions' of academics on these matters constitute 'hard evidence' or simply the opinions of self-interested participants. It will also be interesting to compare the emerging picture of changes in the academic profession with what is known about changes in professional and working life more generally.

The perceptions of academics reflect, of course, the real circumstances of their working lives and institutions. But these in turn reflect the specifics of institutional and national histories and traditions. For all the rhetoric about the effects of globalisation, it is at least possible that the new international study of the academic profession will in fact discover many academic professions, each reflecting local circumstances and histories. Some of them may be 'successfully' resisting change. Others may be 'enthusiastically' embracing it. Or again, differences may cut across national boundaries and reflect such things as the type of institution, the subject area or the age and seniority of the individual academic. The new study may prove to have several stories rather than a single story to tell.

Notes

¹ The terms 'academic' and 'academic staff' are used in this report to cover all those staff recorded by the Higher Education Statistics Agency (HESA) as being on 'academic contracts', and the data shown here cover all such staff. These include both relatively junior postdoctoral researchers as well as senior professors. Clearly different considerations apply to these and, where possible, appropriate data for different grades have been shown separately and appropriate conclusions drawn. However, many data sources do not differentiate sufficiently to do this.

² Enders J, 2006, *'The Academic profession'* in Forest J J F and Altbach P G (eds.) *International handbook of higher education*, Dordrecht: Springer; Enders J and Teichler U, 1997, *'A victim of their own success? Employment and working conditions of academic staff in comparative perspectives'*, *Higher Education Policy*, 34(1): 347-372; Kogan M, Bauer M, Bleiklie I and Henkel M, 2000, *Transforming higher education: a comparative study*, London: Jessica Kingsley.

³ Fulton O, 1996, *'Which academic profession are you in?'*, Cuthbert R (ed), *Working in higher education*, Buckingham: Open University Press, 157-169; Altbach P G, 2000, *The changing academic workplace: comparative perspectives*, Boston: Center for International Higher Education.

⁴ Brew A, 2006, *Research and teaching: beyond the divide*, Basingstoke: Palgrave MacMillan; Rip A, 2004, *'Strategic research, post-modern universities and research training'*, *Higher Education Policy*, 17: 153-166.

⁵ Harman G, 2003, *'PhD Students' satisfaction with course experience and supervision in two Australian research-intensive universities'*, *Prometheus*, 21(3): 317-333.

⁶ Henkel M, 2001, *Academic identities and policy change in higher education*, London: Jessica Kingsley.

⁷ Gibbons M, Limoges C, Nowotny H, Schwartzman S, Scott P and Trow M, 1994, *The new production of knowledge: the dynamics of science and research in contemporary societies*, Sage: London; Nowotny H, Scott P and Gibbons M, 2001, *Re-thinking science: knowledge and the public in an age of uncertainty*, Blackwell: Malden, MA.

⁸ Higher Education Funding Council for England (HEFCE), 2006, *The HE workforce in England*, Bristol. Where it is not indicated in the following paragraphs, data on England is taken from this report.

⁹ Henkel M, 2001, *Op Cit.*

¹⁰ Higher Education Statistics Agency (HESA), 2006, *Resources of higher education institutions 2004/05*, Cheltenham.

¹¹ Association of University Teachers (AUT), 2005a, *The Diverse academy: The pay and employment of academic and professional staff in UK higher education by gender and ethnicity*, London: Association of University Teachers.

¹² HESA, 2006, *Op Cit.*

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- ¹³ Ramsden B, 2006, *Patterns of higher education institutions in the UK; Sixth Report*, London: Universities UK.
- ¹⁴ AUT, 2005a, *Op. Cit.*
- ¹⁵ AUT, 2005b, *The ethnicity of senior UK academic staff 1995-96 and 2003-04*, London: Association of University Teachers. 'Senior academics' include non-clinical professors and principal lecturers in post-1992 universities.
- ¹⁶ A postdoctoral appointment is a temporary research position held by a person who has completed their doctoral studies.
- ¹⁷ Bekhradnia B and Sastry T, 2006, *Brain Drain or Gain? Migration of academic staff to and from the UK*, Oxford: Higher Education Policy Institute.
- ¹⁸ Ramsden B, 2005, *Patterns of higher education institutions in the UK: Fifth report*, London: Universities UK.
- ¹⁹ HEFCE, 2006, *Op Cit.*
- ²⁰ HEFCE, 2006, *Op Cit.*
- ²¹ Metcalf H, Rolfe H, Stevens P and Weale M, 2005, *Recruitment and retention of academic staff in higher education*, Research Report 658, London: DfES.
- ²² Metcalf H *et al*, 2005, *Op Cit.*
- ²³ Kinman G and Jones F, 2004, *Working to the limit*, London: Association of University Teachers.
- ²⁴ Kinman G and Jones F, 2003, "Running up the down escalator: stresses and strains in UK academics", *Quality in Higher Education*, 9(1): 21-38.
- ²⁵ HESA, 2006, *Op Cit.* The remainder (2 per cent) were not employed to teach or research.
- ²⁶ AUT, 2005c, *The rise of teaching-only Academics*, London: Association of University Teachers.
- ²⁷ Locke W, 2004, "Integrating research and teaching strategies: Implications for institutional management and leadership in the United Kingdom", *Higher Education Management and Policy*, OECD, 16(1): 101-120.
- ²⁸ AUT, 2005c, *Op Cit.*
- ²⁹ Kim T, 2006, "Building a business: a comparative note on the changing identities of the British University", in Winther-Jensen T and Sprogøe J (eds.), *Identity, education, and citizenship: multiple interrelations, The CESE Conference Proceedings*, Frankfurt: Peter Lang.
- ³⁰ HEFCE, 2006, *Op Cit.*
- ³¹ Marginson S and Rhoades G, 2002, 'Beyond national states, markets, and systems of higher education', *Higher Education*, 43: 281-309.
- ³² International activities are an important business to UK higher education institutions. The total income to institutions attributable to overseas sources is a little over £1.5 billion, representing 10 per cent of the total income of the UK higher education sector in 2003/04. This is made up largely of student fees (70 per cent) and research grants and contracts (13 per cent). But institutions benefit differentially from these overseas income sources, with approximately one-third of higher education institutions receiving less than five per cent of their income and a small group earning more than a fifth of their total income from overseas. Ramsden B, 2005, *Op Cit.*
- ³³ Cohen M and March J, 1974, *Leadership and ambiguity*, New York: McGraw-Hill; Trow M, 1994, 'Managerialism and the academic profession', *Higher Education Policy*, 7(2): 11-18.

³⁴ Brennan J and Shah T, 2000, *Managing quality in higher education: an international perspective on institutional assessment and change*, Buckingham: Open University Press.

³⁵ Enders, 2001, *Op Cit*.

³⁶ Schuster J and Finkelstein, M, 2006, *The restructuring of academic work and careers: the American faculty*, Baltimore: Johns Hopkins University Press.

³⁷ Boyer E, Altbach P G and Whitelaw M J, 1994, *The Academic profession: an international perspective*, Princeton: Carnegie Foundation for the Advancement of Teaching; Altbach P G and Lewis L S, 1996, *The international academic profession: portraits of fourteen countries, special report*, San Francisco: Jossey-Bass.

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