

Shifting landscapes: from coalface to quick sand? Teaching Geography, Earth and Environmental Sciences in UK Higher Education

Dyer, S., Walkington, H., Williams, R., Morton, K., and Wyse, S.

Sarah Dyer,
Geography Department
University of Exeter,
Exeter EX4 4RJ
S.Dyer@exeter.ac.uk

Helen Walkington
Department of Social Sciences,
Oxford Brookes University
Faculty of Humanities and Social
Sciences,
Gibbs Building,
Gipsy Lane,
Oxford OX3 0BP
hwalkington@brookes.ac.uk

Rebecca Williams
Department of Geography, Environment
and Earth Sciences,
University of Hull,
Cottingham Road,
Hull, HU6 7RX
Rebecca.williams@hull.ac.uk

Katherine Morton
Centre for Academic Primary Care
University of Bristol,
Canyng Hall,
39 Whatley Road, Bristol BS8 2PS
k.morton@bristol.ac.uk

Stephanie Wyse
Royal Geographical Society (with the
Institute of British Geographers)
1 Kensington Gore,
London,
SW7 2AR
s.wyse@rgs.org

Shifting landscapes: from coalface to quicksand? Teaching Geography, Earth and Environmental Sciences in UK Higher Education

In this paper we examine contemporary academic working lives, with particular reference to teaching-only and teaching-focused academics. We argue that intensification in the neoliberal university have significantly shifted the structure of academic careers while cultural stories about those careers have not changed. We call for academics to re-examine our collective stories about standard academic career paths. Challenging the stories and making visible the ways that they create and multiply disadvantage is a crucial step in expanding the possibilities for academic identities and careers. The paper begins by describing teaching-focused academics within the context of the wider workforce. We then draw on narratives of those in these roles to illustrate the processes which (re)inscribe their marginalisation. We uncover the gendering of teaching-focused academic labour market. We end the paper by suggesting interventions that all academics can take and support to address the issues we highlight.

Key words: education, academic labour, gender, teaching

Introduction

In 2001 the committee members of the Royal Geographical Society (with Institute of British Geographers) (RGS-IBG) Contract Research and Teaching Staff (CRTS) forum used an observation piece in this journal to reflect on the working conditions of academics on fixed term contracts (Shelton et al. 2001). They argued that given a rise in recent PhD graduates taking temporary posts in British universities, the terms of employment and departmental attitudes to these posts had to change. There needed to be, the authors

argued, a shift from an understanding of ‘doing one’s time at a dark coalface’ (Ibid., 434), which excuses and even valorises exploitation, to an expectation of a ‘dynamic’ and ‘fulfilling’ (Ibid., 437) stage of an academic career. Fundamental to this shift was, they argued, making visible mechanisms which re-inscribe the marginalisation of such staff. These concerns, and the empirical research which informed them, were submitted via the RGS-IBG to the UK parliament’s House of Commons Science and Technology Committee as evidence for its review of short term contracts in science (Ní Laoire and Shelton 2003; Shelton 2014). The review concluded that fixed-term contracts were used by universities too routinely leading to an academic lottery rather than career paths based on merit (House of Commons Science and Technology Committee 2002). Despite the salience of the forum’s concerns, it closed in 2005/6.

Since 2001 the pressures shaping higher education providers and the working lives of those employed in them have intensified. In 1997 Sidaway gave a qualitative account of the political, cultural and moral economy of academic geography and the way it is reproduced via regulation and competition. In a 2007 volume of the Journal of Geography in Higher Education an international collection of papers revealed that academic roles are constrained by a variety of factors, not least national agendas as well as globalising forces within higher education. Funding and accountability regimes that first led to specialisation (Sidaway and Johnston 2007) are now leading to an ‘unbundling’ of academic work (Locke 2014; Probert 2013), and the

creation of new academic and para-academic jobsⁱ, (Locke 2014), including teaching-focused, teaching-only contracts, and educational support positions. These divisions of labour are happening in conjunction with increasing casualisation in, and segmentation of, labour markets (Bauder 2006).

