

Challenging Boundaries to ‘Employability’: Women Apprentices in a Non-Traditional Occupation

Alison Andrew

Faculty of Social Sciences, The Open University

E-mail: A.M.Andrew@open.ac.uk

This article is based on a case study of women apprentices and workers in a ‘non-traditional’ occupation for women, engineering construction. The article argues that the concept of ‘employability’ is not gender neutral, and that gendered assumptions about who is and is not ‘employable’ for particular work can disadvantage women seeking training and work in non-traditional industries or dissuade them from applying to do so. Approaches to employability which emphasise individual attributes underplay the significance of gender inequalities and wider discourses of gender.

Introduction

The concept of ‘employability’ ‘plays a crucial role in informing labour market policy in the UK, the EU and beyond’ (McQuaid and Lindsay, 2005). Whilst the concept of employability relates both to unemployed people seeking work and employed people seeking better jobs, and has a potentially wide range of meanings, a dominant approach in policy developments in recent years has been to focus on the capability of people to enter and sustain work (McQuaid and Lindsay, 2005; McQuaid *et al.*, 2005). The capability both to enter and improve employment can be viewed narrowly, in terms of predominantly supply-side factors, or more broadly, within a framework which acknowledges the importance of both supply-side and demand-side factors; overall though there has been much emphasis on the individual and their ‘employability skills’ (McQuaid and Lindsay, 2005). This relative neglect of demand-side factors downplays the significance of broader social inequalities, inequalities which include the extent to which ‘gender has an integral relationship with work and organisations’ and is embedded in organisational structures (Halford and Leonard, 2006: 2). Broader approaches to employability may include consideration of ‘the factors influencing whether an individual can get *relevant* work’ (McQuaid *et al.*, 2005: 192, my emphasis) and this further highlights gender inequality. Women may be seen and see themselves as more employable in some kinds of work than others, with implications for quality and remuneration of work, as well as notions of choice and control. In this article employability is seen as not simply about the attributes and skills individuals possess but also about overcoming the barriers they face as a result of more structured inequalities or lack of opportunity in the labour market, specifically in relation to gender.

Gender differentiation and sex-stereotyping characterise education and training in the UK from secondary school onwards, including in vocational education (see, e.g., Equal Opportunities Commission, 2001.) The high degree of gender segregation in Science,

Engineering and Technology (SET) education and occupations is well documented, with such occupations exhibiting 'among the most persistent and extreme patterns of gender segregation' (Bagillhole, 2002: 51). In the UK, women constitute only 1 per cent of the workforce in construction occupations and 9 per cent of the workforce in engineering occupations (Dale *et al.*, 2005: 2). Similar patterns are found across Europe, where in EU member states women are under-represented in SET occupations (Miller *et al.*, 2004; Sagebiel and Dahmen, 2006) although this picture may be modified by EU expansion. A particular concern in recent years has been the persistence of this gender segregation, despite the challenging of traditional stereotypes of women's and men's work from the 1970s onwards. At the same time, there has been a growing interest in how gender identities are constructed in traditionally male occupations where women are present (e.g., Carter and Kirkup, 1990; McDowell, 1997 and 1999; Henwood, 1998; Kvande, 1999; Berner and Mellstrom, 2000; Whittock, 2000; Stonyer, 2002; Ridgeway and Correll, 2004; Faulkner, 2005a and 2005b). Attention has been directed to 'gendered occupational cultures' (Faulkner, 2005a) and the ways in which they support or challenge the apparent link between technology and dominant masculinities.

Many studies of the gendered nature of engineering and construction education and occupations, such as those mentioned above, have focused particularly on graduate-level education or professional workers. The study discussed here, in focusing on apprenticeship, offered an opportunity to look more closely at the experiences of women training and working at craft and technician level, a relatively neglected area and one where women can find themselves in a tiny minority. In UK apprenticeships the distribution of men and women across sectors continues to reflect longstanding stereotypes (Beck *et al.*, 2006b). Figures for England in 2002–3 showed that 'virtually all those starting construction, electrotechnical, engineering, motor industry and plumbing apprenticeships were male' and figures for Scotland were similar (Miller *et al.*, 2005: 5 and 7). This pattern led the Equal Opportunities Commission (2004: 3) to conclude that 'whilst the Modern Apprenticeship (MA) system should be a key focus for challenging occupational segregation... MAs currently reinforce and perpetuate gender stereotypes and traditional recruitment patterns'.

