
NOTES AND ISSUES

Social Science Contract Researchers in Higher Education: Perceptions of Craft Knowledge

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The past two decades have witnessed a trend towards the use of fixed-term and part-time contracts in higher education in the UK, where over a third of routine academic work is now carried out by staff on fixed-term contracts (Ainley 1994). As Kogan *et al.* (1994: 53) have noted, this increased casualisation of academic labour has been driven by the need for universities and colleges to reduce labour costs. The move towards a more 'flexible' and cheaper workforce is largely a response to governmental resource restrictions and the need to cope with increased student numbers (Kogan *et al.* 1994). In order to cope with financial pressures, universities have increasingly sought to diversify their funding and become more entrepreneurial in attracting income from sources other than the government (Wasser 1990; Ziman 1991). External research grants and contracts play an increasingly important role in the finances of many institutions, with a concomitant rise in the number of researchers employed on fixed-term contracts.

In the UK, numbers have been growing since the 1970s (Norris *et al.* 1992), with currently over 35,000 of these researchers across all academic disciplines. In 1995/96, nearly 4,000 academic staff in the social sciences were on fixed-term contracts, which included a research element, and 2,400 of these were employed exclusively on research (HESA 1995/96). Moreover, there are indications that the occupational structure of contract research reflects wider social disparities, with women under-represented at senior research grades and over-represented at junior levels (Court *et al.* 1996: 25).

Despite increasing numbers of contract researchers, their importance for the research profile of universities and colleges and the publication of a concordat on their career management (CVCP 1996), relatively little research has been published on the occupational lives of this marginalised group. Knowledge generally centres upon the inequalities suffered by fixed-term staff in comparison to academics employed on 'permanent' contracts. Poor salaries, reduced holidays and sickness benefits, lack of security, little if any career development, and inadequate pension provision

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are some of the factors which make it difficult for most researchers to tolerate their marginalised status for the duration of a 'career' in academia. It is considered an inefficient system for training and maintaining a skilled research workforce (NATFHE n.d; Norris *et al.* 1992; Ransom 1992; AUT 1995) when so many well-qualified, trained researchers are driven to leave research at a relatively early age due to lack of economic security. Additionally, it is also highly wasteful for the higher education system when the employment of skilled and talented researchers is so fragmented (Pettigrew 1994), and the quality of research output is negatively affected by researchers' worries about job security (NATFHE 1995).

Contract researchers represent a 'growing pool of expertise' (Pettigrew 1994: 48), and yet little is known about the intricacies and complexities of their occupational lives (Brown 1994). As Delamont *et al.* (1994) have observed, knowledge about the reproduction of academic occupational culture is sparse, and has concentrated upon teaching staff, paying scant attention to other occupational cultures within the higher education sector (Delamont 1996).

The Research

With the aim of beginning to fill this lacuna, a pilot study of the experiences of contract research staff was initiated in 1994–5¹, involving interviews with 61 social science contract researchers, 59 employed at 11 United Kingdom universities, one currently unemployed, and one, with considerable experience within the UK, employed at an overseas university. The profile of the researchers studied is given in Table 1.

Initially, judgment sampling (Burgess 1984), sometimes termed criteria sampling (Creswell 1998), was employed to select a group of 61 contract researchers who were widely variable in terms of:

- (i) age (21 to 53);
- (ii) experience (novice research assistants on their first contract to senior research fellows with over a decade of experience); and
- (iii) contract type (covering contracts of 3 years or more, to those based on a daily or hourly contract).

Snowball sampling (Creswell 1998) supplemented the initial trawl so that eventually 11 UK university sites were selected. The sample covered traditional academic social science departments (n=10) and specialist research centres (n=10), in the fields of sociology, socio-legal studies, social work and policy, politics, psychology, planning and education. Researchers' intellectual backgrounds also included social anthropology and the humanities. The objective was to capture a wide spectrum of contract research experience within the time and resource constraints of the study.