In this paper we examine an area of the British labour market for Geographers and Earth and Environmental scientists (GEES) which is expanding. In 2007/08, academics employed on teaching-only contracts, excluding sessional lecturers, made up 18% of those who were teaching GEES in UK universities. By 2012/13, this had risen to 26%. The percentage of these people employed on fixed term contracts had risen from 58% to 75%. The United Kingdom is not unusual in having a large number of academics working in teaching-focused roles on precarious employment contracts. Ten percent of academics who teach in Australia have teaching-only contracts (Probert 2013), again excluding sessional lecturers. Including sessional lecturers and GTAs, May et. al. (2011) estimate that over half of teaching in Australian Universities is done by staff on casual contracts. In the United States, it was estimated that of the 1.8 million faculty members and instructors recorded in 2009 in degree-granting institutions, just over 75 per cent, were 'employed in contingent positions off the tenure track, either as part-time or adjunct faculty members, full-time non-tenure-track faculty members, or graduate student teaching assistants' (Coalition for the Academic Workforce 2012; see also Purcell 2007 for a broader discussion).

We suggest that the experience of working in these teaching-only jobs is less similar to 'work at the coalface' and more like finding oneself in quicksand. The cultural stories about these posts, and the working conditions they justify, have not changed at the pace which labour markets have. A

small but growing body of reflexive personal accounts [autoethnographic writing (Ellis 1999)] demonstrate how cultural stories and practices reify a standard career path and 'other' those not willing or able to access such a path (Purcell 2007; Rossi 2008; Peters and Turner 2014). Teaching-focused academics are constructed as servicing the 'real' work of a department. Purcell (2007, 121) describes such staff as 'not *really* members' of the department, 'they move in the shadows, teaching the big introductory classes, providing indispensable service to the department, and drawing little in return' (Ibid, 121-122). Temporary teaching-focused contracts can act to marginalise through their precarity, the low regard in which teaching is held and because they can serve as a barrier (rather than a 'rite of passage', as working at the 'academic coalface' did) to a 'proper' academic career. Permanent teaching-focused contracts may offer a degree more stability but this stability is won through employment contracts and department cultures which construct these academics as servicing 'real' academic work, and do so in ways which condition future careers.

We begin by describing teaching-focused academics within the context of the wider UK Higher Education workforce. The data contributes to an already convincing case that disadvantage and reward are unevenly distributed between men and women (Maddrell et al 2015). We then draw on narratives of those in these roles to illustrate the processes which (re)inscribe their marginalisation. We end by outlining interventions at various scales which we believe would be effective in beginning to address the problems we identify. Like Shelton et. al. (2001) we write as a collective. In our case, we contribute as members of a network for academics with a teaching-focus in Geography, Earth, and Environmental Sciences (GEES). This paper contributes to our understanding of

academic complicity, or otherwise, in the project of neoliberalising the University (Posecznick 2014). Moreover, the experiences described are instructive in understanding the positioning of teaching and research, their relative valuation and what this means for our disciplines (Castree et al. 2008). We call for academics to re-examine our collective stories about standard academic career paths and our regard for teaching.

‘Unbundling’ teaching from academic work in UK Geography, Earth and Environmental Sciences (GEES)

A recent report highlights ‘the increasing differentiation and diversity of the profession and the gradual unbundling and disaggregation of academic work – not just the link between teaching and research, but of these core academic activities themselves’ (2014, 11). Teaching-only and teaching-focused contracts are becoming a key area in which academic work is differentiated and stratified. As Table 1 shows, teaching-only contracts form a substantial proportion of the academic labour market in the United Kingdom. The UK’s Higher Education Statistics Agency

(HESA) identifies nearly 47,000 staff on teaching-only contracts (2012/13). This figure excludes sessional lecturer and graduate teaching assistants (GTA). This represents about a third of all those teaching in British universities. In GEES subjectsⁱⁱ in 2012/13, teaching-only academics represent 26 per cent of all those who teach (again excluding sessional lecturers and GTAs), an increase from 18 per cent in 2007/08ⁱⁱⁱ.

Teaching only contracts are often fixed-term and the likelihood of this is growing. There has been a striking increase in the proportion of GEES academic staff in teaching-only roles on fixed-term contracts. In 2007/08, 58 per cent of all those undertaking teaching-only were employed on a fixed-term basis, but in 2012/13 this had risen to 75 per cent. In the same period, the proportion of research-only staff on fixed term contracts had fallen (from 73 per cent to 68 per cent), despite a similar rate of increase in the total number of staff employed in that function. In stark contrast, the figures for those on combined teaching and research contracts are remarkably stable.

