

The Changing Dynamics of UK Higher Education Institutions in an
Increasingly Marketised Environment: Academic Work and
Rankings

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Integrative Summary submitted for PhD by Publication

DECLARATION

I, William Locke, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

William Locke

16 March 2017

Word count (excluding references and appendices): 21,120

ACKNOWLEDGEMENTS

I am greatly indebted to my supervisors, Professor Elaine Unterhalter and Professor Karen Evans, for steering me through the process of preparing this Integrative Summary and for keeping my spirits up.

Dr Bryan Cunningham was also very supportive in sharing his experience of successfully completing a doctorate by publication and in reading and commenting on the Integrative Summary in its final form.

My wife, Debbie Locke, gave me moral encouragement throughout and put up with me hiding away in my 'lair' for hours – even days – on end, often with the calming influence of Bailey, our English Setter.

Abstract

The integrative summary for this PhD by Publication, and the five publications on which it is based, address two related strands of the study of higher education. These are (i) the shifting patterns of academic work and careers in the UK, and (ii) the influence of rankings on higher education institutions (HEIs). These strands are understood in a common context: the increasingly competitive and globalised HE environment in which HEIs are responding to external pressures and internal anxieties in dynamic and highly differentiated ways, according to their ranking positions, missions, reputation and resources.

The three research publications on the academic profession, work and careers focus on the diversification and stratification of higher education institutions and those who work in them. In particular, they explore the relationships between research and teaching and the increasing predominance of the former over the latter in the reputations of HEIs and the career opportunities for individual academics in various roles and at different career stages. The new, hierarchical, divisions of labour, I argue, are reducing opportunities and threatening the sustainability of the profession itself, such that it is in need of reinvigoration and renewal.

The two research publications on the influence of rankings on HEIs explore the ways in which the rationales and processes – the logic – of ranking systems are being *internalised* and, ultimately, *institutionalised* by individual universities in different ranking positions and at different stages of accommodation. They investigate how this logic becomes embedded in organisational structures and procedures and established as the norm, and shed light on the variable responses of different types of institution and the different parts within an institution. Finally, they show how these responses unfold over time, for example, from initial scepticism and resistance, to reluctant acceptance and, ultimately, active engagement with rankings systems.

Contents

	Page
1. Introduction	6
1.1. Background and context	6
1.2. Origins of my research	8
1.3. Structure and content of the integrative summary	9
2. The shifting patterns of academic work and careers	10
2.1. Situating the research in the relevant literature	10
2.2. The programme of research	16
2.3. Summaries of the selected publications and key findings	18
2.4. Originality and recent and active contribution to knowledge in the field	25
3. The influence of rankings on higher education institutions	32
3.1. Situating the research in the relevant literature	32
3.2. The programme of research	36
3.3. Summaries of the selected publications and key findings	37
3.4. Originality and recent and active contribution to knowledge in the field	43
4. Research design issues	50
5. Underlying themes and connecting threads	53
6. Reflections, further research and conclusions	62
7. References	68
Appendices	80
1. Publications on each of the two areas of study:	81
a. The shifting patterns of academic work and careers	81
b. The influence of rankings on higher education institutions	83
2. Statement of contribution to collaborative publication 3, signed by the other authors	84
3. Five publications	85

1. Introduction

1.1 Background and context

This submission for a PhD by Publication is based on research into the changing dynamics of UK higher education institutions (HEIs) in an increasingly marketised environment. The five recent publications I have chosen to focus on in this integrative summary draw on several empirical research projects that I led in two related areas of the study of higher education. These areas are: (i) the shifting patterns of academic work and careers, and (ii) the influence of rankings on higher education institutions (HEIs). At the conclusion to the research projects, I produced academic publications and policy documents that reported the detailed findings and initial interpretations of the research. In both cases, however, I subsequently returned to the findings and interpretations in order to develop the original analyses further and to make distinctive conceptual contributions to the research literature.

The publications on which I am basing my application for a PhD by Publication are as follows (in chronological order of publication):

Locke, W. (2012) 'The Dislocation of Teaching and Research and the Reconfiguring of Academic Work', *London Review of Education* (Special issue on Managing higher education in the post-2012 era) Volume 10, Number 3, 261-274.

Locke, W. (2014a) 'The Intensification of Rankings Logic in an Increasingly Marketised Higher Education Environment', *European Journal of Education*, Volume 49, Number 1, 77-90.

Locke, W. (2014b) *Shifting Academic Careers and their implications for enhancing professionalism in teaching and supporting learning*, York: Higher Education Academy: <https://www.heacademy.ac.uk/node/10079>

Locke, W., Whitchurch, C., Smith, H. and Mazonod, A. (2016) *Shifting Landscapes: meeting the staff development needs of the changing academic workforce*, York: Higher Education Academy: https://www.heacademy.ac.uk/sites/default/files/shifting_landscapes_1.pdf

Locke, W. (2016) “There is a World out There We Can Step Into”: The University of Reading (UK) and the World Rankings’, in Yudkevich, M., Altbach, P.G. and Rumbley, L.E. (eds) *The Global Academic Rankings Game: Changing Institutional Policy, Practice, and Academic Life*, New York: Routledge: 222-245.

There are common themes running through these publications and the research studies from which they draw, which are both substantive and methodological in nature. One is the significance of diversity and differentiation, as higher education systems expand and take on greater significance; as existing stratification is modified and new divisions of labour emerge; and as roles and tasks proliferate. Another is the increasing importance of higher education institutions as organisations, alongside academic and disciplinary communities, their governance and management, and their interactions with their local, national and global environments. The context for these developments is the increasingly competitive and international higher education context in which UK HEIs and academic communities are responding to external pressures and internal anxieties in dynamic and highly differentiated ways, according to their missions, reputation and resources. These expanding and developing contexts highlight the importance of the temporal dimension in understanding the dynamics of change and HEIs’ and academic communities’ evolving responses to it. Finally, each of these considerations has implications for the design of studies and research methodologies. This summary seeks to explore these common themes in three final sections, having first set out the original and distinctive nature of my contribution in each of my two chosen areas of study.

1.2 Origins of my research

The research that culminated in the five selected publications included here originated from two studies commenced in 2006 and 2007, respectively.

I was the Principal Investigator (PI) for the UK part of the *Changing Academic Profession* (CAP) study (2006-10), and undertook a survey of more than 1,650 academics from HEIs across the UK, contributing to the total of nearly 26,000 responses across 19 countries worldwide. I have published 21 journal articles, book chapters and policy reports and two co-edited books (Locke & Teichler, eds 2007; Locke *et al*, eds 2011) directly from this study, and have given conference presentations on this research in the US, Canada, Japan, Australia, Europe and the UK.

In 2007/08, I was the Principal Investigator and main author of research commissioned by HEFCE on league tables and their impact on HEIs and the way they are governed and managed. This produced a report and a substantial series of appendices reporting the methodology and detailed findings of the study (Locke *et al*, 2008). The research involved a survey in 2007 of 91 English HEIs, six institutional case studies and an examination (including statistical analysis) of five published rankings.

I have been able to progress these two strands of research through a number of subsequent research projects and publications, despite spending a period of time in a non-research role at the Higher Education Funding Council for England (HEFCE, 2010-13)¹. These represent a substantive programme of research which I am continuing to pursue.

¹ This non-academic role (2010-2013) is also the justification for including a publication from 2012, more than four years prior to the submission date for this thesis.

1.3 Structure and content of the integrative summary

The core of this integrative summary is an account of research in the two areas of study. Section 2 covers the shifting patterns of academic work and careers, and section 3 is on the influence of rankings on higher education institutions. Both of these sections have the same structure. They commence by situating the research and publications in the relevant literature, identifying the dominant approaches and interpretations and indicating where I have a different and distinctive contribution to make. This is followed by a brief account of my research programme, including the original studies, subsequent follow-up research and my further interpretation of the findings. Each of the relevant publications on which this submission is based is summarised in a third sub-section. Finally, I outline the originality and distinctive nature of my contribution to knowledge in each field.

Sections 4, 5 and 6 address aspects of both areas of study. Section 4 raises a number of research design issues arising from the nature of the studies and the challenges they present. Section 5 aims to integrate the two research areas by identifying several key themes and threads running through them. Finally, section 6 outlines my current and proposed future research which seeks to build on the contribution described here. This section also concludes this integrative summary by drawing out some larger questions raised by my research programme which will provide conceptual and analytical frameworks for these further investigations.

2. The shifting patterns of academic work and careers

2.1 Situating the research in the relevant literature

The academic profession, academic work and careers have been the subject of a number of major studies over the last forty years or so, focusing on such aspects as the economic and social characteristics of the academic labour market (Williams *et al*, 1974), the attitudes and opinions of members of the profession (Halsey & Trow, 1971; Carnegie Foundation, 1989; Halsey, 1992) and the nature of academic life (Clark, 1987a; see also Locke, 2010, for a summary and critique of this book). A significant part of this literature has been devoted to exploring academic identities, firmly situated in disciplinary communities (Clark, 1987b; Becher, 1989; Becher and Trowler, 2001), steeped in core values such as collegiality, professional autonomy and academic freedom (Shils, 1991), and the influence of policy developments at national and institutional levels on these identities (Henkel, 2000).

Much of the literature on the academic profession in the UK since the 1980s has been framed by a sense of loss, alienation and retreat from a 'golden age' (for example, Halsey, 1992; Tapper and Salter, 1992; Bryson, 2000; Harley, *et al*, 2004; Macfarlane, 2006). It has documented the impact of expansion in the numbers and types of institutions, massification through increasing student enrolments, the growth of knowledge-based economies, the effects of neo-liberalism, globalisation and technological change on higher education institutions (Scott, 1995; Slaughter and Lesley, 1997; Ferlie *et al*, 2008), and the influence of New Public Management (NPM), quality assurance, performance management and performance indicators on those who work in them (Deem, Hillyard and Reed, 2007; Henkel, 2010). In this discourse, it is variously argued that academics have been proletarianised, their work industrialised, their autonomy eroded and they, themselves have been de-skilled (Gupta *et al* (eds), 2016). The result, according to this narrative, is that the academic profession is demoralised and disaffected, and some individuals are actually disengaged from the academic life of their institutions. For some, this has brought about a crisis in the governance and management of higher education institutions in which the collegial tradition of dualistic or shared decision-making between academics and other stakeholders has largely been replaced by managerialist corporatism (Deem, Hillyard and Reed, 2007). This 'hollowing out' of

collegiality, it is argued, presents a challenge to academic and professional identity and the moral authority of higher education itself (Macfarlane, 2006).

However, the *Changing Academic Profession* (CAP) study (Teichler *et al* (eds), 2013; Locke, 2011a) – for which I was PI in the UK – suggested that this prevailing thesis of loss, alienation and retreat is insufficient for explaining what has actually been happening within the UK academic profession, as the trends were not uniform. The existing literature tends to be dominated by the accumulated perceptions of academics rather than the empirical study of their actual behaviour and actions and, indeed, the conduct and views of increasingly important professional services staff. Despite the significant degree of change in higher education during the last four decades, academics have shown little effective opposition or even widespread dissent as evidenced by survey responses or movement out of the profession (Shattock, 2001; Taylor, 2006; Kolsaker, 2014). Although there has been some opposition from academic unions, there has been a range of responses to the new forms of higher education, including ‘passive acceptance’, ‘tacit approval’ and even ‘positive support’ for many of the changes (Leišytė, 2016). Academics have always been ‘active agents’ in the internal changes in education, scholarship and science (Scott, 2014). Some have positively welcomed the professionalising of management, the speeding up of decision-making and the streamlining of committee structures. In some institutions, this has allowed them to concentrate on research and/or teaching, and take advantage of new opportunities for engaging with external partners and accessing additional resources (Kolsaker, 2008). Among other things, my research has been an attempt to investigate empirically the range of responses to the change in higher education in the last 25 years.

The thesis about loss and alienation tends to regard the academic profession as a homogenous entity and individual academics as rational actors, performing a largely similar role and operating on the basis of a core of common – if increasingly undermined – academic and collegial values (Halsey, 1992; Tapper and Salter, 1992). However, even before the CAP study, some commentators in the United Kingdom had already contended that there are significant variations between different groups of academic staff: between research-only and teaching staff (Bryson 2004); between staff in pre-1992 universities and post-1992 universities (Casey 1997); and between junior and senior staff (Martin 1999).

International, comparative studies of the academic profession – or, rather, *professions* – in different countries and HE systems highlight even more sharply the differentiation and diversity among academic faculty across national borders, and their different perceptions on changes in the profession. One of the first national comparative collections of essays on the topic was published in 1987, covering the US, Britain, Germany and France (Clark ed, 1987b). However, the first large-scale, systematic, international comparative study of the academic profession was initiated and supported by the US-based Carnegie Foundation for the Advancement of Teaching in the early 1990s. The survey of academics was undertaken in 1992 and involved researchers from 14 countries (Australia, Brazil, Chile, Germany, Hong Kong, Israel, Japan, South Korea, Mexico, the Netherlands, Russia, Sweden, the United Kingdom and the USA). The analysis of almost 20,000 responses led to a number of international (Boyer *et al*, 1994; Altbach, 1996; Teichler, 1996) and national (e.g. Altbach, 1996; Enders and Teichler 1995a and 1995b; Fulton, 1996; Arimoto and Ehara 1996) reports and provided the key reference point for the *Changing Academic Profession* study and my own research in this area.