Table 1 Basic profile of contract researchers studied, N=61

<i>Gender</i>	Female	Male		
Numbers	37	24		
<i>Age of researcher</i>	20–30	31–40	41–50	50+
Numbers	17	18	20	6
<i>Qualifications held</i>	First degree	Master's	Doctorate	Professional/other
Numbers	52	20	15	21
<i>Grade/Title</i>	Research Assistant	Research Associate	Research Fellow	Senior Research Fellow
Numbers	14	12	30*	4
<i>Experience of CR</i>	1–3 years	4–6 years	>6 years	
Numbers	25	16	20	

* plus one currently unemployed Research Fellow.

Interviews were in-depth, semi-structured and tape recorded. Details of names and places have been changed in the following excerpts from transcripts to protect the identity of interviewees. A classic methodological problem with interview-based research is the reliability of self-reporting, in that respondents do not always do or say what they say they do. The analysis was therefore based upon the *accounts* or *narratives* (Cortazzi 1993) which contract researchers presented. Due to resource constraints, it was not possible to engage in participant observation in order to compare researchers' accounts with their actions or across contexts (Delamont *et al.* 1998: 158). In such circumstances, as Gilbert and Abell (1983: 2–3) point out, 'accounts are all we have to work with and shaky inferences to what is/was really going on should be dispensed with, as a pointless metaphysical exercise'.

The purpose of the pilot project was not to generate statistical generalisations, but to explore the complexities of contract researchers' working practices and their subjective experiences of contract work. In common with much qualitative research, extrapolation from the data relies on 'the validity of the analysis rather than the representativeness of the events' (Mitchell 1983: 190) and no attempt has been made to claim representativeness of the sample or generalisability of the findings to the general population of contract researchers. However, the group studied was extensive enough to reveal significant similarities and differences in experiences.

This paper focuses upon the researchers' perceptions and understandings of the knowledge and skills they acquired via contract research.

Firstly, the nature of these occupational competencies and the context within which they are acquired will briefly be portrayed. Second, the differing entry routes and amounts of academic capital (Bourdieu 1988) researchers possessed will be examined. Third, links will be suggested between the possession of academic capital and the meanings researchers attributed to the knowledge and skills they acquired.

Occupational Competencies Under Pressure

Amongst the researchers studied, technical knowledge was operationalised in the form of skills such as designing research, data collection, data analysis and the presentation of findings. As none of the departments or centres in the study provided formal research training programmes, the researchers generally acquired technical knowledge informally 'on the job'. Other informal or 'tacit' knowledge (Gerholm 1990; Allen-Collinson and Hockey 1998) was used with the aim of continuing employment in an insecure occupational realm. For example, researchers learned how to 'hustle' for research funds in order to prolong their employment (Allen-Collinson and Hockey 1998).

The application of this combination of formal and informal knowledge constitutes the contract researcher's craft, developed and refined within an environment often characterised by sustained pressure. The nature of most social science contract research forces researchers to work to tight deadlines. The completion of a timely and adequate report is, understandably, a pervading concern, firstly in order to meet the requirements of the sponsor, and secondly, but no less importantly, with an eye to continuing their employment. Failure to produce competent output may well result in damage to the researcher's own reputation and also to institutional relationships with sponsors.

Interviews revealed that pressure was endemic within the contract research milieu. At the 'luxury' end of the contract research spectrum, were those contracts funded by bodies such as research councils for three years or longer, with provision for salary increments, pension contributions and other benefits. In contrast, the majority of contracts are of shorter duration and less secure. Amongst interviewees, it was not unusual practice to be paid on a part-time hourly rate, without advance knowledge of the number of hours required, in some instances from day to day. Several researchers were employed simultaneously on research projects at different universities. There were numerous instances of researchers being assigned relatively major responsibilities at the novice stage (usually research assistant) of their career. The craft knowledge and skills of contract research are then often developed 'on the job' in a highly pressurised and insecure context.