Table 1: Academic staff in GEES Cost Centres by employment function and terms of employment, 2007/08 and 2012/13

Employment function	All UK HE, 2012/13	GEES subjects 2007/08		GEES subjects 2012/13	
	Number	Number	Percentage on fixed term contract	Number	Percentage on fixed term contract
Teaching only	46,795	760	58%	970	75%
Teaching and research	94,600	2,635	9%	2,760	9%
Research only	42,350	1,575	73%	1,860	68%
Teaching only staff as a percentage of those teaching	33%	18%		26%	

Sources: All UK HE: HESA 2014 in Locke (2014, 19); GEES subjects: HESA 2014, HESA 2011

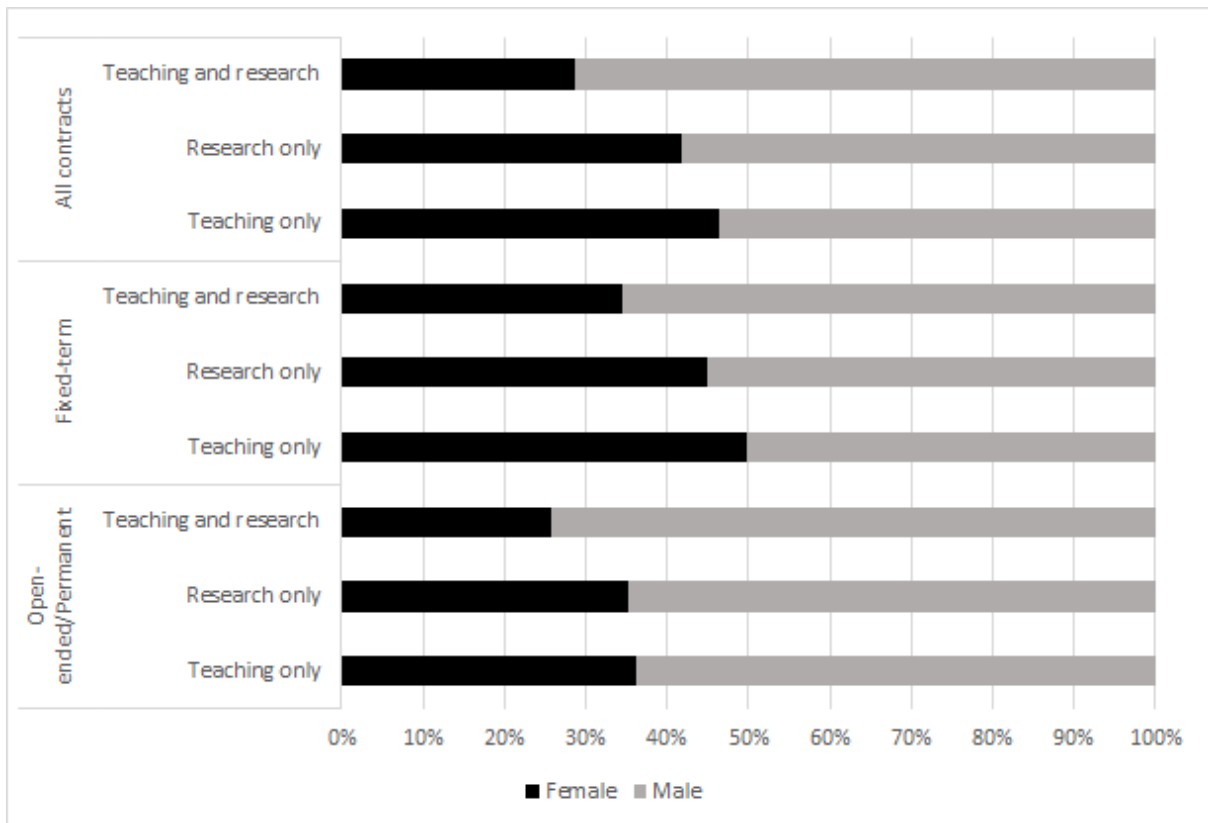
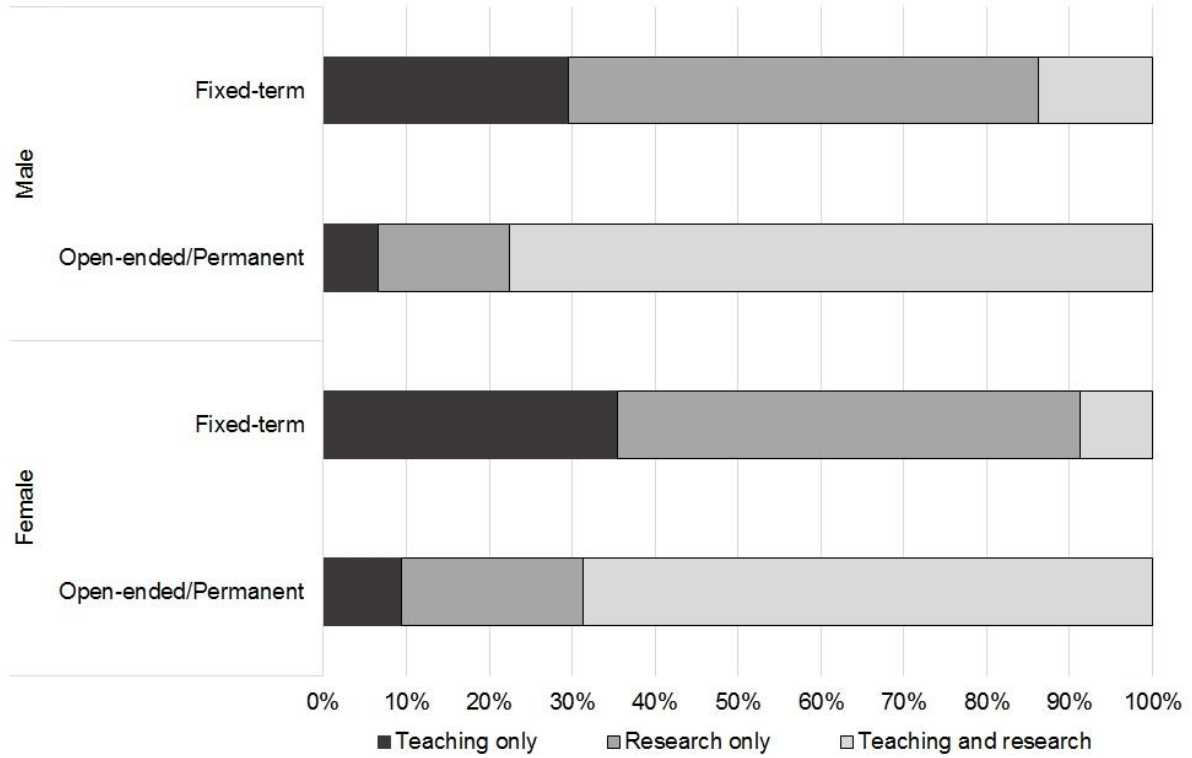