Background and methodology

The research which forms the basis of this article was carried out between 2002 and 2005 as part of an evaluation of a partnership concerned with tackling barriers to the recruitment and progress of women in Science, Engineering and Technology (SET) and with creating cultural change in these areas. The research set out to explore barriers to entry, retention and success for women in SET, as well as some of the ways in which these could be tackled, through a case study of women apprentices in engineering construction. The case study is set in the context of other studies of women in male-dominated industries, particularly in the engineering and construction sectors.

The engineering construction industry constructs plant and makes and maintains equipment for process industries such as oil and gas, food and energy. It is also involved in nuclear plant decommissioning. Trainees in the national apprenticeship scheme for the industry can follow either a craft or technician specialisation for onshore and offshore work. Recruits to the scheme are typically aged between 17 and 21 on entry and apprenticeships last between three and four years. At the time when the research was

carried out, an initial 12–18 month training period combined attendance at training centres (run by regional training providers) with day-release classes in further education colleges. This was followed by placement in on-site training, with some apprentices receiving a training allowance throughout both these periods, with others, particularly those placed offshore, receiving the industry rate for the work. The national apprenticeship scheme for the industry was selected as the focus for the research because it was at the time seeking to recruit more women and working in conjunction with other partners to make this possible.

The research was largely qualitative in approach, focusing on women's experiences of apprenticeship in engineering construction, drawing mainly on their testimonies and including where possible input from trainers and other staff involved in recruiting and working with them. Methods used included training centre and site visits, interviews, use of documentary evidence and personal observation. In-depth semi-structured interviews, lasting between one and two hours, were carried out with four of the total of five women entrants to the national apprenticeship scheme in September 2002 (a fifth entrant had left the scheme very quickly and was not available for contact) and all seven women entrants from September 2003. (Total intake to the scheme fluctuated annually but was usually around 200 at the time the research was carried out). Follow-up interviews were carried out later in the women's training. Interviews were also carried out with some women from pre-2002 cohorts and group discussion was facilitated at a networking day for trainees and ex-trainees, now qualified workers, in the sector. In all 23 women engaged in or qualified from the apprenticeship scheme contributed to the research through interviews and group discussion. This constituted all except three (unreachable) of those for whom there were known contact details, and between a third and a half of all women entrants to the scheme, past and present (an accurate figure being difficult to ascertain; some who proved unreachable or for whom there were no contact details had withdrawn from apprenticeships and some were believed to have 'dropped out' of the industry). This article focuses mainly on material derived from interviews with continuing apprentices. Additional material is derived from recruitment reviews carried out in 2002 and 2003 as part of the evaluation process. These involved contact with applicants to the national apprenticeship scheme, including those who were not successful or did not pursue their applications through to completion, and with staff involved in recruiting to and administering the scheme.

Face-to-face interviews with the 11 apprentices from the main cohorts for the study took place mainly in their regional training centres, and in one case on site. The focus on women apprentices rather than mixed groups was due to the requirements of the evaluation aspects of the research along with a desire to understand and make visible women's experiences through their accounts and to concentrate limited resources to this end. Training centre and site visits enabled some observations of mixed groups of apprentices and of training settings, and there were meetings, discussions and informal interviews with mostly male training staff and recruiters. References in the following discussion to the views of training staff and recruiters are summarised from these contacts.

Interviews with continuing apprentices from the pre-2002 cohorts (and with ex-apprentices) were conducted mainly on the telephone, as were some follow-up interviews, because these women were in scattered locations throughout the UK and sometimes offshore. These interviews clearly did not offer the same opportunities for direct observation. Though shorter than the face-to-face interviews, they commonly lasted

around 45 minutes, so were not superficial, and followed a similar pattern to those conducted face to face. This interview method elicited thoughtful responses and enabled contributions which otherwise would not have been possible.

One woman of Afro-Caribbean origin was interviewed in person; the sample was otherwise overwhelmingly white. It is possible that greater diversity of ethnic background may have been found in those interviewed by telephone, since it was difficult in the circumstances to ask a question about this. However, recruitment to these apprenticeships, whether male or female, from minority ethnic groups was extremely small, as was recruitment of women of all ethnic origins, so the predominantly white composition of the participant group is neither surprising nor unrepresentative.