Routes to Research and Academic Capital

Of significance to the process of acquiring research expertise is the specific occupational entry route. The majority of the interviewees possessed degrees in social science disciplines. A substantial proportion had professional qualifications in areas related to applied research, such as education, law and social work. A small number had entered social science research subsequent to a first degree outside social science, whilst a smaller number had entered research via what might be termed 'unorthodox' routes. Thus, 3 (5 per cent) of the researchers (all women) had originally commenced work on a project in a secretarial capacity and then transferred to the role of researcher for a variety of reasons, including staff shortages, combined with a recognition of their research skills. On occasion staff had occupied dual roles (secretary and researcher) for a limited duration. In a similar vein, 2 male researchers (3 per cent) had started as technicians, servicing research projects in computing or quasi-experimental areas of study, and had incrementally taken on more research-specific functions, before achieving full researcher status.

Consonant with the different routes of entry were differing amounts and kinds of academic capital (Bourdieu 1988). Those without higher education qualifications often had little understanding of the research process prior to their practical involvement in research projects. Researchers with qualifications outside of social science did bring with them an armoury of theoretical and conceptual disciplinary knowledge. Consequently, the learning of social science equivalents, whilst demanding, was not a completely unfamiliar cognitive process. What was unfamiliar and demanding was the acquisition of knowledge and skills under pressure. This also applied in part to researchers whose formal education was of a professional or practitioner orientation, where there was little evidence of prior acquisition of research knowledge or skills.

Finally, there were what might be termed traditionally trained researchers with degree(s) in social science, and a spectrum of research experiences, ranging from undergraduate research projects to original doctoral research. These researchers brought to contract work the depth and breadth of knowledge attained through disciplinary socialisation. For this group, contract research involved learning how to undertake a particular kind of research, one which was relatively constrained and pressurised compared to their previous experiences.

Skill, Upskill and Deskill

Different entry routes, amounts and kinds of academic capital and the individual's 'career trajectory' (Hodkinson and Sparkes 1997) influenced the meanings ascribed by researchers to the skills and knowledge they developed via contract research. 'Career trajectory' may however be a

problematic concept, specifically in relation to contract researchers, as it implies a degree of determinism about choices made and a certain predictability concerning the pathways embarked upon (Hodkinson and Sparkes 1997). It became apparent from the interviews that the element of predictability in terms of the immediate future, let alone a distant 'career' pathway, is often sadly lacking in contract researchers' occupational lives.

For those who entered the occupation possessing no higher education qualifications and for whom a career or job in academia had not been considered a possibility, taking on the researcher role and developing research craft were viewed as positive steps on the career path:

I got myself a place on a community programme, manpower services scheme. It was funded for long-term unemployed people and we were doing data preparation for the University of . . . We were just running the computers and running statistics, and because I had got this statistics 'A' level there were some areas where I was very useful to the health researchers . . . That (contract research) started as a part-time job (Research Associate, academic department).

The ability to manage the interactional, technical and analytical dimensions of research was perceived very much as a process of becoming *skilled*, an upgrading of their capacities in a direction not previously envisaged. Moreover, they perceived positively the attainment of competency in an activity normally reserved for individuals with higher education qualifications who then became defined as equals, colleagues and peers. For these 'unorthodox' entrants to contract research, craft acquisition was strongly connected with a bolstered occupational self-image (Becker 1977). This was perceived as a move up the organisational hierarchy usually from 'assistant' or 'support' staff status, despite the insecure and marginal position of contract researchers in that hierarchy. Possessing no prior knowledge of the research process, nor a disciplinary conceptual or theoretical armoury, the learning curve for such researchers was often very steep, whilst the transition to contract researcher was extremely positive in meaning.