Figure 1: Academic employment function and terms of employment of staff in GEES subjects, by gender. Source: HESA 2014

Teaching-only contracts are disproportionately held by women. Figure 1 shows the gendered nature of the unbundling of academic work. There are fewer women overall, 35% of all staff with teaching and/or research responsibilities in GEES are women. However, women hold only 26% of open-ended teaching and research contracts but 50% of fixed-term teaching-only ones. They make up 28% of all those on teaching and research contracts (fixed and open-ended contracts) but 46% of all those on teaching-only contracts.

In order to illuminate the mechanisms of marginalisation for teaching-only academics we now turn to the narratives of those on teaching-only contracts. These contracts may appear to provide a firm footing in an academic career however the ground is unstable. It is difficult to make progress and disorientating because there seems to be no obvious route nor map to secure ground. Our shared cultural stories about a standard career path and relative valuing of teaching are fundamental to this experience. Like an area of quicksand, the dangers may not clear to those who observe from a distance. The growth of these contracts has been rapid. Much has changed since many established academics began their careers. Each stage of an academic career has its own attendant stress and anxiety (Dowling 2008) and the cultural stories we have about standard career paths are deeply embedded. Even where the problems are clear to others, they may feel powerless to enact change or support as they themselves have no map and are unsure what advice to give or interventions they could make. With that in mind we end our paper by suggesting interventions to address the problems we identify.

Our narratives were collected at a workshop organised to support academics on teaching contracts. The meeting, which was supported by the Higher Education

Academy (HEA), a UK body which champions teaching quality, was attended by 15 academics from across Scotland and England. The participants were from a range of universities (new and old, research-intensive and with a teaching focus). Two thirds of the participants were within five years of having completed their PhD. In discussions of our experiences participants at the workshop identified common themes that emerged. Three participants whose stories typified these themes volunteered to write narratives of their experiences. Autoethnography, with its requirement for the researcher to write “herself into the account of the phenomenon” (Hellsten et al 2011, 271), is emerging as a powerful methodology for investigating the neoliberal reconfiguration of the university (Purcell 2007; Rossi 2008; Peters and Turner 2014). Authorship of the narratives and the paper overlap but are not identical.