Interviews with all current and ex-apprentices explored previous backgrounds, interests and education; the process of application for an apprenticeship place; and day-to-day experiences of apprenticeship training. They were analysed in terms of emerging themes, including reasons for choice of career and influences on it; 'barriers' to entry and responses to them, early experiences of training and ongoing negotiations with the challenges faced as a result of high visibility within a male-dominated industry. The article uses some of these findings, set in the context of wider work on women in non-traditional industries, to contribute to discussion about gender and employability.

Context

Employment in engineering construction, as already indicated, is very much a non-traditional route for women in the UK and many western countries. Women form a tiny minority of apprentices and workers in engineering construction in the UK, less than 1 per cent when site audits are carried out, and it is among the most gender segregated areas of employment in Britain (Equal Opportunities Commission, 2004). This is despite the possibility of considerably higher earnings than would be the case in many traditionally 'female' occupations (Miller *et al.*, 2004; Dale *et al.*, 2005). However, as Cynthia Cockburn (1987: 194) argued over 20 years ago, if this situation is to change, 'simply exhorting young women to widen their aspirations... is certainly not enough'. Such gender segregation can, Cockburn argues, partly be due to young women leaving school with sex-stereotyped preferences, but also to both active and passive, in many cases unconscious, discrimination against them. It is not necessarily 'discrimination' at an individual level which is the issue, though, but a more general problem of embedded power relationships and social and cultural barriers (Weller, 2007).

This then raises the question of whether women see themselves and are seen by others as 'employable' within a non-traditional, male-dominated industry such as engineering construction. A focus on gendered occupational cultures in recent years has led to claims that women are not seen as having identities compatible with the engineering community, and that they have to try to develop these in order to belong (e.g., Wall and Clarke, 1996; Dryburgh, 1999; Clarke *et al.*, 2004; Faulkner, 2005a). Lave and Wenger's work on apprenticeship and communities of practice (Lave and Wenger, 1991; Wenger, 1998) points to a process of 'legitimate peripheral participation' by which apprentices undergo an identity transformation in order to become full members of a community of practice. However, the research found that women may face difficulties both in attaining 'legitimate peripheral participation' and in achieving full membership status. These difficulties start at the pre-recruitment stage and can continue through to employment or lack of it after

completion of apprenticeship, despite documented skills shortages within the industry and training agencies expressing a commitment to recruiting and training more women.

Gendered expectations and recruitment

Recruitment issues identified through the research included a lack of accessible information, and obstacles in progressing through the application and selection process. Access to reliable and useable labour market information is seen as an important asset for employability (McQuaid *et al.*, 2005) and this can be a problem for those who might consider non-traditional routes. Young women interviewed for this research reported difficulties in accessing material and information about engineering apprenticeships. School and college tutors and careers advisers often seemed to have no or limited information and in any case often were seen as not promoting such routes for women:

They just really asked you what you wanted to do. They didn't really say, well this is what you could do, this is opening up so you could try that.

Men's jobs were never recommended as careers choices.

There was often an element of chance, where for example relatives and friends involved in engineering, particularly fathers, brothers and men friends or partners, were responsible for passing on information:

My brother [an electrical engineer] waved an application form in front of me, said 'you should do this', got me to fill it in and send it off.

This information wasn't available at school, it was Dad [a builder] who saw it in a newspaper and said 'you should try it'.

Given the young age of entrants to the apprenticeship scheme, parents and teachers could be key. Without support and encouragement from them, which is often unlikely unless they have some connection to the industry themselves, young women may not pursue such a strongly non-traditional route, although some did so as a result of their keen interest in engineering and construction activities, despite parental concerns about 'dirt and danger' of various kinds. More fundamentally, young women and their parents and teachers may not even know about such occupations. They may have little awareness of what engineering construction involves, if indeed they have even heard of it, and may have only the haziest knowledge of areas of work within it. Gendered expectations on all sides make it likely that, in the words of one apprentice:

Unless you actually know what you want and you actually go out and find it, it's not possible at all.

However, gendered expectations on the part of young women themselves, as well as those who may influence them, mean it is more unlikely for them than for young men that without some kind of positive influence or intervention they will know that they

want an apprenticeship in engineering construction, or more generally see themselves as employable in such an industry.