Interviewees with professional or occupational experience in areas such as education, social work or law brought a combination of practitioner experience and theoretical knowledge to the new research domain. One of the principal motives for entering and tolerating such a marginal status, with its attendant insecurities, was articulated as the desire to promote social and political change in areas such as schooling, housing, criminal justice, and so on. This was linked to conceptions of occupational self which valorised a concern for social justice. Contract research was perceived as an opportunity – practically and positively – to influence the fields in which these researchers had originally trained, and offered a vehicle for engagement with specific policies and practices identified as in

need of improvement or transformation. One Research Fellow (academic department) emphasised the importance of being able to influence practitioners:

I'm a specialist in helping practitioners, that's how I see myself . . . You really feel here you are making a difference, that people (practitioners) actually do listen to what you say.

These researchers viewed their research as an instrument of change (c.f. Carr and Kemis 1986; Whyte 1991). As a result, the acquisition of the research craft which empowered them to promote such change was regarded as a valuable addition to the array of practitioner, professional knowledge and skills they possessed *a priori*. and therefore a process of *upskilling*.

In contrast, the group of researchers from the humanities and social sciences, who constituted the majority of the sample, tended to articulate rather more ambivalence towards the development of contract research craft. A strong influencing factor was the degree to which they adhered to their former intellectual and disciplinary identity. A number of immediate practical problems detrimentally affected disciplinary identification. Interviewees indicated that pressures to meet deadlines were often intense, and that production of a research report for the sponsor held top priority. This pressurised context usually precluded an allowance of time to conceptualise or theorise from the data using disciplinary resources, as one researcher lamented:

What you find is that most research funders will not pay you to do things that they are not directly interested in. So what they do is calculate the time for the job . . . and that's what they pay for . . . As I said, it was a bit of a shock me thinking I was going to be able to use the theories I had just spent four years learning how to use, and then finding there was no time to do that on the project (Research Fellow, research centre).

No time was usually 'budgeted in' for such intellectual activity, because the vast majority of sponsors had no interest in what might be termed more academic or theoretical output. In addition, economic necessity often meant that researchers had to pursue a new contract well before the end of the current project. Where some time could be extracted from a project, there was an overwhelming consensus that this time should be devoted to drafting proposals for funding, in order to secure employment. The understandable fixation with economic survival and the need to sell one's skills were noted by all those interviewed, for example:

In a sense, agencies don't pay me to write chapters in books or articles, they pay for the report. So, in order for me to keep working I've got to get more money from another agency . . . So in some respects my first interest is not data to write academic articles. I almost run as a business basically . . . my first priority is to provide people with what they want (Research Fellow, academic department).

Inevitably this reduced the likelihood of academic research output. A further factor was the extent to which the original project research design permitted the generation of publishable academic material. Initial contractual arrangements with sponsors rarely included an allowance for this kind of output. With the major exception of the Economic and Social Research Council (ESRC) grants which encourage dissemination in this way, the obligations and temporal limits of most research contracts generally precluded the production of academic output:

If you manage to get an ESRC grant that's the luxury end of the market. In a way it's as near as you are going to get to academic research, because they are interested in that kind of output, and the people who referee your funding applications are expecting you to situate your research theoretically and conceptually. You know yourself that with the rest of it, the vast majority of sponsors have no interest in that kind of material, so their original project specifications exclude it (Research Fellow, research centre).

Researchers articulated different levels of expectation in relation to using disciplinary knowledge. In general, the less cognate the background was to social science, the less the expectation that disciplinary knowledge would be utilised. Inevitably, perhaps, the lower the expectations, the less the disappointment experienced by researchers who were unable to make direct use of disciplinary knowledge. Of more immediate concern to this group was the development of competence in the complexities of their new craft, and this was perceived positively, as a process of becoming *skilled*.

A similar perception was held by researchers with social science backgrounds. These individuals were still required to learn new aspects of the research process relevant to the domain of contract research. Differences in perception were discernible within this group and interviews revealed a correspondence between the intensity and duration of disciplinary socialisation (Delamont *et al.* 1997a; 1997b) and the degree of disappointment articulated, so that those with first degrees exhibited less frustration than those with master's degrees or doctorates. Although all social science interviewees perceived the learning of contract research craft as a process of *skilling*, those with more advanced disciplinary socialisation also perceived a simultaneous *deskilling*. On the one hand, researchers were developing and refining the methodological tools of their craft, whilst on the other hand they perceived their stock of disciplinary conceptual and theoretical devices to be subject to gradual erosion over time:

Interviewer: So what's happened to psychology?