It is impossible to summarise satisfactorily the broad range of findings of the Carnegie Study, but it did suggest that the academic profession was a ‘profession under pressure’ confronted with more expectations and offering fewer privileges than previously. Yet, despite these pressures, at least senior academics in universities (as distinct from junior academics and those in research institutes and teaching-only institutions) remained fairly satisfied with their role in the majority of countries surveyed. Interestingly, senior academics in English universities (the UK survey actually only covered England, despite being labelled otherwise), already considered themselves under greater pressure than their counterparts in other European countries (Teichler, 1996). However, these expectations and pressures had not led (by 1992) to academics in any of the countries involved in the Carnegie study developing a common view of their situation, or of how to act. “Rather while academics believe they have to respond, they feel they have leeway for interpretation and for the selection of various directions of action” (Teichler, Arimoto and Cummings, 2013: 7).

Both the Carnegie and CAP studies addressed the impact of important external influences on the academic profession and academics’ responses to these, in particular:

- the external pressures to undertake teaching, research and related academic work that is *relevant* to the wider knowledge society and economy (for example, the graduate employability agenda and the concern for research to have observable social and economic impact)
- the changing nature of the management and governance of HEIs, and
- the internationalisation of higher education and the impact of this on academic work and careers.

Other key themes common to both studies included: faculty norms and attitudes; the formation and socialisation of new academics; academic capitalism (the efforts of colleges and universities to develop, market, and sell research products, educational services, and consumer goods in the private marketplace); bureaucracy and managerialism; academic identities; academic, non-academic and 'third space' professionals; and gender, ethnicity and equality.

The follow-up, 2007 survey again indicated that UK academics were more likely than those from the other 18 countries in the CAP study to position themselves towards the negative end of many of the scales included in the survey, for example, on job satisfaction, the quality of institutional management, levels of support, and facilities, resources and personnel. This international 'benchmarking' was helpful in situating and interpreting the UK CAP survey findings and, further, in informing my subsequent research studies which have aimed for more qualitative investigation of some of these issues.

The CAP study provided evidence to help investigate whether there are significant differences of perception emerging from this increasingly diverse and segmented population of those employed in academic institutions, depending on a wide range of factors, including the type of institution in which an individual is employed; their grade or seniority; the nature of the contract they have; the time they have spent in the profession; and their disciplinary subject. It also aimed to understand the extent to which these dimensions are overlaid by demographic factors, in particular, gender, age and ethnicity. So, the CAP findings helped to disaggregate the perceptions of academics and locate more accurately where there was a sense of alienation and unfairness and, indeed, where there was greater satisfaction and advance.

However, in drawing on the CAP findings, I was keen to question what I saw as some of the underlying assumptions of the study: the relatively homogenous nature of the academic profession, the integrity of academic work, the accepted reality of academic freedom, the relative stability of career trajectories, the ubiquitous nature of academic mobility, and the universal operation of academic labour markets. The UK CAP survey responses seemed to indicate a variegated profession, which is differentiated in several ways (Locke, 2008; Locke and Bennion, 2009; Locke and Bennion, 2011).

Increasingly, universities and the academic role itself are being fragmented – or, in US terms, ‘unbundled’ (ACE, 2014). In the UK, the core functions of ‘teaching’ and ‘research’ have been disaggregated into their constituent activities and some of these have been allocated to specialist roles, such as learning support, course evaluation, research bid preparation and knowledge transfer (Strike, 2010). The importance of teaching has often been usurped by a focus on learning, and the student has become the centre of attention in policy discourse, albeit largely as a consumer of education (BIS, 2011). This has shifted the locus of authority from teachers and their disciplinary expertise to learners and the increasingly heterogeneous contexts in which they learn (Scott, 2014). More learner-centred (than teacher-led) approaches to educational and curricular design seek to cultivate the social relationships and interactions between learners and support students as co-producers and co-designers of learning (Jahnke *et al*, 2016). My research provided further confirmation and elaboration of these developments (Locke, 2012; Locke, 2014b).

Research is also disaggregated into different modes of knowledge production. One perspective on this disaggregation suggests a distinction between mode 2 multidisciplinary research seeking to solve real world problems contrasted with mode 1 disciplinary-based fundamental research driven by investigators’ curiosity (Gibbons *et al*, 1994). The increasing concern of research funders with the impact of research on society and the economy (for example, in the Research Excellence Framework (REF)), has created new roles for those who specialise in writing retrospective impact case studies and those assigned to encourage researchers to plan, prospectively, from the start of projects, how they will engage the public and the media with their findings. These developments have consolidated the steady growth of non-academic staff in UK HEIs (Ginsberg, 2011; Jump, 2015) and, in particular, those ‘third space’ professionals operating between academic and

administrative roles (Whitchurch, 2012). They have also contributed to a blurring of the academic role (Malcolm and Zukas, 2009), a loss of clarity about purpose and a growing sense of insecurity, especially among early career academics (UCU, 2013).

My research draws on aspects of this literature, but seeks to investigate the different circumstances and perspectives of academics in the UK, the nature of their roles and work, and their prospects for career progression. I outline the programme of research from which my selected publications are drawn in the following subsection.

2.2 The programme of research

Following the CAP study (2006-10), I was asked in 2012 to give a paper (Locke, 2012: *Publication 1*) at a conference celebrating the tenth anniversary of the MBA in Higher Education Management at the Institute of Education, University of London. I was a graduate from the first cohort of this programme (2002-04) and, subsequently (in 2013), became its Co-Director. In this 2012 paper, I revisited a previous journal article (Locke, 2005) that I had written on UK higher education institutions' efforts to integrate teaching and research strategies and their implications for institutional management and leadership (which, itself, had started out as an MBA assignment). I drew on the CAP study findings to illustrate how these two core activities have been further detached and are, themselves, being disaggregated into separate specialist functions, with significant consequences for academic work and careers. The paper was published in a special issue of the *London Review of Education*, along with the other papers from the conference.

My research and writing on the academic profession, work and careers has been of continuing interest to national HE bodies. The CAP UK study was partly funded by Universities UK (UUK) and HEFCE, among others, and these organisations also commissioned me (together with Research Assistant, Dr Alice Bennion) to write reports based on the CAP study (Locke & Bennion 2010a; 2010b). The Higher Education Academy (HEA) had also partly funded the CAP UK study, and subsequently commissioned me to write a review of the literature, empirical evidence and policy implications of shifting academic careers for enhancing professionalism in teaching and supporting learning (Locke, 2014b: *Publication 2*). This was to advise the HEA's senior team on future strategy for the Academy at a difficult period in the organisation's history, with the reduction in public expenditure on higher education, a renewed emphasis on teaching and 'the student experience' and the growing numbers of academics in teaching-only contracts and teaching-focused roles, largely as a result of HEIs' responses to the 2014 REF.

Following this up, together with IOE colleagues, I undertook research on meeting the staff development needs of a changing academic workforce. This, largely qualitative, study aimed to develop a deeper understanding of the roles and career trajectories of academic and related staff in UK higher education and their development needs in relation to promotion and transition across and between teaching, learning-support and research career pathways (Locke, Whitchurch, Smith

and Mazonod, 2016: *Publication 3*). I also wanted to establish the national context for the study, including an analysis of the data gathered by the Higher Education Statistics Agency (HESA) on staff in UK HEIs, developing the initial analysis I had started in the earlier review for the HEA and, in particular, including data from the year of the institutional submissions to the REF (2013/14), given the significance of this process for many UK academics' career trajectories.

2.3 Summaries of three selected publications and key findings

Publication 1:

Locke, W. (2012) 'The Dislocation of Teaching and Research and the Reconfiguring of Academic Work', *London Review of Education* (Special issue on Managing higher education in the post-2012 era) Volume 10, Number 3, 261-274.

In this article, I examined the relationship between teaching and research and their strategic management in UK higher education institutions. For many academics, the indivisible nature of teaching and research is a touchstone of their thinking about higher education. However, as a result of policy and operational decisions made during the last 40 years – to distinguish the way these activities are funded, managed, assessed and rewarded – there has been a gradual separation. Furthermore, these core academic activities are themselves disaggregating and the functions fragmenting into new professional specialisms, such as study support and online learning, and the management of research proposals and funding. These processes result in new roles, work patterns and career trajectories, such as teaching-only or 'teaching and scholarship', learning enhancement, knowledge exchange, public engagement and contract research. The 2007 CAP survey of UK academics shed light on some of these developments, including a shift in primary interest among all academic respondents since the 1992 Carnegie study from teaching to research, a perception of a greater propensity for institutions to favour research criteria in recruitment and promotions decisions, and differences according to the career trajectory of respondents in their perceptions of whether teaching and research are compatible with each other.

The article described several efforts to raise the status of teaching to achieve parity with research, ensuring sufficient reward and recognition for the former. Some of these initiatives have employed concepts of 'excellence' to establish equivalence with notions of 'research excellence' and to restore the central place of teaching in a 'world class' university (much as the current Teaching Excellence Framework attempts to do in England). Others, such as the 'Scholarship of Teaching and Learning', have sought to identify teaching with research through the systematic investigation of learning and those factors that enhance it, and so relocate teaching at the core of academic practice and academics' professional identities and affiliations. I argued that, paradoxically, the unbundling of activities and fragmentation of roles may be allowing the reintegration of teaching and research in

novel and innovative ways. However, I concluded that these developments were unlikely, ultimately, to be successful without the fundamental reconfiguration of academic work and career paths, in ways that accurately reflect the diversity of the workforce and academic activities, and which introduces greater flexibility for staff in varying their employment conditions and shaping their career trajectories and in re-engaging academics in strategic decision-making within HEIs.

Publication 2:

Locke, W. (2014b) *Shifting Academic Careers and their implications for enhancing professionalism in teaching and supporting learning*, York: Higher Education Academy: <https://www.heacademy.ac.uk/node/10079>

The first of two publications for the Higher Education Academy included here addressed the changing nature of academic careers in higher education, including a move in some institutions towards the use of ‘teaching-only’ contracts. It aimed to provide a brief review of the literature and other evidence of recent shifts, and to identify the key issues for enhancing teaching and supporting learning, continuing professional development and reward and recognition arising from these developments. In particular, it questioned whether some national reforms and institutional management strategies are leading to attempts to ‘professionalise’ teaching and broader aspects of the academic role from *outside* and/or *above*, rather than by encouraging new forms of ‘professionalism’ that emerge from *within* the profession itself.

The paper commenced by analysing data from the Higher Education Statistics Agency (HESA) and other sources in order to profile some of the trends among academic and other staff in higher education institutions in the UK. It then examined some of the major medium-term trends, focusing on their impact on academic careers and work, including the increasing differentiation and diversity of the academic profession and the ‘unbundling’ and disaggregation of academic work that had been highlighted in Publication 1. It also included an assessment of some more recent, short-term developments, such as reduced government expenditure on higher education and changes in funding regimes, the influence of the REF, and the impact of increasing competition and the growing influence of rankings. In commenting on the last of these, the paper drew on my own analysis from an earlier publication (Locke, 2014a: *Publication 4*).

One section of the paper focused, in particular, on the increasing numbers of academics on teaching-only contracts and in teaching-focused roles, the various routes into them, and the possible reasons for these developments. It included an analysis of the HESA data to show that a third of those who teach in UK HEIs are on teaching-only contracts and that a disproportionate number of these were to be found in some pre-1992 universities outside the Russell Group. It appeared that this grouping of HEIs (formerly, members of the 1994 Group) were placing more emphasis on research in order to reaffirm their status as research-intensive universities, despite not being members of the Russell Group. This may have led them to create more teaching-only posts in order to free other academics up to concentrate on research, and to maximise their 'grade point average' in the 2014 REF.

The paper also explored three aspects of the changes needed to reinvigorate the academic profession:

- rethinking academic work and career pathways
- rewarding and recognising academic work
- enhancing professionalism

I concluded that, without these changes, some of the shifts identified in the paper may ultimately erode the attractiveness of academic work and careers and I argued for a reinvigoration of professionalism and professional identity in the sector around education (as a more inclusive term than 'teaching') as well as research.

Publication 3:

Locke, W., Whitchurch, C., Smith, H. and Mazonod, A. (2016) *Shifting Landscapes: meeting the staff development needs of the changing academic workforce*, York: Higher Education Academy:

https://www.heacademy.ac.uk/sites/default/files/shifting_landscapes_1.pdf

The research project reported in this publication investigated some of the issues raised by Publication 2. In particular, it sought to investigate the day-to-day realities of those in academic and 'learning enhancement' roles, their motivations and careers, and their staff development needs in relation to promotion, career

progression and the balance of teaching, learning support, research and other responsibilities.

The report extended the analysis of the HESA data included in Publication 2, revealing a number of interesting developments in 2013/14, the final year before the 2014 REF:

- the total number of academic staff in the UK grew between 2012/13 and 2013/14 by 8,655 or nearly 4.5%; a huge jump compared with previous years, especially given the continuing economic crisis and reduction of direct government funding for higher education;
- this increase was made up of an additional 5,780 staff on teaching-only contracts and 3,230 academics on research-only contracts. In 2013/14, 27% of all academics and 36% of those who taught were on teaching-only contracts. Those on teaching and research contracts actually declined and, for the first time, represented a minority (48.6%) of the academic population. The report also explored how these and other trends varied by institutional type.