If women do get as far as expressing an interest, accessing the necessary information and applying for a place on the scheme, their progress through to a recruitment interview is by no means certain. They can be unsure about what they have applied for, how the recruitment process will work, what is going to happen through its various stages, including technical tests and interviews and what progression there is likely to be after training. They can find it difficult to attend tests and interviews some distance from home and often don't have access to a car or are hesitant about driving in unfamiliar surroundings. There can also be a gap between leaving school at 16, and minimum entry age for the apprenticeship scheme at 17. At all these stages women who may have expressed some initial interest can be discouraged and turn in other directions. One applicant noted that after a wait for information on the progress of her application she 'didn't fancy it any more' and 'you lose a lot of your confidence when that happens', and another had felt the need to 'grab what was going', in her case clerical work.

Whilst some of the anxieties that they experience during the recruitment process may equally apply to young men, women are often well aware that engineering construction is not traditionally for them, that it represents risk as well as opportunity, and therefore their faith in their ability to succeed in it can easily be shaken. It has been suggested that resistance to choosing to train in non-traditional occupations indicates 'the significant additional risk to which a non-traditional choice exposes the young person' (Beck *et al.*, 2006a: 273). Their research found young women to be more concerned than young men about how they would be treated in non-traditional jobs, and they point out that occupational choices are about identities as well as interests. Some apprentices in this study reflected that they had 'always' wanted to do this kind of work, or had another very conscious and well-articulated reason for choosing it, such as escaping from disadvantage, seeking adventure or avoiding more traditional kinds of work:

I've always wanted to do hands on. My Dad's a builder, I've always helped him.

I didn't fancy that [catering] or hairdressing or computers...cos engineering is something different every day...there's not much work in [home town], very few opportunities, lots of problems, I didn't want to settle for that.

Others had a much more tenuous connection to it, perhaps a vague feeling that this might just be something for them, that it might promise a good future or might be more interesting than some of the more traditional alternatives on offer. These women did not regard involvement in this kind of work as central to their identities or interests, and were particularly likely to be discouraged by perceived barriers. Those who did drop out of the recruitment process nevertheless often spoke wistfully, whilst working in an office or in other more traditional and less 'risky' work, of still having an interest in engineering, and wishing that they had been able to see it through.

The research also revealed, however, through informal discussion with trainers and recruiters, that some of them may see lack of confidence on the part of these young women as a necessary filter for recruitment, believing that they were less likely to be 'employable' in the industry. This was partly explained by the nature of the training and work in the industry, which involve travel away from home and some degree of confidence and

independence, but there seemed to be more to it than this. It is impossible to know from the research whether young men are judged similarly in this respect, but their choice of such apprenticeships is widely seen as gender-appropriate. It comes with less risk attached, both for them and for recruiters, who, as Collinson *et al.* (1990: 198) point out, face commercial pressures and retention targets and may be concerned to be seen as competent selectors. These researchers found evidence of interviewers coming down hard on women to see if they could take it, and that even where recruitment was difficult, women candidates continued to be rejected. Whilst the apprenticeship research discussed in this article found no evidence of disproportionate rejection of women candidates for apprenticeships, it did find that norms of gender-appropriateness may, consciously or not, affect all aspects of the recruitment process from initial publicity and encouragement onwards, including support for applicants. There was often lack of awareness of, and in some cases resistance to, the idea that specific targeting and support of women might (within the remit of equality legislation) increase numbers applying and progressing through the application process. The industry is seen by some recruiters as particularly tough, and women are required to be tough themselves, in order to fit in to it and be fit for it from the beginning – to 'hit the deck running'. However, 'toughness' and 'confidence' are subjective qualities and ones which can develop over time. Moreover, assessments of 'fit' in organisational life are commonly based on a male rather than a female profile (Priola, 2007), thus potentially disadvantaging women applicants or dissuading them from applying. Collinson *et al.* (1990) draw on Jenkins' distinction between functional 'suitability', where specific performance criteria are related to job requirements and qualifications, and functionally non-specific 'acceptability'. The latter involves very nebulous criteria and 'the cultural reproduction of white male hegemony is all but guaranteed' (*ibid.*: 60).