Interviewee: Well it's gone to sleep I think! The reason he (research director) hired me in the first place was because I came from psychology and he wanted somebody who had a psychology approach to talk to people . . . I was very

interested in that, but I dropped that altogether. I've even blanked it out, because I can't remember much about it at all now, although I knew so much, I really was on top of that, and it's just gone (Research Fellow, academic department).

For individuals with a prolonged disciplinary socialisation and expectations of a career in a particular subject area, the attenuation of theoretical knowledge was a difficult and painful process involving loss of hard won intellectual resources, and also a certain loss of intellectual identity and of self-confidence.

In terms of occupation, right now I'm a contract researcher; intellectually somewhat ambiguous because I'm academically trained to do something completely different . . . Well, now I feel sad about it . . . sometimes you think to yourself, 'I should have applied for the jobs I see teaching' . . . which I wouldn't apply for now because I don't feel confident enough . . . Intellectually, being in contract research does mess you about (Research Fellow, research centre).

Data revealed that individuals who had so far managed to evade the process of disciplinary deskilling were those whose careers displayed particular characteristics. The majority of those who had been employed at the grade of Research Fellow or Senior Research Fellow for a number of years had managed to develop sufficient expertise and control over their labour process to generate for themselves time for academic writing and publishing.

Another factor which helped researchers achieve academic output was sustained employment in a single centre where the management encouraged academic output and efforts were made to schedule in some opportunities for publishing. It was evident that researchers' control over their labour process was dependent upon the development of a high degree of craft competence which subsequently enabled them to remain in jobs where academic output was possible. However, as others have noted in the context of careers, happenstance or serendipity were also important factors (Miller 1983; Hodkinson and Sparkes 1997).

For the majority interviewed, opportunities for academic output were rare. Perhaps the most oft-repeated response from all researchers, when questioned about their work practices, was their manifest concern at the lack of time available across all research activities. The highly pressurised nature of contract research was emphasised by many, including this Research Fellow (research centre):

Ideally it would all be nicely planned and we'd all be getting ESRC money for nice long-term bits of work . . . but in actual fact what we are doing is constantly reacting to tenders, for pieces of work that are not often what I would call research at all, rather a lot of it is consultancy, and they (sponsors) come in with ridiculous time scales . . . and it's so competitive . . . And then there's all the pressures that everybody longs to turn their work into academic publications, which is very difficult when you're talking repeated short tendering and completion for local authority work.

A further influence upon perceptions of occupational self operated irrespective of entry route to contract research. The conditions of contract research commonly produce a pattern of employment where researchers are obliged to work on a series of unrelated projects in a variety of subject areas. This fragmented employment pattern almost inevitably results in the gradual diminution of any real claim to a specific area of expertise. Experienced researchers were well aware of the pitfalls of this trend, which was viewed with trepidation as a dangerously *deskilling* process, both by those forced into such diversity of work and by those whose career paths thus far had avoided it. The sheer wastefulness and frustration of fragmented employment and resultant deskilling are captured in the comments of a Research Fellow (academic department):

I started to apply for research jobs in other places, although I was already beginning to feel I couldn't face too much more dislocation . . . It's destructive in that you build up a certain amount of expertise in your area, then you chuck it and it goes down the tube. It seems really wasteful that you should have to do that. You build up the expertise, you do the reading, you get to know what's involved in the area, then that turns to dust, and you're on to the next project . . . whatever that is . . . In effect you're deskilled every time you move jobs . . . you really feel that every time you start off, you're sort of demoted again to somebody who is really to do the ground work. And it's the constant, sort of, being brought down to somebody who knows nothing about what they're doing; it's very demoralising.