Danger! Quicksand

We structure this section using different types of contracts and illustrative narratives. Narratives which run counter to stories about the ‘standard’ academic career. It is important to understand the role that academic cultures play, alongside structural factors, in shaping these labour markets. Academic identities tend to obscure job function and contract type (Bauder 2006) which in practice normalises full-time permanent working conditions. Powerful cultural stories about ‘non-standard’ (or ‘not-standard-enough’) career paths and the deficiencies of those on them persist (Purcell 2007). The role such stories play in gendering academic careers is well-known, but both men and women find these assumptions working against them. These stories act as barriers at transition points, moments when the quicksand can be felt particularly keenly. Such transitions include (but are not limited to) the timing of applying for a permanent job, returning to work after periods of substantial caring

responsibilities, and moving between different types of institutions (Chappell et. al. 2009, Ecclestone, et. al. 2010; Kahn 2009). Challenging the stories and making visible the ways that they create and multiply disadvantage is a crucial step in expanding the possibilities for academic identities and careers.

Table 2: The Graduate Teaching Assistant's narrative

Working as a GTA I've marked hundreds of scripts and organised countless seminar sessions over the past few years. I have not always felt valued however I've loved every moment of it. Well, nearly all of it. I've relished my responsibility and enjoyed working closely with undergraduate students. It's been a pleasure. The line between 'donkey work' and career development is a fine one. In their investigation into perspectives of Graduate Teaching Assistants (GTA's) at a research-led institution Park and Ramos (2002, 47) suggest that GTA's felt like 'donkeys in the department'. They called for a 'nationwide discussion of the most appropriate role and framework for GTA's' to have any impact on redressing the strain of balancing a lack of autonomy with the pressures of work and responsibility (Park and Ramos 2002, 47). This is a conversation which needs to be had. Is there a donkey roaming your department?

Teaching as a PhD student (GTA) is often experienced as work 'at the coalface'. GTAs and sessional lecturers do not appear in the HESA data but theirs are important voices. This is often the first paid academic work people do. The ways that we construct teaching for our PhD students will be an important part of our disciplinary legacy. As academic labour markets have become more competitive, the 'coalface' now extends into PhD studies. Some experience of teaching could provide early career academics with

valuable experience. However, the risk of exploitation is a real one. It is important we ask questions about the type of teaching PhD students do, under what conditions, and whether this is gendered.

Table 3: Teaching on a temporary-contract narrative

I took on a role as a 60% part-time Teaching Fellow at the end of my PhD, starting the day after I submitted my thesis. It was my intention to run a 40% part-time research postdoc alongside the teaching, which I saw as an opportunity to create a sort of 'lectureship' role. I found that keeping the teaching within the contracted time was impossible. Field trips, marking, spending too long preparing for lectures all took up more time than full-time hours. I was even told that the research wasn't part of my job description and was distracting from the teaching role. I was able to deliver on the analysis required for the research, but neither the papers from my PhD or the postdoc. This was something I was embarrassed by, particularly in job interviews for teaching and research lectureships. It was a glaring hole in my CV and something that I was told made me not ready to hold a lectureship role. I thought I'd be trapped in fixed-term Teaching roles forever. Eventually, as yet another short-term teaching contract was up for renewal, I was advised at a workshop for teaching-focussed academics to turn the role around, and make it a selling point. I worked towards a Higher Education Academy (HEA) fellowship, I gathered evidence of my teaching abilities and sold that equally alongside my research abilities. This led to me securing a permanent teaching and research position at an institution who recognised that my time as a teaching fellow was a challenging, but ultimately positive experience which meant I was prepared to take on full teaching responsibilities and leadership roles.

In our cultural stories temporary contracts can serve as a stepping stone to a permanent teaching and research role.

They are, at best, an extended apprenticeship and, at worst, a chance to write papers from your PhD. Our cultural stories do not acknowledge the reality of many of these roles. Many employed on temporary contracts would recognise the axis of marginalisation the Contract and Research and Teaching Staff (whose story began this paper) identified in 2001: Invisibility, exclusion, isolation, exploitation, powerlessness. Temporary teaching contracts are the real ‘quicksand’ of an academic career.