The main part of the research study, however, was largely qualitative, and was based on eight case studies of universities across the UK, consisting of individual interviews with up to eight staff from each institution in a variety of roles. From the analysis of the interviews and case studies, we drew out a number of common themes, shared challenges and potential solutions, as follows:

- The parameters of academic work appeared to be changing, with the growing separation of teaching and research and increasing specialisation. Interviewees talked of the 'hidden time' spent on research and ancillary teaching activities that were not recognised by workload allocation processes. What counted as academic work was changing and national policy developments and institutional strategies were shifting the emphasis and re-ordering priorities.
- We found a multiplicity of career trajectories and routes into academia, and a perception of a lengthening of the time it takes to establish oneself in academia. Increasingly, early career academics were having to take a series of full-time fixed-term or multiple part-time contracts. Some interviewees had changed from

their original discipline of study to another, or moved into interdisciplinary work, and several had entered academia mid-career from another profession. Most found academic work intrinsically rewarding, but experienced differential opportunities for career progression depending on their role and contractual status. Many described 'hidden' rules and practices, and reported variation between HEIs with regard to how easy it was to move between roles and contract types. Some confusion was expressed about new career pathways in 'teaching and scholarship'.

- There was a widespread expression of the need to recover time and psychological space for personal reflection and development. Most interviewees reported increasing workloads and academic work becoming all-pervasive, especially with remote working blurring the boundary between work and other aspects of life. Many reported a lack of time for involvement in continuing professional development, especially those who were in part-time roles and on research-only contracts. Several interviewees emphasised the value of 'thinking time' and more individualised forms of professional development.
- Respondents also noted the diversity of those in academic work and, therefore, the need for targeted development and support, tailored to individual needs rather than driven by bureaucratic institutional requirements. Many acknowledged the need to be proactive in progressing their own careers, the importance of local mentors and the key role of line managers. They sought more opportunities to reflect on their own practice.

We concluded that, for these and other reasons, we should no longer think of an academic career as a linear progression or as having a common trajectory or, perhaps, continue to regard 'academic' as referring to a single, homogenous profession. In that sense, and in common with other professions, there may be less singularity to academic careers than has been assumed in the past. Furthermore, several interviewees felt that mapping out a career too closely in advance was neither feasible nor desirable, as they needed to be able to take advantage of the opportunities that came along. Likewise, all academics, and particularly those in the early stages of their career, needed to attend to their own employability as well as their students'. Those who were active in addressing their own career needs, with the energy and desire to do this over a sustained period, would be better able to achieve the extent of career progression they anticipated. We argued that

institutions, managers within them, and agencies such as HEFCE, UUK and the HEA may need, therefore, to make greater allowance for the different timescales involved in developing a career, be more permissive of a variation of activity at different stages, and take this into account in provisions for promotion, progression and development. This would be one element of adjusting the 'fit' between individuals, what is available in practice, and the 'lived reality' of working in higher education. The academic career landscape may have shifted, such that some of the data categories and definitions used by HESA no longer sufficiently reflect institutional and individual realities and could become increasingly misleading rather than informative.

The differentiation and diversity of roles, careers, starting points and trajectories, together with the demands for more individualised, personalised, and contextualised professional development opportunities, indicated to us a need to reconsider what is meant by initial and continuing professional development for academic and learning enhancement staff. At present, there seems to be a gap – maybe in some cases a gulf – between what appears to be for the university's benefit (such as formal, standardised training for largely operational purposes) and what might be seen as more beneficial for the individual academic and learning enhancement professional, both in the provision of staff development and in the mechanisms for reward and recognition. In achieving a better balance between these sets of needs, we might begin to think of more *collective* approaches to both professional development and the development of the profession. That is, approaches which build on evidence-based and more accurate understanding of the actual experiences, needs and concerns of individuals as well as the organisation's need for development. There is a significant role here, we felt, for some experienced academics, as developers, mentors and coaches, as well as heads of department, middle managers and line managers, especially in relatively devolved organisational structures, despite the challenge of finding the time to do this. These senior staff will also need to be carefully selected, prepared, trained and supported in this developmental role, but they can play a significant part in interpreting and implementing institutional policies and in helping early career academics to navigate through a university's structures and to think strategically about their career and professional needs. Through these more collective approaches to development, the profession might then be in a position to rethink its ideas about the skills, knowledge and other qualities required of academics in their various guises, and in a rapidly changing environment, in ways

that ensure consistency of delivery and quality, but which are not overly prescriptive and are flexible enough to accommodate individual needs.

2.4 Originality and recent and active contribution to knowledge in the field

In this sub-section, I summarise my contribution to the study of the academic profession, work and careers in six main areas of investigation, analysis and interpretation. These focus on the diversification and stratification of higher education institutions and those who work in them. In particular, the three publications explore the relationships between research and teaching and the increasing predominance of the former over the latter in the reputations of HEIs and the career opportunities for individual academics in various roles and at different career stages. The new, hierarchical, divisions of labour, I argue, are reducing opportunities and threatening the sustainability of the profession itself, such that it is in need of reinvigoration and renewal.

The separation of the core functions of universities

From the outset of my investigations into the academic profession, I felt it was important to locate these in the specific and developing policy, funding and operational contexts in order to fully understand how it was changing. Publication 1 (Locke 2012), for example, set out the key developments in the relations between teaching and research since the 1963 Robbins Report in order to emphasise that the separation of these core HE functions was not inevitable, but the result of a series of policy and funding decisions at national, institutional and discipline levels. Elsewhere, I have explored how HE policy-making in the UK has seldom been a rational and linear process, but subject to chance, coincidence and unintended consequences (Locke 2008a). In particular, in Publication 1, I argued that the separation of the ways in which the quality of teaching and of research were assessed and funded has had significant consequences for the academic profession. It had generated an operating environment in which the following developments could take root:

- the predominance of research over teaching in the reputation of universities and the career prospects of academics;
- the differentiation of teaching-only and research-only academic contracts, roles and career pathways, especially from those in conventional academic posts who are expected to undertake the full range of academic activities; and
- the elevation of teaching-only institutions, including private colleges, to the status of universities.

Since this list was drawn up, the outcomes of the 2014 REF have become known and plans have emerged in England to introduce a Teaching Excellence Framework that will allow the successful HEIs to increase full-time undergraduate tuition fees. This introduces a new financial incentive that, over time as the increases are compounded, could deepen the separation of teaching and research. Furthermore, there are barely any substantive suggestions in either the recent review of the Research Excellence Framework (Stern, 2016) or the Teaching Excellence Framework proposals (BIS, 2016; DfE, 2016) to recognise or reward HEIs that are building synergies between teaching and research. Indeed, it is likely that the increased use of metrics, in both these frameworks and more generally, will have the effect of hindering these efforts.

How this further separation of teaching and research is affecting academic practice and roles is only just emerging, and whether it is resulting in a significant realignment of academic work, careers and 'the profession' will require continuing empirical investigation. I highlighted (Locke *et al*, 2016: *Publication 3*) how the national data revealed that those expected to both teach and research were now in the minority in the UK (49%), with those on teaching-only (26%), research (24%) and neither (i.e. management) (1%) constituting the majority for the first time in 2013/14 (HESA 2015). The most recent data (HESA, 2017) do not suggest this trend is reversing, and current developments (financial accountability, increased competition/reduced collaboration, rankings, REF/TEF, internationalisation and academic labour markets) are likely to accelerate it. My planned and potential future research studies will seek to evaluate and conclude on the implications of these developments for the stratification of higher education in the UK (see Section 6).

The disaggregation of the core elements of academic work

Building on this analysis of the separation of the principal academic functions, it was possible to elicit further disaggregation of each of the core activities into specialist roles and their implications for career progression. My investigations revealed that the responsibilities of academics could range from solely teaching to also assessing students, leading courses and designing the curriculum, or from basic research to also analysing data, managing projects and preparing research proposals. Most HEIs now have dedicated offices for gathering and disseminating intelligence about

sources of research funding and giving advice on preparing proposals. Many institutions have instigated policies for maximising proposal success rates by managing demand and, in particular, reviewing and selecting for submission those bids most likely to be successful. The growing use of educational technologies and managed learning environments appears to have transformed teaching into a series of processes for 'facilitating learning', increasingly undertaken by multi-skilled teams of specialists in, for example, subject content, instructional methods, learning technologies, assessment strategies and learning analytics. These teams would often include 'para-academics', or professionals specialising in an aspect of the academic role who were not on academic contracts. The changes in roles had been accompanied by shifts of emphasis in academic work, and a greater focus on the immediate enhancement of 'the student experience', innovation in pedagogy, knowledge exchange, research impact and the development of institutional policies on these matters. However, in Publication 3., we also found that key institutional processes, such as workload allocation mechanisms, performance management, recruitment and promotion criteria and practices, were lagging behind in recognising and rewarding these new roles and priorities.

The diversification and segmentation of the academic profession

In contrast to the dominant perspectives found in much of the research literature, these shifts in roles, values, perspectives and expectations, I argued, were unlikely to be evident in a discourse predominantly of loss, alienation and retreat that harks back to a 'golden age' of academic governance by a community of equals, even if this is an inaccurate representation of a hierarchical and exclusive past (Tapper and Salter, 1992; Ylijoki, 2005). New concepts and theories were needed that acknowledge the differentiation within the academic profession and recognise a range of perspectives on the changing power relations, management structures and governance arrangements in particular types of higher education institution. New approaches needed to recognise that there are those who are being marginalised by these developments (Marginson, 2000), some who make compromises in order to reconcile their preconceptions of academia with their experiences of working in a corporatised university (Churchman, 2006) and others who internalise a managerialist ideology for their own career advancement (Deem and Brehony, 2005). Indeed, academic values and identities are becoming an increasingly contested area which managers and decision-makers need to understand and address in crafting a vision for their institution (Winter, 2009). In particular, there are

generational differences emerging, with early career academics experiencing rather changed conditions, and adopting different perspectives, to their more established senior colleagues (McAlpine, L. & Åkerlind, G. (eds) 2010; Bagilhole, B. & White, K. (eds) 2013; Teichler, U. & Cummings, W.K. (eds) 2015; Yudkevitch, M., Altbach, P.G. & Rumbley, L.E. (eds), 2015).

The diversification and segmentation of academic staff raises the issue of whether we can any longer speak of a single profession in the UK (Fulton, 1996b; Williams, 2008; Shattock, 2014), as well as the increasing differentiation of UK higher education institutions calling into question the existence of a homogeneous higher education system. These characteristics make the generalised analysis of 'academia' in such institutions problematic, and more nuanced, differentiated approaches essential.

The growth of teaching-only contracts and teaching-focused roles

A significant aspect of the diversification and differentiation of academic roles in UK higher education is the growth in the number and proportion of academics on teaching-only contracts. My analysis of the national data for *Publication 3* (Locke *et al*, 2016) revealed unusually large increases in 2013/14 from the previous year in staff on both teaching-only and research-only contracts. This was the year of the submissions to the 2014 REF, and it is plausible that institutions had reduced the number of their academic staff who would be eligible for submission to the REF by transferring them to non-research positions in order to increase the institution's research intensity rankings. Moreover, although the vast majority (76%) of teaching-only staff are on part-time contracts, I calculated there had been a dramatic increase in the number of staff on *full-time* teaching-only contracts after 2010/11. This suggested that a significant number of those excluded from submission in the period covered by the 2014 REF (2008-14) had been full-time academics previously expected to undertake research as well as teaching, but now regarded as no longer 'research active'. These shifts are significant – for the academic profession, as well as for the individuals concerned – because those on teaching-only (and research-only) contracts are lower paid and more likely to be young, relatively new to the profession and female.

Furthermore, I analysed these data by institutional type (Russell Group, other pre-1992 universities and all other HEIs). My 2014 report (*Publication 2*) had revealed a

much higher proportion of teaching-only staff in *some* 'other pre-1992 universities'. Our 2016 report identified substantial increases in this category in 2013/14 in Russell Group and 'all other HEIs'. Moreover, while the overall proportion of those on teaching and research contracts had declined, these had increased in pre-1992 universities and, particularly, in Russell Group universities. So, clearly, it is important to take account of institutional differences – and institutional strategies – in evaluating the significance of these data. These findings were confirmed by the qualitative element of the study, based on eight institutional case studies from across the UK which were broadly representative of the main types of HEI. In particular, the interviews with academics revealed that, in addition to those employed on teaching-only contracts, there was a significant – and, possibly, growing – number of those on teaching and research contracts being directed by their line managers to conduct less or no research (or receiving less or no funding or time allocation for research), and so effectively undertaking teaching-only *roles*, despite their contractual status. This signalled the need for more sophisticated national data collection strategies that are sensitive to the increasing differentiation between and within higher education institutions.

The significance of career stages and trajectories

Both the analysis of HESA data and the case study interviews underlined the importance of understanding academic *career stages* and *trajectories*, or the multiplicity of routes into and through (and sometimes out of) academia that individuals may take. In the CAP study, I had analysed and interpreted the differences of perspective of those survey respondents in the UK, Australia and Canada who were young, those who were mature and had entered academia from another profession within the previous ten years, and those who were older and established in their academic careers. In particular, young academics seemed to be more satisfied and less dissatisfied than those over 40 years old (Locke & Bennion, 2013). I found that the UK was unusual among these English-speaking countries in the variation in levels of satisfaction between academics in different career stages and trajectories. These, and other variations, may have arisen from differences of expectation, focus and aspiration and in levels of understanding of the demands of an academic career (Henkel, 2000). Academics at different stages with distinct career trajectories may have been attracted by different aspects of the profession, and they certainly experienced dissimilar levels of job security. Our later HEA-funded research found that only a minority of interviewees had pursued the

traditional PhD and postdoctoral path into academia and they reported differential opportunities for career progression according to their variance from the traditional path (Locke *et al*, 2016, *Publication 3*). These dynamics of change are difficult to investigate through 'snap shot' surveys such as the CAP study and annual census points, and imply a more longitudinal approach to research design.