Despite the negative consequences of such fragmented employment, interviewees also maintained that the diversity of jobs helped generate flexibility, craft competence and a high level of skill across a variety of research contexts. Yet they were keenly aware that the possession of a specialism was a significant factor in obtaining long-term employment within contract research, or more optimistically in transferring to a career in mainstream academia:

My research pedigree is a pig's ear . . . in that I've got too many specialisms, I mean I've done too many things so nobody's going to believe that I'm a specialist in any of those things. I might know as much as any one person about an area, but I'm not going to be seen in that way. I'm going to be seen as somebody doing different things, somebody with multiple skills rather than somebody who is an expert in something particular (Research Fellow, research centre).

Conclusion

In conjunction with large numbers of fixed-term and 'casual' teaching staff (Cutler *et al.* 1997), contract researchers form part of a marginalised labour force whose work is nevertheless central to the work of higher education institutions. Although contract researchers constitute a relatively homogeneous group in relation to certain structural features (such

as inferior salaries, employment conditions and status), interview data identified significant differences in biographical features such as educational level, disciplinary identification, motives for entering contract research and occupational expectations. Analysis revealed a relationship between these features and researchers' perceptions of the knowledge and skills gained and lost whilst undertaking contract research work.

Many researchers considered themselves to have become deskilled in relation to their subject area, whilst simultaneously being upskilled in terms of the generic craft practices needed to complete contract research in a pressurised environment. Others evidenced frustration and a sense of deskilling at being forced to move between projects, with a resultant loss of subject expertise. In contrast, there were researchers who had entered the occupation with little academic capital or expectations of a career in academia and consequently viewed the accumulation of research craft knowledge and practice very positively as a skilling process.

This paper has portrayed some of the complexities of social science contract researchers' lives, encompassing the relationships between their routes to research, their possession of academic capital and the meanings they attach to the skills and knowledge of their craft. Further analysis of the project data will, it is hoped, chart connections between these factors and levels of work performance in contract research.

The major managerial challenge facing higher education over the next decade and a half has been identified as the need 'to ensure that it can recruit, retain, and motivate staff' (Keep and Sissons 1992: 67–68). There is now a pressing need for research on the complexities of contract researchers' occupational lives and everyday working practices in order to inform policy at both national and institutional level, if the higher education sector is seriously committed to retaining and motivating these staff, and to achieving a real improvement in their employment conditions and marginalised position. Currently there is no evidence to suggest that any meaningful policies have been implemented in order to ameliorate the harsh reality of many contract researchers' working lives (Bryson 1999).

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1. The research team comprised the author and Dr J. Hockey.