The problem facing those in fixed-term, which are usually shorter than an academic year, is that these contracts work against gaining the skills and experience - in terms of research but also teaching - required to make the transition into an open-ended post. Publishing or developing new research proposals is actively discouraged for some temporary teaching-focused academics, with those applying for these roles being asked, for example, if they are happy to ‘give up their research careers’. Where it is not actively discouraged it may just be practically very difficult in the face of the demands of relocation and/or commuting, the first year of a job, and the need to look for employment beyond the current contract. Developing teaching skills (designing modules and assessment, deciding on appropriate teaching methods, reviewing pedagogic evidence) and experience can also be difficult if you have been appointed to cover someone else’s teaching, perhaps on a contract that starts at the same time as a new term. Contracts that are less than two years make working towards diplomas in HE teaching difficult and departments are unwilling to ‘invest’ in training or career development for these staff. Although teaching contracts ought to include time and resources for scholarship, as was the case for the authors of our narratives, this is rarely the case.

The experiences of permanent teaching-focused academics demonstrate that the

Table 4: The permanent teaching academic narrative

As a post-doc I felt I was on a standard career trajectory. I didn’t much enjoy the required mobility between cities and departments but it felt like a price worth paying. Then, with pregnancy and new parenthood, it felt undoable. I think education is a really important and rewarding part of an academic role. I went into a teaching-only position with my eyes open about the relative value of teaching. The irony is that teaching-focused roles are feminised but less compatible with caring responsibilities than teaching-research roles. I am more tied to campus, less able to work at home, unable to take school holidays off in term time, less able to organise my own time or reschedule work when my children are sick. I have not been de-skilled as a researcher in the couple of years I have been in a teaching-only position, however my employment status has far-reaching consequences. I am thought of differently. I am excluded from resources and opportunities which would support research or scholarship. I am allocated only two hours a week for the scholarship (researching and writing about education) which promotion requires. I have had application for department resources to support research and scholarship turned down because of my contract type. A decision to move to a teaching-focus job can feel irreversible.

earlier narratives pertain not just to casualisation but also to their status as teaching-focused in HE. The standard career story takes teaching-focused academics as being a ‘failed’ research academic — an understanding which serves to marginalise these academics and belies a failure of imagination about the meaning and importance of education. While appointment on a permanent contract at first appears like firm career footing, for many it soon becomes clear

that what follows is exclusion from resources to enable networking, time to pursue research or scholarship (writing grants and papers) and an institutional invisibility.

The landscapes of academic labour are changing and there is an urgent need to examine these changes. Academics, like other workers, are likely to experience many transitions throughout their careers and we need to extend our stories beyond standard/good and non-standard/'not good enough'. Universities, departments, and other academics benefit from the professional position and precarity of academics with teaching responsibilities. Shelton et al. (2001) suggest that the use of fixed-term and short-term contracts in higher education pointed to casualisation of the labour force in favour of universities holding greater flexibility in the Research Assessment Exercise (RAE), while Peters and Turner (2014, 2327) highlight the highly precarious experience of temporary teaching-only staff who are used strategically to allow departmental research activities to 'excel and accelerate' (particularly through teaching buy-outs built into large research grants; see also Ní Laoire and Shelton 2003, 99).

Teaching-focused contracts need to feature squarely on our disciplines' agendas. They need to be made visible and included in our discussions of academic work (Dowling 2008, Rose 2009). They need to be included in analysis of the gendering of academic work and institutions, and in the initiatives aiming to address inequality (Angervall et al 2005). We need to challenge the assumptions inherent in our stories about 'a standard career path' and make visible the effects of this story.

Interventions

In this section we suggest some interventions that might begin to address the issues we have highlighted (Table 5). We hope these might provoke

conversations in departments and beyond about the best ways to make visible our different experiences and make room for expanded understandings of academic careers, and for a collective response to what can often feel like individual predicaments (Bearman et al 2015).

The interventions suggested here demonstrate the need to network within and beyond an individual's own institution, to engage in supportive dialogue, to collect and present evidence of effective teaching practice and to gain professional credit for this, which has currency in the job market. These activities may provide a lifeline to prevent being caught in quicksand.

Conclusions

The closure of the Contract and Research Staff forum in 2005/6 suggests the difficulties of making a sustained contribution to academic life from a position of precarity and/or marginalisation. The numbers occupying such positions have grown in the ten years since the forum closed and make it more important that these voices are heard. These voices focus our attention on the gendering of academic work and the de-valuing of education in contemporary higher education structures. The gendered nature of teaching contracts should be a pressing issue for disciplinary communities and institutions, as should the relative valuing of teaching and research. Where we accept this hierarchy we do ourselves and our students a disservice. Teaching is not less inherently valuable than research. For most departments it is certainly not less economically valuable. Valuing teaching-focused academics is part of a wider project of valuing teaching in HE. Our network serves as a forum for discussing teaching and teaching-focused professional development. We call for everyone, in their everyday working practices, especially those with decision-making and budgetary control, to be

attentive to othering in their departments and address the valuing of teaching in a proactive way.