Reinvigorating and renewing the profession

The findings from my selected publications and the many other outputs from the studies underline the need to consider academics as a heterogeneous collection of groupings structured by a series of interrelated characteristics. They begin to illuminate our understanding of the variegated attractiveness of the profession to a range of groups; different individuals' motivations, expectations and ambitions; the implications for institutional management; and the prospects of recruiting the next generation of academics and academic managers. Because much of the existing literature ignores this differentiation between academics, this detracts from our understanding of the ways in which changes are taking place throughout the profession. Analyses by career stage and trajectory need to be complemented by an understanding of the differences between institution size, type and mission, the terms and conditions of employment, discipline or field of study, grade, gender and ethnicity. Together, these perspectives offer a more complete picture of these complex changes and different academics' responses to these.

This differentiated approach, I maintained, can inform research, policy and practice in an effort to reinvigorate and renew the academic profession (Locke, 2014b, *Publication 2*). In particular, it would enable us to:

- rethink academic work and career pathways to introduce greater flexibility and the freedom of individuals to choose, and vary, their profiles of activities. Rather than devising inflexible career 'tracks' (the teaching track, the research track, the academic track) with restricted transfer between them and parity only at the junior levels, truly flexible pathways would allow the core activities to be combined or separated as the situations or roles benefit.
- achieve greater parity in the reward and recognition of academic work, including teaching, and opportunities for professional learning and career development. It

would help to address more effectively than previous initiatives, the current inequities in earning capacity, promotion prospects, job security and professional autonomy among early and mid-career academics depending, for example, on their conditions of employment, role and discipline.

- enhance professionalism which emerges collectively from academics themselves. Rather than referring to the ‘professionalisation’ of higher education, with its connotations of imposition from the outside and/or above, and given the importance of intrinsic motivations to academic work, it would seem more constructive to speak of a more democratic form of ‘professionalism’ that emerges from within the academic community. It would provide the necessary space for collective self-determination that involves a creative and more collaborative and inclusive rethinking of core values, such as academic autonomy.

3. The influence of rankings on higher education institutions

The second area of the study of higher education I have selected is the influence of rankings on higher education institutions. The following sub-section seeks to situate my research within the burgeoning literature on rankings in higher education.

3.1 Situating the research in the relevant literature

The influence of rankings on higher education has largely been studied at the level of national and international policies on education (Marginson & van der Wende, 2006; 2007; Marginson, 2007; 2009) and regulation, and in the context of national higher education systems (Wedlin, 2006; Locke *et al.*, 2008; Locke, 2008a; IHEP, 2009; Teichler, 2011), rather than at the institutional level and on the governance and management of individual HEIs. Reference is often made to national governments' desire to foster 'world class' research-intensive universities as a source of comparative economic and status advantage (King, 2009; Shattock, 2017). Some scholars note an 'emerging global model' of the research university has been developed to characterise the kind of institution that appears at the top of the world rankings (Mohrman *et al.*, 2008; Altbach & Salmi (eds), 2011). The German *Exzellenzinitiative* (2007-17) (Kehm, 2013; Münch, 2014) is a key example identified in the literature of the influence of the global rankings on the thinking of national governments. The shift from egalitarianism to competition between HEIs this represents (IHEP, 2009) is leading, it is argued, to the concentration of resources and reputation in a few elite institutions, the undermining of meritocracy and an increasing vertical stratification of higher education systems (Teichler, 2008). Rankings themselves are becoming instruments of national and institutional policy-making (Salmi & Saroyan, 2007; Hazelkorn, 2009, 2015; Shin & Teichler (eds), 2014)). In Japan, for example, higher ranked universities have received more attention from the central government (as distinct from the Ministry), including the allocation of funds (IHEP, 2009). There is also evidence from the U.S. of rankings influencing the allocation of research and development funding from government (Bastedo and Bowman, 2011). Their use as indicators of performance lends themselves to institutional benchmarking by senior managers and determining internal resource allocation.

The few investigations of the influence of rankings on individual higher education institutions have tended to focus at the level of the whole institution (Locke *et al.*, 2008; Cyrenne & Grant 2009), often from the perspectives of senior managers (Hazelkorn, 2007; 2008; 2009; 2015; Morphey & Swanson, 2011), or of specific disciplines and specialist schools (Elsbach & Kramer, 1996; Walpole, 1998; Martins, 2005; Sauder & Lancaster, 2006; Wedlin, 2006; Espeland & Sauder, 2007; 2016; Sauder & Espeland, 2009). These studies tend not to distinguish between types of institution – e.g. teaching-focused, research-intensive – (except, perhaps, by broad ranking position) and the different levels of financial and human resources these HEIs can draw on to resist external pressures (and exploit competitive opportunities) such as rankings, and do not explain different responses or chart over time the evolving effects of these influences. It is not entirely a coincidence that rankings themselves emphasise the level of the whole institution rather than the discipline or department, tend not to distinguish between different types of institution (except in broad terms) and the resources they can draw on, and do not track institutions' performance over several years, preferring a 'snapshot', approach to evaluation and producing only fixed annual lists compared only with the previous year's ranking. The deficit model they apply to the HEIs they rank – in seeking to quantify their inferiority to the 'top' ranked university – also encourages isomorphism among HEIs, undermines diversity and promotes an ossified model of the ideal, 'elite' or 'world class' university (Little & Locke, 2011).

Perhaps we should not be surprised that these earlier analyses of the influence of rankings mirror the main features of ranking systems themselves. However, it is the differential responses to rankings of distinct types of institution and the different parts of an institution, the relations between internal units and university-wide management, and the activities within institutions – together with the unfolding of these responses over time – that have yet to be explored empirically to any great extent and in any detail (Locke, 2011b). In the burgeoning literature on rankings, this is where I believe I have made a contribution to a more subtle and nuanced understanding of how rankings influence HEIs, particularly in the way they reinforce and modify (and are reinforced and modified by) marketisation – or the application of the economic theory of the market to higher education (Williams, 1995) – increased competition between HEIs and government exhortations to them to be more responsive to 'customers' (particularly students and graduate employers), improve quality, and become world class (Hazelkorn, 2009). In particular, rankings feed on governments' efforts to improve public accountability and institutional

performance by means of published indicators of teaching and research quality, student satisfaction and graduate employment, for example. Indeed, they draw on many of these published indicators in their compilation and, by doing so, add impetus to these forms of NPM (Ferlie *et al*, 2008).

However, my research (Locke *et al*, 2008) also suggests that league tables in England have also produced perverse changes in institutions' academic priorities that may simultaneously contradict government and institutional policies, for example, on (i) widening access to disadvantaged students who have not had the opportunity to achieve high qualifications, (ii) promoting greater diversity among institutions' missions, and (iii) maximising the socio-economic impacts of research. Some of those institutions ranked lower than expected, for example, are having to develop survival strategies to bolster demand in key overseas markets damaged by league tables, revive their internal morale and public confidence, and spend more on marketing and publicity to restore their image (Hazelkorn, 2008). Many of these actions can be traced directly to the impact of lower than expected (or desired) positions in the league tables (Locke *et al.*, 2008). But they may often be short-term, and even potentially self-damaging, reactions to a sudden fall in a particular ranking (Gioia & Corley 2002; Martins, 2005).

A number of studies claim that rankings exert pressure to 'conform and perform' to their criteria (Gioia & Corley, 2002) because institutions perceive their key stakeholders are, themselves, influenced by them. Despite the relative paucity of evidence of this influence, institutions assume that high achieving undergraduate and graduate applicants, graduate employers, talented researchers, research funders, potential partners, foreign scholarship awarding bodies, government agencies and donors are swayed by the rankings (Locke *et al.*, 2008). They anticipate the impact this might have on their access to resources (Martins, 2005). This reaction to rankings illustrates the preparedness of universities to compete if market conditions are introduced (IHEP, 2009) and the extension and embedding of market logic in HEIs (Sauder & Espeland, 2009). Rankings are also being used as marketing tools (Grewal *et al.*, 2008) and for image management (Gioia & Corley, 2002).

In this way, it is argued, rankings serve to reinforce the effects of broader, market-based and competitive forces in higher education (Clarke, 2007) and are ratcheting up the level of competition between institutions. In federal systems, they even

accelerate competition between states, provinces or länder (IHEP, 2009). Ranking systems are helping to transform higher education institutions into strategic corporations, engaged in positional competition to close the gap between their current and preferred rank (Hazelkorn, 2009). In conjunction with NPM reforms, they encourage institutions to become more business-like and respond to their 'customers' promptly. They lead to "increased 'managerialism' and greater institutional control of the activities of staff and units; increased internal differentiation; and reduced control of the 'academic agenda'" (Brown (ed), 2011: 36). It is no coincidence that rankings have proliferated (and have been least contested) in the most marketised higher education environments, such as North America, Japan, Malaysia, the UK and Australia. The influence of market behaviour explains the failure of collective and enduring resistance to rankings by higher education institutions in these territories.

My research draws on many aspects of this literature, but seeks to investigate the perspectives of individual HEIs and their organisational members on rankings, their internal influence, the intra-organisational reverberations that contribute to this, and the organisation's response to them as it evolves over time.

3.2 The programme of research

The 2008 HEFCE project on league tables and their impact on higher education institutions found that universities and colleges in England were strongly influenced by rankings in both their strategic decision-making and more routine management processes. Interviews with personnel in the case study institutions reported increasing reference to the rankings by prospective students and their families, and by academics seeking job opportunities. Yet, analysis of three UK national league tables and two world rankings confirmed they largely reflected institutional reputation and resources rather than the quality or performance of institutions.

Two years after the HEFCE report, I returned to the empirical findings from the research and, in particular, from the case studies and survey findings, to re-analyse these for a book chapter (Locke, 2011b). The aim of the chapter was to develop a conceptual framework, drawing on the work of a number of American scholars (e.g. Espeland and Sauder, 2007), in order to understand the ways in which English HEIs and their members (i.e. staff, students and members of governing bodies) *internalise* the logic of ranking systems such that their influence becomes *institutionalised* in organisational processes and structures. This re-analysis sought to place these developments in the context of growing competition (for example, for students and research funding) in higher education in England, and to understand the responses of institutions to rankings as ways of managing status anxiety in an increasingly marketised operating environment. Having been asked to re-present this analysis for a special journal issue on rankings, I developed the conceptual framework further to account for the emergence of new and increasingly sophisticated online tools for comparing indicators of institutional ‘performance’ (Locke, 2014a: *Publication 4*).

On the basis of this research, I participated in an international study of the influence of global rankings on ‘second tier’ institutions, undertaking further research in the form of a case study of a UK university. This study resulted in a book (Yudkevich *et al*, eds, 2016) to which I contributed a chapter, which investigated the case of a pre-1992 university outside the Russell Group of research-intensive universities, which was seeking to internationalise and increase its visibility on what it perceived as ‘the global stage’ (Locke, 2016a: *Publication 5*). This chapter was published alongside institutional case studies from ten other countries.

3.3 Summaries of two selected publications and key findings

Publication 4:

Locke, W. (2014a) 'The Intensification of Rankings Logic in an Increasingly Marketised Higher Education Environment', *European Journal of Education*, Volume 49, Number 1, 77-90.

In this paper, I argued that it was important to understand the influence of rankings in the UK in the context of the increasing marketisation of higher education, and in particular in England. It was the phenomena of growing privatisation of tuition and intensifying competition over students and funding, I claimed, that had transformed rankings from 'easy guides' to the strengths and weaknesses of individual universities into powerful tools for monitoring and influencing their organisational behaviour and that of their staff and students. I maintained that these broader and more significant forces had made it almost impossible for universities to simply ignore rankings and virtually inevitable that they would have to accommodate them in some way.

Through re-analysis of the interview transcripts of the six case studies and the survey responses from the original HEFCE study (2007/08), I explored the forms in which this accommodation could take and, specifically, the ways in which the rationales and processes – the 'logic' – of ranking systems were being *internalised* by people working in HEIs and, ultimately, *institutionalised* by individual universities in different ranking positions and at different stages of accommodation. By this means, I aimed to explore how this 'logic' became embedded in organisational structures and procedures and established as the norm. I also hoped to shed light on the variable responses of different types of institution, the different parts within an institution and, in particular, the dynamics between central university management and the various academic and support units. Finally, I aimed to show how these responses unfolded over time, for example, from initial scepticism and resistance, to reluctant acceptance and, ultimately, active engagement with rankings systems. These phenomena could only be explored empirically, I argued, and this was (and still is) largely missing from the literature on rankings.

However, I also wanted to provide a theoretical and conceptual framework to underpin the analysis, which might be applied and tested in further research studies. Drawing on Espeland and Sauder's (2007 and, subsequently, 2016; see

also Sauder & Espeland, 2009) concept of reactivity, and the two mechanisms they argue induce this – “the self-fulfilling prophecy” and “commensuration” – I re-analysed the evidence gathered for the HEFCE study, in particular the case studies. This revealed six main ways in which different types of higher education institution, and distinct levels and parts of institutions, are affected by, react to, and use rankings in various ways.

These were:

1. Strategic positioning and decision making: The use of rankings in the strategic positioning of institutions, in branding and promoting themselves, and in making decisions about strategic goals;
2. Redefining activities and altering perceptions: How rankings can redefine activities, as institutional personnel focus on the indicators and measures used in rankings rather than the qualities they are designed to evaluate, privileging certain characteristics above others;
3. Evolving responses: How responses to rankings evolve, for example, from initial dissonance and the invoking of alternative evaluations, to attempts to understand and explain unexpected results, to efforts to produce desired ranking outcomes, and the exploitation of ranking successes in institutional promotion activities;
4. Affective responses: The influence of ranking results in the affective domain, including the impact on staff morale in institutions (and departments) ranked in different parts of the national tables, and anxiety about what other institutions are doing to improve their ranking positions;
5. Self-management: The use of rankings logics to lever internal change, for example, tightening reporting procedures, rendering academic units accountable, and promoting competition between departments; and
6. Degrees of control — resisting, managing, exploiting, and ‘gaming’ rankings: Attempts to manage the influence of rankings, including negotiations with compilers and efforts to mitigate conflicts between ranking logics and the social missions of institutions.