References

- Ainley, P. (1994) *Degrees of Difference: higher education in the 1990s*, London: Lawrence & Wishart.
- Allen-Collinson, J. and Hockey, J. (1998) 'Capturing contracts: informal activity among contract researchers', *British Journal of Sociology of Education*, 19, 4, 497–515.
- Association of University Teachers (AUT) (1995) *Commitment Betrayed*, London: AUT.
- Becker, H. S. (1977) *Sociological Work – Method and Substance*, New Brunswick, N.J.: Transaction Books.
- Bourdieu, P. (1988) *Homo Academicus*, Oxford: Polity Press.
- Brown, A. (1994) 'Being A Researcher', in R. G. Burgess (ed.), *Studies in Qualitative Methodology*, Vol. 4, London: JAI Press.
- Bryson, C. (1999) 'Contract Research: the failure to address the real issues', *Higher Education Review*, 31, 2, 29–49.
- Burgess, R. G. (1984) *In the Field*, London: Routledge.
- Carr, W. and Kemmis, S. (1986) *Becoming Critical*, Lewes: Falmer.
- Cortazzi, M. (1993) *Narrative Analysis*, London: Falmer.
- Court, G., Rick, J., Dench, S., La Valle, I. and Moralee, J. (1996) *Equal Opportunities in Social Science Research Careers*, Brighton: Institute for Employment Studies.
- Creswell, J. W. (1998) *Qualitative Inquiry and Research Design*, London: Sage.
- Cutler, T., James, P. and Waine, B. (1997) 'Atypical Employment and the New Universities: the case of part-time staff', *Higher Education Review*, 29, 23–40.
- Delamont, S. (1996) 'Just Like the Novels? Researching the Occupational Culture(s) of Higher Education', in R. Cuthbert (ed.), *Working in Higher Education*, Buckingham: SRHE/Open University Press.
- Delamont, S., Parry, O., Atkinson, P. and Hiken, A. (1994) 'Suspended Between Two Stools: doctoral students in British higher education', in A. Coffey and P. Atkinson (eds.), *Occupational Socialization and Working Lives*, Aldershot: Avebury.
- Delamont, S., Atkinson, P. and Parry, O. (1997a) 'Critical Mass and Doctoral Research: reflections on the Harris Report', *Studies in Higher Education*, 22, 3, 319–331.
- Delamont, S., Parry, O. and Atkinson, P. (1997b) 'Critical Mass and Pedagogic Continuity', *British Journal of Sociology of Education*, 18, 4, 533–549.
- Delamont, S., Parry, D. and Atkinson, P. (1998) 'Creating a Delicate Balance: the doctoral supervisor's dilemmas', *Teaching in Higher Education*, 3, 2, 157–172.
- Gerholm, T. (1990) 'On Tacit Knowledge in Academia', *European Journal of Education*, 25, 263–271.
- Gilbert, G. N. and Abell, P. (eds) (1983) *Accounts and Action*, Aldershot: Gower.
- Higher Education Statistics Agency (HESA) (1995/6) *HESA Staff Record 1995/6*, Cheltenham: HESA.
- Hodkinson, P. and Sparkes, A. C. (1997) 'Careership: a sociological theory of career decision making', *British Journal of Sociology of Education*.
- Keep, E. and Sissons, K. (1992) 'Owning the Problem: Personnel Issues in Higher Education Policy-Making in the 1990's', *Oxford Review of Economic Policy*, 8, 2, 67–78.
- Kogan, M., Moses, I. and El-Khawas, E. (1994) *Staffing Higher Education: Meeting New Challenges*, London: Jessica Kingsley.
- Miller, M. (1983) 'The Role of Happenstance in Career Choice', *Vocational Guidance Quarterly*, 32, 16–20.

- Mitchell, J. C. (1983) 'Case and Situation Analysis', *Sociological Review*, 31, 187–211.
- National Association of Teachers in Further and Higher Education (NATFHE) (n.d) *A NATFHE Response: Career Management of Contract Research Staff in Universities and Colleges*, London: NATFHE.
- National Association of Teachers in Further and Higher Education (NATFHE) (1995) *Research Staff in the New Universities and Colleges of Higher Education*, London: NATFHE.
- Norris, N., Davies, R., Pettigrew, M. and Kushner, S. (1992) *Research Careers in the Social Sciences*. A Policy Review Paper for the ESRC, Norwich: Centre for Applied Research in Education, UEA.
- Pettigrew, M. (1994) 'Coming to Terms with Research: The Contract Business', in D. Halpin and B. Troyna (eds), *Researching Education Policy: Ethical and Methodological Issues*, London: Falmer Press.
- Ransom, S. (1992) *The Management and Organisation of Educational Research*, Report to the Economic and Social Research Council Educational Research Working Group, Swindon: ESRC.
- Wasser, H. (1990) 'Changes in the European University: from traditional to entrepreneurial', *Higher Education Quarterly*, 44, 111–122.
- Whyte, W. F. (ed.) (1991) *Participatory Action Research*, Newbury Park: Sage.
- Ziman, J. (1991) 'Academic Science as a System of Markets', *Higher Education Quarterly*, 45, 41–61.

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