Table 5: Interventions

As an individual	Understand the nature of evidence used to evaluate teaching excellence across the sector (HEA, 2013) and in your institution. Create a portfolio of evidence. Tell people about your projects and successes (webpages, twitter, emails). Join and contribute to networks (see below). Find out if there are professional standards frameworks in the country you work in. In The UK there is professional standards framework which allows teachers to gain accreditation and progress through associate, fellow, senior fellow and Principal fellow of the HEA, to demonstrate external recognition of the status of teaching and learning (HEA 2011).
At the departmental or equivalent level	Review differential access to resources, including for temporary staff. Ensure oversight of what temporary staff and GTA are asked to do, include work that has direct benefit to them. Include teaching-focused academic roles on Equality and Diversity and Athena Swan Charter agendas. Ensure mentoring of junior staff by more senior colleagues, consider including senior teaching-focused staff from outside the department. Create (in)formal education seminars; exchange best practice and create time for strategic and professional development. Support teaching-focused staff by allowing access to, and encouraging, relevant training, including academic practice diplomas, professional standards applications, pedagogic research grant applications and pedagogic research leave.
At the Institutional level	Support the interventions suggested at departmental level as part of a commitment to gender equality. Review routes to progression in academic careers. Distinct tracks, which reduce the ability to shift between teaching-focussed and research-focussed pathways (Cashmore et. al. 2013) should be evaluated for their gender impact.
Networks	<p>THE GEES (Teaching-focused in HE) network can be used to contact others and share information, get feedback from peers, organise/take part in skype reading groups and to write collaborative publications (Bearman et al 2015; THE GEES network 2015).</p> <p>The International Network for Learning and Teaching in Geography in Higher Education (INLT) is a way to engage with a professional and international community of people researching their own teaching practice. The network has produced a book and numerous journal articles from 12 international workshops since 1999. The International Society for the Scholarship of Teaching and Learning (ISSOTL) has pre-conference international collaborative writing workshops and a journal called Teaching and Learning Inquiry.</p>
Learned Society	<p>Research, study and working groups of learned societies provide sub-disciplinary focused professional networks for collaborative work and support.</p> <p>In the UK the RGS-IBG, Institution of Environmental Sciences, Geological Society and other professional bodies provide online materials and one day meetings to support teaching focussed academics as well as discipline specific training courses.</p>

References

- Angervill P Beach D and Gustafsson J** 2015 The unacknowledged value of female academic labour power for male research careers *Higher Education Research and Development* (article in press)
- Bauder H** 2006 The segmentation of academic labour: A Canadian example *ACME* 4 228-39
- Bearman N Dyer S Walkington H and Wyse S** 2015 The power of collective tactics: A response to Peters and Turner *Environment and Planning A* 47 4 1015-16
- Cashmore A Cane C and Cane R** 2013 *Rebalancing promotion in the HE sector: is teaching excellence being rewarded?* Higher Education Academy, York <http://www.heacademy.ac.uk/node/4267> Accessed 24 February 2015
- Castree N Fuller D Kent A Kobayashi A Merrett C D Pulido L and Barraclough L** 2008 Geography, pedagogy and politics *Progress in Human Geography* 32 680-718
- Chappell C Scheeres H Boud, D and Rooney D** 2009 Working out work: integrated development practices in organizations in **Field J Gallacher J and Ingram R** eds *Researching Transitions in Lifelong Learning* Routledge, London 175-188.
- Coalition on the Academic Workforce** 2012 *A Portrait of Part-Time Faculty Members: A Summary of Findings on Part-Time Faculty Respondents to the Coalition on the Academic Workforce Survey of Contingent Faculty Members and Instructors* [online] http://www.academicworkforce.org/CAW_portrait_2012.pdf Accessed 4 February 2015
- Dowling R** 2008 Geographies of Identity: Labouring in the 'neoliberal' university *Progress in Human Geography* 32 6 812-20
- Ecclestone K Biesta G and Hughes M** 2010 eds *Transitions and Learning through the Lifecourse* Routledge, London
- Ellis C** 1999 Heartful Autoethnography *Qualitative Health Research* 9 5 669-683
- Hall T Toms P McGuinness M, Parker C and Roberts N** 2015 Where's the Geography department? The changing administrative place of Geography in UK higher education *Area* 47 56-64
- Higher Education Academy (HEA)** 2013 Promoting Teaching: Making evidence count [online] https://www.heacademy.ac.uk/sites/default/files/making-evidence-count-web_0.pdf Accessed 16 October 2015
- Higher Education Academy (HEA)** 2011 The UK Professional Standards Framework for teaching and supporting learning in higher education [online] https://www.heacademy.ac.uk/sites/default/files/downloads/ukpsf_2011_english.pdf Accessed 01 December 2015
- Higher Education Statistics Agency (HESA)** 2014 *HESA Staff Record 2012/13* Higher Education Statistics Agency Limited, Cheltenham
- House of Commons Science and Technology Committee** 2002 Short-term research contracts in science and engineering. Eighth report of session 20112-02 The Stationery Office Limited, London
- Kahn P** 2009 Contexts for teaching and the exercise of agency in early-career academic: Perspectives from realist social theory *International Journal for Academic Development* 14 3 197-207
- Locke W** 2014 Shifting academic careers: implications for enhancing professionalism in teaching and