This re-analysis of the qualitative data from the HEFCE study offered substantial evidence of how diverse HEIs were, in varying ways – and at different stages of – being influenced by, and using, rankings. These varied according to the institutions’ histories, reputation, resources, ranking positions and the markets in which they operated. In particular, they were differentiated by the ways in which they mitigated the negative impacts of rankings and maximised the potential benefits. Highly ranked universities sought to protect their reputations and increase the worldwide recognition of their brands, while lower ranked institutions were often just ‘waking up’ to the importance of rankings, seeking to understand how they were compiled and how to emulate their peers. In each case, though, rankings had exerted a major influence on institutional behaviour, but their responses had also evolved, increasing in sophistication and adapting to changes in the emphases and methodologies of the rankings.

In this 2014 article, I noted major developments since the 2008 study in rankings and the use of metrics to evaluate institutional performance. These included the extension of UK data collections (e.g. to include contact hours and the teaching qualifications of academic staff) and the development of increasingly sophisticated web-based facilities that allowed prospective students to compare data about HE courses and the institutions offering them. The significant features of these developments included the following:

- they were being developed, evaluated and refined in consultation with HEIs and potential users;
- new indicators to measure university ‘performance’ (for example, in teaching, learning and assessment) were being defined that often required HEIs to gather and submit new data to national bodies such as HESA;
- a wider range of university activities was being reported on, for example, university-business collaboration and the impact of research;
- online tools that allowed users to select performance indicators and the weightings applied to each;
- greater ‘granularity’ in the data, such as information on specific courses rather than at the subject level.

I argued that these developments represented an *intensification* of rankings ‘logic’ and its internalisation and institutionalisation by institutions. They did this by

engaging a number of HEI staff directly in their development, through consultation processes, expert working groups, and in the gathering, analysing and submitting of data to the national bodies. Other staff were also tasked with the responsibility for assessing how their university would appear on the new web sites and what it would need to do to improve its performance in the following year. Often individuals would be seconded to these roles, or recruited from other HEIs that had improved their performance in the rankings. Internal processes, monitoring and management information systems would be aligned more closely with the 'logic' of the online tools. However, I concluded, further empirical research would be necessary to establish the degree to which this intensification was influencing the strategic decision-making of HEIs.

I also argued that, in a highly regulated higher education market such as England – where tuition fees and student numbers were then still capped, and the entry of private providers was tightly controlled – rankings had become a proxy for more genuine market mechanisms. They had helped embed a market-like 'logic' in institutions, increased competition within and between them and contributed to the commodification of higher education. However, while they may have modified the enduring reputational hierarchy of institutions in the UK, they had not disrupted it. This is because the resources at the disposal of higher and lower placed HEIs to maintain and improve their rankings are very unequal. Also, by tending to confirm the existing reputational hierarchy of institutions, they had deepened institutional inequalities.

I concluded that: “the empirical evidence and analysis presented in the paper clearly indicated the need to go beyond the investigation of the ‘impacts’ of rankings on higher education institutions and develop an understanding of how institutions start – and continue – to engage with processes of marketisation, as a way of surviving, prospering and managing status anxiety in changing and challenging environments, and how this is made possible and modified by ranking systems.” (Locke, 2014a: 89)

Publication 5:

Locke, W. (2016) ““There is a World out There We Can Step Into”: The University of Reading (UK) and the World Rankings’, in Yudkevich, M., Altbach,

P.G. and Rumbley, L.E. (eds) *The Global Academic Rankings Game: Changing Institutional Policy, Practice, and Academic Life*, New York: Routledge: 222-245.

This chapter investigated the influence of global rankings on – and their use by – a small research-intensive English university outside the top-ranked Russell Group of large research universities in the UK. It explored the ways in which key University personnel negotiated the use of such rankings for internal and external strategic purpose, attempting to avoid their distorting effects while recognising their increasing influence in orchestrating global and domestic reputation. The study was undertaken at a particular moment in the University of Reading's history, when a new leadership and strategy were aiming to extend the institution's global reach and recognition just at the moment when it dropped out of the top 200 in the *Times Higher Education World University Rankings*. One aim of the chapter was to investigate whether the six categories outlined in *Publication 4* (and above) still held their explanatory power seven years after the original study, and in the particular context of the world rankings and a university seeking to become a global player, and whether new ways of responding would be observable.

The chapter included a brief description of the UK higher education system at the time of the study (2014) and how universities within it were responding to the growing influence of world rankings. Subsequent sections described the methodology of the study and the theoretical and conceptual framework for the analysis of the evidence gathered, based on the six categories. The core of the chapter was a case study of the University of Reading, utilising interviews and focus groups, observation and documentary analysis. After providing key information about the University, the current narratives of the institution were explored, drawing on the accounts that personnel and documents gave of the University in the context of rankings and other related developments. A further section analysed the influence and use of rankings in the University, utilising and testing the theoretical and conceptual framework developed in the previous study.

In analysing this case study, I found that my original theoretical and conceptual approach continued to provide an effective framework for the analysis of the narratives and accounts of the participants, the documentary evidence, and the observations included in this case study. There were examples of the University responding to, engaging with, and using rankings in each of the six ways originally identified. As the rankings evolved and proliferated, it was clear that the University

was taking an increasingly informed and proactive approach to them. Whether this was identifying citations or academic reputation as priority areas for action, or becoming more sophisticated in benchmarking performance with other universities ranked similarly, there was a more 'knowing' approach than was exhibited by most of the case study institutions in the original 2007 study. However, I suggested that further investigation would be necessary to determine the extent to which this was reproduced throughout the institution or if it was largely concentrated among senior management.

Finally, the implications of the findings were discussed and concluding comments made about the likely impacts of world rankings on medium-sized research-intensive universities in the United Kingdom, and England in particular, as they seek to extend their global visibility and reach. In concluding the chapter, I suggested that the case of the University of Reading may be an example of a more widespread dilemma for many mid-ranking UK universities that are increasingly likely to be supplanted in the higher echelons of the global rankings by institutions from emerging systems, such as the Asia-Pacific region. If such universities are to increase their international activities, however, including supporting the development of other nations' higher education systems, I asked whether and how they can manage the growing pressure to maintain – or improve – their reputations in the global rankings, given the increasing impact on the University's 'bottom-line'.

3.4 Originality and recent and active contribution to knowledge in the field

In this sub-section, I outline my contribution to the study of the influence of rankings on higher education institutions. In particular, I have sought: (i) to place my analysis in a specific policy, funding and regulatory context (England); (ii) to focus on organisational perspectives and how the influence is realised differentially within particular higher education institutions, (iii) to regard institutions as active agents in this process; and (iv) to acknowledge the evolution of this process over time.

The interaction between rankings and marketisation

My research on rankings is part of a larger effort to investigate how higher education institutions as organisations are responding to increased marketisation and market regulation, and how these influence intra-institutional relations, organisational cultures and management styles (Locke & Botas, 2009; Locke, 2011c). Because the quality of education is so difficult to define and measure, however, marketisation in HE tends to be articulated through positional competition and reputational stratification (Teixeira *et al* eds, 2004; Brown (ed), 2011; Marginson, 2013). A higher education institution's reputation is based on how attractive it is, and therefore how selective it can be, with regard to students, academic and other professional staff, research funders and partnerships (Locke, 2011c). As higher education becomes increasingly subject to marketisation, reputation becomes critical because it is regarded by universities, employers, government and the best qualified and most mobile students as ultimately more important than quality. However, the diversion of resources towards activities that enhance institutional reputation may actually detract from the quality and performance of educational activities that are likely to be of most interest to potential students and their families. Expenditure on extensive marketing campaigns, impressive new buildings and facilities and attracting international research 'stars' are thought to be a signal of "high quality" and therefore likely to increase shares in the markets for students, consultancy services, and research funds, for example. But this may mean that less money is spent on supporting students' learning, improving educational resources, and the professional development of younger academic staff (Locke, 2011c).

The interaction between rankings and marketisation helps to explain why compilers and publishers have been surprised by the influence of their rankings: market

mechanisms and responses to these have transformed their (not entirely innocent) attempts to provide simple and 'user friendly' guides to the higher education landscape for prospective students and their families into vehicles for auditing and producing changes in institutional performance (Locke, 2011b). For commercial reasons, compilers of rankings have also tended to incorporate existing performance indicators originally developed for other, usually regulatory, purposes (e.g. for accountability, quality assessment and research evaluation), such as the results of student surveys, graduate destination data and research metrics (Locke *et al*, 2008). In doing so, they have strengthened and extended the influence of these individual indicators to become reputational manifestations and not just regulatory mechanisms. These developments also help to explain why attempts by higher education institutions themselves to boycott rankings have largely failed: rankings are linked with larger and more far-reaching changes in economies and society that cannot simply be rejected, and they appear to have to be, at least in part, accommodated, even where they are resisted in principle.

Organisational and sub-organisational perspectives

Situating the study of rankings and their influence in the context of marketisation and market regulation highlights the organisational and sub-organisational perspectives (Peterson, 2007). This is distinctive from the largely global and national policy perspectives that have dominated investigations of the impact of rankings on higher education to date (e.g. Kehm & Stensaker (eds), 2009; Shin, Toutkoushian & Teichler (eds), 2011; Hazelkorn, 2015). Markets are not homogenous, but differentiated, and HEIs operate in different markets and in different parts of a market, whether this is for domestic or international students, staff, research funding or partnerships, for example. The effects of marketisation on the internal operations of HE institutions – closely associated with privatisation, reduced government funding and increased regulation – have been well-documented (for example, Brown (ed), 2011; Brown with Carasso, 2013; John & Fanghanel (eds), 2016). Those taking a policy perspective on the impact and influence of rankings on HEIs (e.g. Hazelkorn, 2015) have tended to base their findings on surveys of institutional leaders and follow-up interviews with senior managers and stakeholders from different locations, and so have largely focused at the level of the whole institution and strategic responses, rather than the interplay within and between different institutional levels and parts, which requires a different research design to investigate.

An institutional case study approach to exploring the influence of rankings within organisations, however, enables us to understand more clearly the diversity and differentiation of HEIs' responses to them, how these interact with other internal and external forces and drivers, and how a range of organisational members (academics, professional staff and students, as well as senior managers and governors) actively engage with their effects at a particular point or over a defined period of time. The original HEFCE research included six case studies of different types of HEI, differentiated according to whether they were a pre- or post-1992 university (the former including members of the Russell Group and the, then, 1994 Group; the latter including mid- and low-ranked former polytechnics), a specialist university and a university college. However, this is only one means of categorising HEIs, and other approaches are, of course, possible. Theonig and Paradeise (2016), for example, used the two axes of reputation and excellence, and the degree to which HEIs pay attention to these, in devising a typology of HEIs based on the importance they attach to status-related dimensions of quality. They generated four ideal types from this: 'the top of the pile', 'the wannabes', 'the venerables' and 'the missionaries'. Within this typology, 'the wannabes' include those universities that have attained a genuine local or national reputation but are less visible on the radars of international rankings. The CIHE/HSE international study of the influence of world rankings on 'second tier' institutions (resulting in *Publication 5*) took a similar approach to identifying HEIs as case studies, in effect, selecting them according to their mid-ranking status and strategic intention to improve their visibility and position on the global stage. The research for my chapter suggested that my original conceptual framework – and, in particular, the six categories of response – continued to have explanatory power in a different context seven years later, focusing specifically on the global rankings.

Organisational case studies also enable us to explore the different relationships with rankings experienced by various parts of institutions, including governors, the executive, academic departments, professional services and student groups. For example, for some 'lay' governors of universities in the studies (often from a business background), league tables had introduced 'a sense of the market' and of the consumer, and introduced 'market discipline' to the institution. They had contributed to an increasing awareness of market pressures generally in higher education, accelerated by the introduction (in England) of higher tuition fees. For these governors, league tables were 'a short-hand descriptor' for the market and

competition overall. The benchmarking made possible by league tables had highlighted, for them, the need to target resource allocation and to be forward-looking. It had focused the minds of the executive and others on 'performance management' and 'research effectiveness'. In these universities, as a result, members of the executive had felt the need to 'package' and manage league table results, and published performance indicators generally, in order to avoid 'knee-jerk' responses by both governors and staff. Other governors, however, recognised that the tables were counter to 'more sensible' and 'proper' external evaluations, such as institutional quality assessment and financial audit, which they considered more suitable for the purposes of evaluating a higher education institution's activities. Accordingly, to use rankings to 'make things happen' or 'as a stick against the administration' would be very unwise, because 'league tables have a power beyond rationality' (Locke 2011b).

Higher education institutions as active agents

The case studies also illustrate the importance of an approach which recognises that HEIs and their organisational members are active participants in the process of making sense of rankings and in responding to, and engaging with, them. They do not simply react to rankings in a passive way; rankings do not *simply* impact on HEIs. Many critical studies of the 'impacts' of rankings have tended to draw heavily on Michel Foucault's ideas of discipline (Foucault, 1977) and how rankings, through processes of surveillance and normalisation, change members' understandings, perceptions, expectations and behaviour. This 'internalisation' of the logic of rankings and, ultimately, their 'institutionalisation' in the processes and systems of the university can be seen as a form of self-management or self-discipline, such that, paradoxically, efforts to control rankings simply result in extending their power and influence. In this sense, rankings seduce as well as coerce.

I have drawn on the important work of one such pair of critics, Wendy Espeland and Michael Sauder writing about US law schools (Espeland and Sauder, 2007; Sauder and Espeland, 2009) who conceptualised how rankings have generated anxiety among institutional members through the twin processes of 'self-fulfilling prophecies' and 'commensuration'. However, I have also criticised those approaches that underestimate the power of institutions to respond actively to environmental forces, such as rankings, and which assume they react passively to external pressures. I have argued the need to explore the reverberations of rankings *within* institutions,

for example, (i) how they are used by governing bodies and senior management to drive change, (ii) by particular disciplines to argue for more resources, and (iii) by individual academics to enhance their career prospects (Locke, 2014a). Interestingly, a recent book by Espeland and Sauder (2016) which brings together their findings over a number of years, significantly develops their conceptual framework to elaborate two further processes, of 'reverse engineering' and 'narrative' (in addition to 'commensuration' and 'self-fulfilling prophecies') to explain law schools' responses to rankings. This work largely confirms and complements the approach I have been taking.

The significance of temporal dynamics and the affective domain

Analysing the reverberations of rankings within institutions helps to reveal the power relations between the various parts of a university, the different levels of resources at their disposal and variations in their capacity to resist external (and internal) pressures. It also helps to illuminate the development of these reverberations over time, and how the processes of *internalisation* and *institutionalisation* occur at various speeds and in diverse ways in different parts of an institution. These concepts and the six main ways in which I have analysed HEIs' responses to rankings, aim to capture the dynamics of the processes by which the logic of rankings can become embedded in institutional operations and behaviours. I formulated the six aspects of organisational response in order to highlight their temporal nature, in particular, to investigate the shift from initial resistance to rankings, to attempts to control them and, ultimately, to efforts to exploit them for reputational advantage. Indeed, one of the six ('evolving responses') was a deliberate attempt to make this explicit. Cross-sectional rather than longitudinal case studies may not be ideal in capturing these dynamics, although organisational members often relate stories ('narratives' in Espeland and Sauder's (2016) term) about how responses to rankings have changed: how personnel have become more sophisticated, and how approaches have been finessed in order to negotiate the 'tightrope' between being driven by rankings and being driven down by them.

One conclusion that might be drawn from the case studies, and the increasing body of research into the influence of rankings (e.g. Hazelkorn, 2015), is that the 'clever' universities have realised that adopting rankings as an integral and explicit part of an institutional strategy is unlikely to result in success. Even those institutions that were most responsive to rankings avoided being driven – or being seen to be driven

– by them. It was generally recognised that being too overtly influenced by rankings was likely to bring its own reputational risks. Most institutions preferred to treat rankings as a form of external validation rather than an end in themselves: “A successful institutional ranking strategy is as much about managing stakeholder expectations as managing data and outcomes” (Sheil, 2016: 13). This resonates with my own findings.

A further distinctive element of my approach has been to emphasise the *affective* domain in understanding HEIs’ engagement with rankings: the emotional responses of academics, professional staff, students, governors and executive members. Many of those interviewed in the case study institutions used psychological terms and language to describe their emotive reactions to rankings, and those of their colleagues. A high ranking position could deliver the ‘feel good factor’ or, if expected, an element of ‘relief’. A lower than expected result could provoke a sense of affront or moral outrage – even pain and embarrassment. However, the prevailing and enduring state of mind was ‘anxiety’ or even ‘panic’, about (i) what the rankings compilers will come up with next, (ii) what other HEIs are doing to improve their positions, (iii) whether one’s own institution was doing all it could to improve its performance, and (iv) whether even doing this would only prevent a slide down the rankings rather than achieve the targeted improvement that had been written into the strategic plan.

The significance of temporal dynamics and the affective domain highlight the importance of the empirical investigation of HEIs’ active engagement with rankings. Their ‘effects’ or ‘impacts’ cannot just be read off from the latest version of the leading rankings or the recent public pronouncements of institutional leaders. Indeed, the proliferation and expansion of the rankings industry is taking it into a series of related activities, including organising conferences about rankings or ‘world class universities’, providing confidential benchmarking services, offering advice and consultancy to HEIs on improving their performance, and spawning a series of companies dedicated to providing bibliometric data sets that underpin many of the global rankings. The rankings themselves are becoming increasingly sophisticated, with the multiplication of indicators, expanded coverage of HEIs and national HE systems, the linking of datasets (e.g. the *LinkedIn* university rankings) and developments in benchmarking tools. In *Publication 4*, I argued that recent developments represented an *intensification* of the processes by which compilers

seek to engage with HEIs, and higher education markets more broadly, drawing them further into the construction of rankings and the manufacture of competition.

The remainder of this document addresses both my selected areas of study together. In the following section, I explore some of the issues raised by this developing approach to investigating institutional case studies for my research design.

4. Research design issues

The research presented here, in the five selected publications and in my complete published work, has employed a range of both quantitative and qualitative methodologies to investigate a number of complex issues and questions in an effort to achieve a nuanced and substantive understanding of two areas of the study of UK higher education in a national and international context. It has included the analysis of existing national datasets, statistical analysis, conducting national surveys of HE staff both as part of an international study and separately, undertaking several sets of interviews and focus groups in HEIs, analysing documentation, producing institutional case studies and developing individual vignettes to exemplify common patterns.

The international CAP study (Locke, 2011a; Teichler *et al* (eds), 2013) had the advantage of volume and coverage, although the survey instrument itself was pre-determined, and its conceptual foundation was fixed in a retrospective view of academic work and careers, in order to make comparisons with the 1992 Carnegie study. It suffered from the limitations of most such surveys based on multiple choice questions and Likert scales, in the lack of depth to the responses. I contributed to the design of the follow-up, EUROAC study (Teichler & Höhle (eds), 2013) which combined semi-structured interviews with a reduced version of the survey in some additional European countries. I have used this combination of survey and interviews most recently in an investigation of the experiences and support needs of early career social scientists in the UK (Locke, Freeman and Rose, 2016), using the survey to select the follow-up interviewees and to inform the interview schedule. In this way, the limitations of interviews in reflecting a representative sample of the total population, and in introducing the risk of bias in selecting what to report, can be minimised. However, to date, constrained funding has prevented me from undertaking repeat interviews or surveys aiming to facilitate longitudinal analysis. Most of the studies covered here provided only a 'snap-shot' view of changes. My current four-year ESRC-funded project aims to add this temporal dimension (see section 6).

However, these are common and typical issues with research design and methodologies in the social scientific study of higher education. In the remainder of this section, I identify several methodological and analytical challenges for further

investigation of the changing nature of academic work and careers and HEIs' responses to rankings and other measures of institutional and individual performance.

Methodological and analytical challenges

I have selected four challenges, in particular, that have emerged from my research, relating to: 1. the available national data and common categories, 2. institutional sensitivities about participating in the research, 3. interpreting drivers that may reinforce or inhibit each other, and 4. determining when changes are fundamental rather than simply marginal.

First, the limitations of the national data and categories: given the diversity and differentiation between HEIs (and between academic roles), is it possible to create definitional categories that better represent the population and enable meaningful comparisons to be made? This is a significant issue for the future of the academic workforce, for example, because the highly specialised and diverse nature of academic roles and career trajectories along with limitations in the current data make projecting supply and demand in this area highly problematic (Edwards *et al*, 2011). Likewise, in selecting institutional case studies in the UK, the old pre-1992/post-1992 university categorisation is now 25 years old, and ignores the considerable developments that have occurred since the abolition of the binary divide between universities and polytechnics. It is time to develop new forms of classification, which do not prescribe, privilege or impose any particular interpretive framework on case study evidence.

Second, there are growing institutional sensitivities about participating in external research studies in an increasingly marketised higher education system such as the UK (and, particularly, England). As competition has increased, universities and colleges have become less willing to reveal and share information about organisational matters and, especially, strategic decision-making. Institutions have been reluctant to admit to being responsive to rankings and market mechanisms, for example, even though their behaviour belies this. Even where the claim is made for a sophisticated, selective and nuanced response to such external pressures, it is difficult to ascertain the degree to which this extends beyond senior management and the governing body to the majority of staff in departments and divisions. This raises the question of whether it is possible, through standard qualitative

approaches (interviews, focus groups and observation), to 'get beneath the surface' of institutional narratives in order to reveal the thought-processes and day-to-day practices throughout an institution. This is particularly relevant when investigating employee relations matters, including management's preoccupation with 'staff engagement' with the institution's goals, and the less common concern with staff 'well-being', including their work-life balance.

A third, analytical, challenge revolves around the difficulty of disentangling or disaggregating the various aspects of the local, national and global context, be it the effects of marketisation, the enduring reputational hierarchy of institutions, the increasing separation of teaching and research, the priority given to research over teaching, internationalisation (in both pre- and post-Brexit forms) and technological change. A number of these drivers reinforce each other, and my research has particularly highlighted: the interplay of rankings with marketisation and competition in generating status anxiety among many HEIs and their personnel; and the relationship between the predominance of research over teaching and increasingly constrictive academic career structures for many in the profession. However, some forces may conflict, weaken or moderate each other, such as growing populist nationalism leading to controls on immigration that may inhibit or distort the internationalisation of higher education.

A fourth and final analytical challenge is determining the point at which quantitative change (a trend in the data) transforms into qualitative change ('a paradigm shift', 'a tipping point'). It may be the case that a fall in the proportion of those on teaching and research contracts in the UK to below 50% of the total may not signal a significant change in the structure and nature of the profession. Or it may be just one of a number of factors, qualitative as well as quantitative, that, when combined, represent a fundamental change. In a sense, this is the mirror image of the transformation of qualities into quantities (or 'commensuration') which metrics attempt to achieve. Both are problematic. It also reflects the point above about the shortcomings of both quantitative and qualitative methods of investigation and the need for a mixed approach in interpreting complex, dynamic and contested change.

These methodological and analytical challenges arise across both areas of research addressed here. The following section aims to identify substantive themes and threads linking them.

5. Underlying themes and connecting threads

In this section, I bring together a number of connecting themes and threads from the two areas of study represented by my five publications, in order to highlight the coherence and consistencies in my approach, and some underlying conceptual frames of reference (Smith, 2015). I have selected three analytical threads:

- the significance of diversity and differentiation in investigating both academic work and careers and the influence of rankings;
- the explanatory power of the organisational case study for understanding the influence of environmental changes within different HEIs and how the institutions – and their constituent parts – respond in particular ways;
- the importance of time in understanding the dynamics of change and HEIs' developing responses, and whether the changes themselves are accelerating and intensifying, or simply evolving, consolidating and even slowing.

The significance of diversity and differentiation

In this sub-section, I explore why research into current developments in the academic profession and in how HEIs navigate current policy tendencies and metrics-driven developments must take account of the diversity and differentiation of the HE sector, and how my publications achieve this. According to the UK national data, the redistribution of types of academic contracts between those expected to teach *and* research, those who only teach and those who solely research appears to have reached a 'tipping point', with the majority of academic staff no longer undertaking the traditional full responsibilities as a condition of their employment. The situation may be more pronounced than the national data suggest, given there are likely to be many academics with conventional contracts who are in 'teaching and scholarship' *roles*, with no expectation, time, funding or support to undertake research, regardless of the wording of their contracts. Other academics may be spending a significant proportion of their time on activities *related to but peripheral to* teaching and/or research, for example, in knowledge exchange projects and consultancy, public engagement, and support and development roles within their institution. Para-academics, who undertake core academic activities, but who are not on academic contracts, add to this diversification of employment conditions, roles and identities. My investigations to date have not specifically focused on the

variations between academics in different disciplines. Nevertheless, there were observable differences between those in STEM subjects and those in the arts, humanities and some social sciences (Locke & Bennion, 2009). Apart from exploring age and 'time in the profession', my research has only referred in passing to the ways that other demographic characteristics, such as age, gender and ethnicity, overlay or underwrite this differentiation (Locke, 2008b).

In my writing, I have shown that this growing specialisation within academic work is creating a new division of labour with limited career movement between the different functional specialisms – or, at least, 'no going back' for those academics who have ceased to pursue research, or a *cul-de-sac* for those at the start of their careers who take up teaching and scholarship posts simply to 'get a foot in the door' of academia, but who find their progress inhibited because of their limited research record. The national (HESA) data categories are inadequate for investigating some aspects of these changes, in particular the 'catch-all' category of *atypical* academic staff, which is not disaggregated sufficiently to reveal the extent of hourly-paid teachers or the emergence of the use of 'zero hours' contracts (White, 2016). This new division of labour, I have argued, represents a segmentation of the profession, which is becoming more stratified, with established research professors at the top of the hierarchy, a growing proportion of fixed-term contract researchers and part-time and hourly-paid teachers at the bottom, and layers of academics with – most significantly – varying degrees of research activity in between.

There are arguments over whether the bottom end of this hierarchy amounts to the casualisation of a segment of academic labour, which is subject to such insecurity that it forms a kind of academic 'precariat' (Standing, 2011; White, 2016). Others argue that it is common in other fields for early career professionals to undertake a series of different fixed-term positions in order to broaden their experience and build their CVs, and that flexibility does not automatically mean insecurity (James, 2016). However, it is important to ask who is expected to be flexible and in whose interests? If such 'flexibility' eventually results in making an academic career less attractive than most of the alternatives, HEIs may risk the sustainability of the profession itself. I have concluded that the HE sector will need to give attention to longer-term questions around the systematic replenishment of the academic workforce, the preparation of early career staff, the attractiveness of the profession to them, and creating sustainable, internationally recognised career pathways.