- supporting learning. Higher Education Academy, York
- Maddrell A Strauss K Thomas N and Wyse S** 2015 Mind the gap: gender disparities still to be addressed in UK Higher Education geography *Area*
- Ní Laoire C and Shelton N J** 2003 'Contracted out': Some implications of the casualization of academic labour in geography. *Area* 35 92-100
- Park C and Ramos M** 2002 The Donkey in the Department? Insights into the Graduate Teaching Assistant (GTA) experience in the UK *Journal of Graduate Education* 3 47-53
- Peters K and Turner J** 2014 Fixed-term and temporary: teaching fellows, tactics, and the negotiation of contingent labour in the UK higher education system. *Environment and Planning A* 46 2317-31
- Posecznick A** 2014 Introduction: On Theorizing and Humanizing the Politics of Complicity in Higher Education. *Learning and Teaching: The International Journal of Higher Education in the Social Sciences* 7 1 1-11
- Probert B** 2013 Teaching-focused academic appointments in Australian universities: recognition, specialisation or stratification? Department of Education Office for Learning and Teaching
- Purcell M** 2007 "Skilled, cheap, and desperate": Non-tenure-track faculty and the delusion of meritocracy *Antipode* 39 121-43
- Gill R** 2009 Breaking the silence: The hidden injuries of neo-liberal academia in **Flood R and Gill R** Eds *Secrecy and Silence in the Research Process: Feminist Reflections* Routledge, London <http://platform-hnu.nl/wp-content/uploads/2015/05/gill-breaking-the-silence-2.pdf>
Accessed 24 February 2015
- Rossi U** 2008 Being here and there: In-betweenness, double absence, and the making of a multi-layered academic citizenship *Area* 40 401-06
- Shelton N** 2014 Personal conversation.
- Shelton N Ní Laoire C Fielding S Harvey D C Pelling M and Duke-Williams O** 2001 Working at the coalface: Contract staff, academic initiation and the RAE *Area* 33 434-39
- Sidaway J D** 1997 The Production of British Geography *Transactions of the Institute of British Geographers* 22, 4, 488–504
- Sidaway J D and Johnston R J** 2007 Geography in Higher Education in the UK. *Journal of Geography in Higher Education* 31 57 - 80
- THE GEES network** 2015 Teaching-focused in HE: THE GEES network [online] <https://teachingfocusedgeesnetwork.wordpress.com/> Accessed 01 December 2015
- Wainwright E, Barker J, Ansell N, Buckingham S, Hemming P and Smith F** 2014 Geographers out of place: institutions, (inter)disciplinarity and identity *Area* 46 410–17

ⁱ Jobs which are on non-academic contract but in which people perform academic-related work or aspects of the academic role (Locke 2014, 11).

ⁱⁱ Defined using the UK's Higher Education Statistics Agency's cost centres (111: Earth, marine & environmental sciences and 124: Geography & environmental studies in 2012/13, and 28: Geography and 14: Earth, Marine and Environmental Sciences in 2007/08). Cost-centre definitions change but HESA data is the most complete for analysis. For a fuller discussion of this problem, see Hall et al, 2015 and Wainwright et al, 2014.

ⁱⁱⁱ HESA's standard rounding methodologies have been applied. HESA cannot accept responsibility for inferences derived from the data.