Universities' growing reliance on 'contingent' workers to provide a more flexible, lower-cost academic workforce is not unique to the UK, and there are parallel trends in the US (Finkelstein *et al*, 2016), Australia and Canada (AHEIA, FBS and UCEA, 2015). However, there are significant differences, even within the UK, in the ways in which universities and colleges set about achieving greater employment flexibility and reducing staff costs, with observable variations between Russell Group, other pre-1992, post-1992 and post-2004 universities (Publications 2 and 3). If private proprietors were required to provide equivalent data to that submitted by their public counterparts, it is possible this would reveal even greater variation. Furthermore, it is likely that UK HEIs are presently in the process of modifying their strategies in response to current changes in the funding, policy, regulatory and media environment, for example: in England as the TEF is introduced and more private HEIs emerge; across the UK in the run up to the 2021 REF; with changes in the national research infrastructure; as negotiations on the UK's exit from the European Union progress; and, as the global and national rankings industries expand and increase their influence on HEIs and their 'customers'. These changes, and potential disruptions, are likely to expand the range of institutional responses.

In an increasingly competitive higher education system such as the UK, institutional rankings have often substituted for genuine market mechanisms, where these have only been partially introduced or could never be fully realised in an education sector that generates public benefit as well as private returns, and where competition is based more on reputation and status than on quality (Brown (ed), 2011; Brown with Carasso, 2013; Marginson, 2013). As the results of the TEF are, no doubt, incorporated into future national league tables, this will compound and may even exceed any financial advantages of the exercise to individual institutions. Depending on its performances in the individual metrics (the NSS, student retention and graduate employment), each HEI will adopt specific strategies to suit its particular markets and operating environment. Some research-intensive universities may need to work quite hard to adjust to the new mechanisms, but the changes are unlikely to disrupt the existing 'prestige economy' in higher education (Blackmore, 2016; Blackmore *et al*, 2016). The focus of the government will remain on distinguishing the minority of 'gold medallists' from the remainder, and identifying the 'coasting' universities that are claimed to be 'failing' their students. The emphasis will continue to be on preserving a few 'world class universities' rather than creating and sustaining a high quality higher education *system* in which

different types of university – and the staff within them – are treated equitably and valued for their particular contribution.

The explanatory power of the organisational case study

In this sub-section, I argue that the organisational case study is essential for understanding the influence of environmental changes within different HEIs and how these institutions – and their constituent parts – respond in particular ways to these changes. The importance of this approach is amplified in the increasingly marketised UK environment in which institutions are competing with each other, ‘challenger’ private institutions are being encouraged by the English government, and ‘incumbent’ (formerly) public universities are compelled to develop strategies and branding to distinguish themselves from their competitors. As I argued in section 3 of this document, the enduring status hierarchy of universities in the UK has not yet been fundamentally challenged by the introduction of market mechanisms because of the traditions, reputations and levels of financial and human resources that the most prestigious universities can draw on to resist external pressures and exploit competitive opportunities. So, the differences remain, and yet there have been relatively few empirical investigations of individual institutions over time, partly due to the sensitivities identified in the previous section.

A case study approach can incorporate quantitative (Yin, 2014) as well as qualitative (Stake, 1995) methods in the investigation of HEIs’ responses to change. The former might include national (and international) data, surveys of large numbers of institutions, a survey of an individual university and data supplied by the organisation itself direct to the researcher. The CAP survey, for example, asked academics questions about the governance and management of the institution where they were currently employed, the influence of managers in decision-making, the level of bureaucracy and the quality of resources and facilities. By matching these responses with basic institutional characteristics, it was possible to make broad inferences about different kinds of university and research institution. However, such findings would need to be subject to further examination in a series of investigations of individual institutions, in order to explore such dimensions as organisational cultures and management styles (Locke, 2007), and to test the original institutional typology which informed the selection of cases. More qualitative methods would be used in individual cases, including interviews, focus groups, observation and documentary analysis. So, for me, the organisational case

study is a mixed *approach*, drawing on a range of methods, rather than a method in itself (Hamilton and Corbett-Whittier, 2013).

Organisational case studies of this kind allow us to investigate the parameters and capabilities of agency, proactivity and strategic initiative within different institutions. Investigating the impacts of rankings in the context of marketisation particularly illuminates the processes by which organisations are, at the same time, coerced and seduced by forces not within their control but, also, not totally outside their realm of influence. Analysis can draw on conceptions of state or government steering, such as New Public Management, in elucidating how a university can be positioned as an active, 'autonomous' agent within a highly regulated system such as a market, but which has constrained room for manoeuvre, given the drivers and risks in operation. It is only by investigating *within* an institution, however, that it is possible to see how these dynamics operate, with external drivers influencing, co-ordinating and competing with internal power relations and organisational cultures. It is clear from the case studies I have undertaken, for example, that many parts of an institution can use rankings and their component indicators to their (and, sometimes, their institution's) advantage, whether it is the governing body, senior management, professional services divisions such as marketing and communications, particular academic disciplines and departments, or student groups. As well as processes of *internalisation* and *institutionalisation* of rankings logics (section 3), we also see co-option, adaptation and resistance. So the 'influence' of rankings, or the 'implementation' of national policies, is seldom a one-way process, it is always interpreted, translated or modified in some way.

Such an approach also enables us to observe and analyse the interplay within and between different institutional levels and parts. At one end of the spectrum, some universities may be relatively hierarchical organisations that have macro (the governing body and its sub-committees, the senior management team), meso (the academic schools, faculties and larger departments, the professional divisions) and micro (units, teams and groups of individuals) levels that are (to variable degrees) nested within each other. These elements, even at the same level, can have varying degrees of power and influence, and so change may occur at different rates in different parts of an institution. Some may take the lead while others lag behind. At the other end of the spectrum, there are universities which are more loosely coupled systems (Weick, 1976), where there is a relative lack of co-ordination and regulation, and a greater degree of autonomy within the elements, and more

discretion for heads of departments and other 'middle' managers to interpret institutional policy. A multi-organisational case study approach provides an opportunity to understand the dynamics of change and the intra-organisational reverberations *within* institutions, and to compare them with other cases.

A key aspect of such organisational case studies is the human element: the people (staff and students), their engagement, well-being and morale (the affective domain), the organisational cultures and sub-cultures formed and re-formed, the stories and narratives that are told and re-told. My studies of the influence of rankings have revealed the emotive language used to talk about particular results, whether they were better or worse than expected, and whether the staff were elated or depressed, or even saddened, by the outcomes. I also found some institutions, or parts of institutions, that were in a constant state of anxiety in the lead up to the next published ranking or indicator. In relation to academic work, my studies highlighted the importance of the 'lived reality' of working in higher education, rather than the received 'wisdom' of some established academics and outdated notions of traditional career pathways. We confirmed the perception of a lengthening in the time taken to establish oneself and the increasing pressures, but also the intrinsic motivation of academic work and commitment to the discipline. This affective dimension is both individual and collective, as groups share their experiences, staff and student surveys reveal patterns and institutions seek to implement policies and initiatives to improve engagement and well-being.

The importance of time: acceleration and intensification

In both areas of study – academic work and careers, and the influence of rankings on HEIs – I have explored the changes over time in several of the phenomena and processes under investigation. In some cases, this has been a gradual development, as in the separation of teaching and research in national policy and regulation and in their management within higher education institutions over four decades. Comparing the 2007 CAP survey findings with the 1992 Carnegie equivalent also afforded me an opportunity for longer term comparison. In other aspects, there has been a quickening of pace over a relatively short timescale, as in the development and use of metrics for evaluating the core activities of HEIs. In yet others, a steady trend has been accelerated by a particular policy incentive – such as the jump in the numbers of (especially full-time) academics with teaching-only contracts in the lead up to the REF submissions in 2014 – which has been

consolidated in subsequent years. This quickening and slowing of the pace of change has an influence on how institutions and individual academics respond, as does their different circumstances and the environments in which they operate.

The narratives of academics reported in Publication 3, frequently drew attention to what was perceived as the acceleration of time and the intensification of activity, often in the form of increasing demands, growing workloads, a speeding up of academic processes and the shortening of timescales. Individual interviewees suggested that some of these activities were captured by workload allocation models, but others were 'hidden' because the models underestimated the time spent on preparing and delivering teaching, and on service and administration. For some, this meant that the nominal time allocated for research was being crowded out and pushed into the margins of evenings and weekends, blurring the distinction (and tipping the balance) between work and other aspects of life. Remote and online working had exacerbated this, but also the academics' passion for their discipline and research fields and the open-ended nature of many academic tasks.

In my studies of the influence of rankings (Publications 4 and 5), I highlighted the evolving responses to the rankings by the case study institutions as, for example, senior managers became more sophisticated in their understanding of: the methods of compilation, which measures they could improve on and how particular rankings and indicators could be employed in promoting their own university. To some extent, the HEIs were both coerced and seduced into responding to the proliferation of rankings and indicators, the frequency with which the rankings themselves changed, and the effects of some of these measures becoming incorporated into national policy instruments and evaluative mechanisms. In the period between the two ranking studies (2008 and 2014), I argued there had been an intensification of several of the phenomena I had been investigating, in particular, through:

- the extension of data collection and analysis (for example, the introduction of the Key Information Set and the redesign of *Unistats* as an online course comparison tool, and the development of U-Multirank, a multi-dimensional European ranking of HEIs by type);
- the generation of new and increasingly sophisticated performance indicators that combine different data sets (such as the Longitudinal Education Outcomes (LEO), which combines educational, employment and earnings data);

- their use as levers and drivers of policy goals (for example, in the TEF and REF).

In Publication 4, I described these developments as a process of *intensification* in order to capture the extension of influence, the increased penetration and the strengthening hold of rankings logics and the ways these are being embedded in institutional infrastructures and individual academics' working lives. HEIs and their employees are increasingly drawn into this logic, through responding to national policy initiatives and consultations, collecting new data and self-reporting (for example on teaching contact hours and research impact case studies). These indicators and the evaluative frameworks they feed are themselves reviewed and revised in consultative processes with HEIs, so that senior managers are continuously having to think about how (and where) their institution will appear in the next ranking, the implications for the income and reputation of their organisation and what the university needs to do to protect and promote itself.

There is a literature on the acceleration of time and the intensification of activity in academic work, although it is not extensive and has tended to emphasise the negative effects, and thus align itself with the 'loss, retreat and alienation' school of thought on the state of the academic profession and university life (Ylijoki and Mäntylä, 2003; Menzies and Newson, 2007; Gill, 2009; Chow *et al*, 2010; Clegg, 2010; Peters, 2015; Brew, 2015). Some recent contributions have begun to acknowledge the positive advantages of dynamism in academic life, the excitement of a fast pace, the stimulation of variety and the pleasures of high productivity (Gornall and Salisbury, 2012). However, as I have maintained throughout my writing on academic work and careers, there are differential effects and a diversity of experiences of acceleration and intensification, and a wider or narrower range of strategies available for dealing with them, depending on the positions and circumstances of individuals and the institutions in which they work. Some, more senior and established academics, may achieve a certain amount of temporal autonomy whilst also enjoying the speed and intensity of a full and rewarding academic life (Vostal, 2016). Others, for example, in the early phases of their careers, in part-time and teaching- or research-only positions, may have little or no control over their time (McAlpine, 2010, 2012). For those experiencing a series of fixed-term, post-doctoral contracts, time may seem to be elongated and careers 'stretched' as it takes longer to establish themselves in an academic career, and find a permanent position that enables them to pursue their research as well as

continue to teach. Yet others, who enter academia mid-career from another profession, may be seeking more time to reflect on their professional experiences and to provide time and space for their students to consider fundamental questions and values within their programmes of initial and continuing professional development.

These examples illustrate the importance of career stages and trajectories in understanding the diversity of academics and their experiences of work and careers. They suggest quite significant generational differences that may mean that the experiences of mature, established academics no longer provide a relevant guide or model for early career staff, which could render mentoring and other forms of advisory support problematic. The examples also indicate the need to investigate empirically the importance of time and the role it plays in academic work, including through longitudinal studies of individuals and groups.

6. Reflections, future research and conclusions

In many ways, my research programme and the contribution summarised here is a work in progress which raises new, and larger, questions about the two areas of study and the challenges of investigating them. My research to date and, indeed, the process of producing this integrative summary, is informing my current and future scholarly activity – both the questions to ask and the design of the research projects that aim to answer them. This final section offers some reflections and concluding comments, including on some broader questions raised by the research described here.

In this summary, I have indicated at various points some of the limitations of the research studies described here. Compromises have been made, especially in the international studies, in the initial design of the research and in attempts to make the findings from very different national higher education systems and institutions comparable. Restricted funding has limited the sample size and, especially, the extent of the qualitative investigations. Likewise, despite the importance of the temporal dimension in these areas of higher education study, longitudinal approaches have been limited to repeating the core elements of a survey questionnaire in the 2007 CAP study (from the 1992 Carnegie study). As with much higher education research, there has been a greater focus on empirical investigation than on the development or generation of theory, although I would maintain that, in each of the two areas of study, I have begun to devise conceptual frameworks that can be elaborated further and integrated with broader theoretical domains.

These, and other, issues are being addressed in my current research project as part of the ESRC and HEFCE-funded Centre for Global Higher Education at the UCL Institute of Education, focusing on *The future higher education workforce in locally and globally engaged higher education institutions* (£378,000, 2016-20). This is exploring further the ways in which academic roles and identities are diversifying; the implications for individuals and institutions, locally and globally; the tensions and/or synergies arising from this diversification, for instance between individual aspirations and institutional missions, structures and processes; and how such tensions are being managed and resolved in optimal ways for individuals and institutions. It is developing further the longitudinal multi-institutional case study

approach outlined in section 5, identifying eight cases and conducting two phases of interviews and focus groups at the beginning of the project and again with the same individuals and groups two years later. These will be supplemented by surveys of the total population (academics and para-academics) within each of the case study institutions, between the interview phases. The first phase of interviews will inform the survey questionnaire, and the results of the surveys will inform the second phase of interviews in, potentially, institution-specific ways.

My completed and planned research raises new and, often, larger questions about the two areas of study, which I have written about in two recent conference papers (Locke 2016b and c). My concluding comments focus on each of these in turn.

Concluding comments: Academic work and careers

Several leading international scholars of higher education have noted the importance of stable and effective academic career structures for universities to achieve their mission of high quality teaching, innovative research and an outstanding reputation (Coates and Goedegebuure, 2012; Teichler and Cummings, 2015; Yudkevitch *et al* (eds), 2015). They have also warned of “the dysfunctional nature of career structures in many countries – with disturbing negative trends” (Altbach and Musselin, 2008: 2), which no longer meet the educational and operational demands of the current environment and create many barriers to success (Enders and De Weert (eds), 2009). Drawing on this body of scholarship and my own research findings, I have raised the following questions about academic career structures in the UK in a recent conference paper (Locke, 2016b):

- Do these academic career structures attract the most talented scholars – from the UK and from abroad – or is there a risk of losing increasing numbers to other knowledge-based professions?
- Do they reward those who are creative, innovative and effective educators, researchers, knowledge brokers, developers and managers?
- Do they help HEIs to, first, select only those who are suited to this kind of work and, later, if a small number of recruits prove not to be suited, do they help them to move on?
- Do they provide sustainable careers for the increasing variety of roles in higher education, a proper work-life balance, and meaningful career progression?

- Are they fit for the new purposes and policies, and funding and regulatory arrangements that are currently being developed and will be in place for several years to come?

There are conceptual, empirical and policy dimensions to each of these questions, which will form an overarching set of aims for a continuing programme of research. They can also support efforts to initiate a debate about reinvigorating and renewing the academic profession, as outlined in Publication 2 and section 2.4 above.

Concluding comments: The influence of rankings on HEIs in international perspective

The international study of which Publication 5 was a part (Yudkevich *et al* (eds), 2016) raised issues around the difficulties of comparing the responses to rankings of HEIs in very different national and regional contexts. I subsequently drew on these eleven international case studies and more recent literature for another conference paper which developed some broad hypotheses that could be tested by further empirical studies of the influence of rankings on institutional behaviour (Locke, 2016c). In this paper, I argued that, while each researcher or national team in the international study has approached the case studies methodologically in similar ways and with the same research questions in mind, it would not be justified to attempt to make conclusive comparisons between them. The institutions, the systems within which they are situated, their global relationships, and the ways in which each is positioned by the world rankings, are so varied that it would be foolhardy to make generalisations – about their differences, as much as their similarities (Altbach, 1998). Some of the case study institutions were described as barely cognisant of the global rankings and only able to dream of appearing in their lowest echelons. Others were compelled to pursue better ranking positions by their national governments for political purposes, and a few were even funded by these to do so.

However, a close reading of the cases does suggest some broad hypotheses which could be tested by further empirical studies of the influence of rankings on institutional behaviour across national boundaries. In sketching these hypotheses, I speculated about the prevailing conditions necessary for (1) national HE systems and (2) individual HEIs to be more likely to be responsive to global rankings, and (3)

the characteristics of particular rankings that are more likely to elicit responses from institutions:

1. National higher education *system* responsiveness to global rankings is more likely when a combination of several of the following conditions prevail:

- The national system is diverse, with an existing hierarchy of institutions (for example, where a binary division has been removed, but significant resource and reputational differences remain between HEIs);
- The prevalence of New Public Management and other steering policies that regard higher education as an essential part of the knowledge economy and key to national competitiveness (Ferlie *et al*, 2008);
- The national government seeks to implement policies that are influenced by rankings, either:
 - *implicitly*, as an external validation of the existing hierarchy; or
 - *explicitly*, such as through state initiatives to increase the number of 'world class' universities featuring in the global rankings;
- There is increasing competition (for example, for students – especially international students – academics, research funding and collaborative partners) encouraged by the introduction of market-orientated elements of the system.

2. *Institutional* responsiveness to global rankings is more likely when a combination of several of the following conditions prevail:

- The HEI exercises a significant degree of autonomy in its operations (for example, financial, ownership of property, employment of staff, recruitment of students);
- It features 'business-like' institutional governance arrangements and managerialist structures and styles (especially if rankings are used to provoke change and encourage internal competition);
- It has a research-orientation (especially in science and medicine);
- It is aspirational, expansionist, and wants to become more visible globally;
- It is internationalised, or *becoming* internationalised, with a significant number of staff engaged in international activities;
- It is subject to status anxiety (about its position in its own national HE system and in the world), with a desire to benchmark itself against other similar HEIs;

- Its mission is not built around goals that are likely to conflict with ranking strategies (for example, seeking to widening access and engage with local communities, or having a strong focus on teaching).

3. Rankings are more likely to elicit institutional responsiveness if...

- they incorporate indicators which already exist and have achieved some independent validity in HEIs' operations (for example, national student survey results, graduate outcomes, highly cited scholars, research funding and the number of doctoral students);
- they include at least one indicator that appears to be open to enhanced performance, optimisation, gaming or other means of 'improvement';
- the multiplicity of different rankings allows most universities (and not just those in the upper echelons) to find some success in them (for example, by subject, type of institution, mission or region);
- there is one, fixed annual ranking, rather than – or, in addition to – a portal which enables users to select and weight indicators to reflect their own priorities;
- the compilers and publishers of the ranking engage with universities, in advising them on how to improve their rankings performance, in organising joint events with them and in helping them to develop their ranking system.

These broad hypotheses – or speculations – will form an analytical framework for further empirical investigations of the influence of rankings and institutions' responses to them, which will be revised and refined as new findings emerge.

These larger questions, in turn, present significant challenges for those seeking to understand developments in UK higher education, whether as researcher, policymaker or institutional leader. The highly regulated, but increasingly marketised, operating environment is populated by a growing and diverse range of institutions, differentiated by their histories, constitutional status, missions, resources, reputations and cultures. Their organisational capacity to respond to change and take advantage of opportunities varies considerably. As does their strategic capability to look ahead and plan long term, in the face of so many short-term challenges and policy shifts. The particular issues I have considered here, include the future size, shape and make-up of the HE workforce incorporating a sustainable academic career structure, and how best to navigate the increasingly

influential national and global rankings – and the growing use of metrics, generally – as reputation continues to trump genuine quality in the HE marketplace. The biggest challenges face those who manage, teach, research and make policy in this developing environment, but they will need the contribution of those who research, analyse and seek to understand what these developments mean over time.

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Appendices

1. Publications on each of the two areas of study:
 - a. The shifting patterns of academic work and careers
 - b. The influence of rankings on higher education institutions
2. Curriculum Vitae, including full publications list
3. Statement of contribution to collaborative publication 3, signed by the other authors
4. Five publications

Appendix 1a

Publications on the shifting patterns of academic work and careers

1. Locke, W., Whitchurch, C., Smith, H. and Mazenod, A. (2016) *Shifting Landscapes: meeting the staff development needs of the changing academic workforce*, York: Higher Education Academy:
https://www.heacademy.ac.uk/sites/default/files/shifting_landscapes_1.pdf
2. Locke, W. (2014) *Shifting Academic Careers and their implications for enhancing professionalism in teaching and supporting learning*, York: Higher Education Academy: <https://www.heacademy.ac.uk/node/10079>
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4. Locke, W. and Bennion, A. (2013) 'Satisfaction in stages: the academic profession in the United Kingdom and the British Commonwealth – career stages and trajectories', in Bentley, P.J., Coates, H., Dobson, I., Goedegebuure, L. and Meek, V.L. (Eds.) *Job satisfaction around the academic world*, Dordrecht: The Netherlands: Springer, 223-238.
5. Locke, W. (2012) 'The Dislocation of Teaching and Research and the Reconfiguring of Academic Work', *London Review of Education* (Special issue on Managing higher education in the post-2012 era) Volume 10, Number 3, 261-274.
6. Locke, W., Cummings, W.K. and Fisher, D. (eds) (2011) *Changing Governance and Management in Higher Education: The Perspectives of the Academy*. Dordrecht, The Netherlands: Springer. **Winner, Best Comparative Higher Education Book 2012, U.S. Comparative and International Education Society.**
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12. Locke, W. (2010) 'The Academic Life: Small Worlds, Different Worlds', *London Review of Education* (Special issue on the work of Burton R. Clark) Volume 8, Number 3, 251-261.
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15. Bennion, A. and Locke, W. (2010) 'The Early Career Paths & Employment Conditions of the Academic Profession in Seventeen Countries', *European Review* (Supplement on 'Diversification of Higher Education and the Academic Profession') Journal of the Academia Europaea, Volume 18, Supplement Number 1, S7-S33.
16. Locke, W. and Bennion, A. (2010) *Supplementary report to the HEFCE Higher Education Workforce Framework based on the international Changing Academic Profession (CAP) study*. Bristol: Higher Education Funding Council for England: http://www.hefce.ac.uk/pubs/rereports/Year/2010/supplementaryevalnwfdp/Title_92260,en.html
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19. Locke, W. and Teichler, U. (eds) (2007) *The Changing Conditions for Academic Work and Career in Selected Countries*. Kassel, Germany: International Centre for Higher Education Research.
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22. Locke, W. (2007) *The Changing Academic Profession in the UK: Setting the Scene*. Universities UK Research Report, London: Universities UK.
23. Locke, W. (2006) 'The Academic Profession: changing roles, terms and definitions', Supplement to *Higher Education Digest* Number 56.

Appendix 1b

Publications on the influence of rankings on higher education institutions

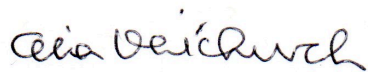
1. Locke, W. (2016) “‘There is a World out There We Can Step Into’: The University of Reading (UK) and the World Rankings”, in Yudkevich, M., Altbach, P.G. and Rumbley, L.E. (eds) *The Global Academic Rankings Game: Changing Institutional Policy, Practice, and Academic Life*, New York: Routledge, 222-245.
2. Locke, W. (2014) ‘The Intensification of Rankings Logic in an Increasingly Marketised Higher Education Environment’, *European Journal of Education*, Volume 49, Number 1, 77-90.
3. Little, B. and Locke, W. (2011) ‘Conceptions of excellence in teaching and learning and implications for future policy and practice’, in Rostan, M. and Vaira, M. (eds) *Questioning excellence in higher education: Policies, experiences and challenges in national and comparative perspective*. Rotterdam, The Netherlands: Sense Publishers, 119-137.
4. Locke, W. (2011) ‘The Institutionalization of Rankings: Managing status anxiety in an increasingly marketized environment’, in Shin, J.C., Toutkoushian, R.K. and Teichler, U. (eds) *University Rankings: Theoretical Basis, Methodology and Impacts on Global Higher Education*, Dordrecht, The Netherlands: Springer, 201-228.
5. Locke, W., Verbik, L., Richardson, J. and King, R. (2008) *Counting What Is Measured or Measuring What Counts? League Tables and Their Impact on Higher Education Institutions in England*. Bristol: Higher Education Funding Council for England, http://www.hefce.ac.uk/pubs/hefce/2008/08_14/
6. Locke, W. (2007) ‘Ranking Universities: Criteria and Consequences’, Supplement to *Higher Education Digest* Number 59, 1-8.

Appendix 3

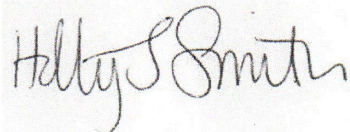
Statement of contribution to collaborative publication 3, signed by the other authors

Locke, W., Whitchurch, C., Smith, H. and Mazenod, A. (2016) *Shifting Landscapes: meeting the staff development needs of the changing academic workforce*, York: Higher Education Academy:
https://www.heacademy.ac.uk/sites/default/files/shifting_landscapes_1.pdf

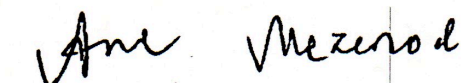
This is to confirm that William Locke was Project Lead for the Shifting Landscapes: meeting the staff development needs of the changing academic workforce project. He was co-ordinating author and editor of the report and main author of the conclusions and recommendations. He was solely responsible for the analysis of data from the Higher Education Statistics Agency (HESA) reported in section 1.3.



Dr Celia Whitchurch



Dr Holly Smith



Dr Anna Mazenod

Appendix 4

Five publications

Publication 1:

Locke, W. (2012) 'The Dislocation of Teaching and Research and the Reconfiguring of Academic Work', *London Review of Education* (Special issue on Managing higher education in the post-2012 era) Volume 10, Number 3, 261-274.

Publication 2:

Locke, W. (2014b) *Shifting Academic Careers and their implications for enhancing professionalism in teaching and supporting learning*, York: Higher Education Academy: <https://www.heacademy.ac.uk/node/10079>

Publication 3:

Locke, W., Whitchurch, C., Smith, H. and Mazenod, A. (2016) *Shifting Landscapes: meeting the staff development needs of the changing academic workforce*, York: Higher Education Academy:
https://www.heacademy.ac.uk/sites/default/files/shifting_landscapes_1.pdf

Publication 4:

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Publication 5:

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