This cultural reproduction of labour market segmentation can be overt, covert or unconscious and may vary across time and place. It cannot, however, be understood simply in terms of an accumulation of individual processes and decisions, or in terms of recruitment processes alone, but reflects 'the routine expressions of barriers that are complexly intertwined with social, cultural and economic norms' (Weller, 2007: 421).

Recruiters to apprenticeships often expressed a need to be honest with potential and actual applicants about the demands of training and work in the industry, considering this necessary both in terms of retention, given the high cost of training, and in fairness to the applicants themselves, in whose best interests they may believe they are acting. This may also, however, unconsciously or not, convey messages to women about who is seen as most employable within the industry. Two women recounted interview questions which sketched vivid pictures of gender isolation in terms that emphasised the 'otherness' of women in such settings. One, who subsequently completed an apprenticeship, recalled being asked how she would cope with '140 boys aged 16–20 with their hormones running wildly' and another apprentice remembered:

something about, how would you feel if you was trapped on an oil rig with all men, and you got chemicals spilt on you, and you had to strip off there and then, and get a cold shower, you know, where you stood.

Both of these women were offered and took up apprenticeship places, despite the perception of the former that such questions were designed to 'put women off', whilst

the latter felt that they were intended to 'see if you had it in you'. Recruiters, trainers and women apprentices and workers in the industry all made reference to the notion of 'having it in you', which was commonly believed to determine one's progress or otherwise into and within the industry. This went hand-in-hand with the argument that success or failure within the industry largely came down to individual characteristics. In other words, applicants and apprentices were usually seen, by themselves as well as by trainers and employers, as having, or not having 'context-independent strengths and weaknesses'. Here, identity and potential for development is seen as primarily deriving from the individual, in contrast to work on communities of practice which emphasises the situated, context-specific nature of identity, learning and development (Yandell and Turvey, 2007: 535). This individualist approach fits Rodd and Bartholomew's (2006: 39) characterisation of 'an espoused liberal equal opportunities ethos which works towards greater female participation but stops short of challenging the terms in which they are expected to participate'. What this can mean in practice is that despite apparent attempts by government, education and training agencies and some branches of industry to work towards greater participation by women in non-traditional occupations, there is still an emphasis on women's responsibility to prove themselves fit for the work and able to fit in to it. Their responsibility for this does not stop at the recruitment or entry stage, but is ongoing throughout apprenticeship and later work.

Surviving and thriving in employment

'Employability', as noted earlier, is not just about gaining entry to work but also about sustaining it. Broadly defined, it could also encompass ability to pursue an occupation of one's own choosing, to be fairly paid, to progress if desired and to thrive rather than simply survive. In the study discussed here, 'fitting in' and gaining legitimacy were continuing issues for women progressing through their apprenticeships and beyond, as well as for those who left for reasons including difficulties in obtaining work post-qualification and perceived incompatibility of the work with domestic commitments.

Women negotiated these challenges in different ways and with varying degrees of ease or difficulty. There was no standard experience and accounts were often very positive. The industry was seen as having a lot to offer, including great learning opportunities, travel, 'fun', independence and good money. Challenging gender-stereotyped expectations was often quietly relished, with reports of enjoying people's surprise on learning their chosen occupation. Even so, as Cockburn (1987: 202) has noted, 'young women, and, in a different way, young men, do not make gender-contrary moves scot-free'.

There were many examples from the interview material of the work involved in 'fitting in' and of the often hidden costs which this could involve, although the extent to which these were perceived as costs and seen as problematic varied between women and at different times and in different circumstances or settings. Whilst women often claimed that they were treated 'just the same as the men', their interviews revealed that this was not always the case. Examples included being the target of jokes, as a result of visible difference, and feelings of isolation.

I am the one that gets the brunt of things, sometimes, just for the fact of being female... a lot of the time the jokes are directed towards me cos of being female.

They [the men] always sit together at work [in a training centre] and I find I can be sitting on my own . . . at dinner I'm just sat there on my own.

Attempts to deal with this included the nurturing of friendship wherever it might be found, regardless of personal preference. There was work to be done too in managing gendered bodies. This included for example lack of access to female toilets and washrooms, one woman losing a stone and a half in weight due to feeling constantly under observation as a lone woman in the canteen and being consequently unable to eat there, and monitoring dress and other aspects of appearance. One example was given of being careful not to wear a low-cut top, for which one woman had been reprimanded, but not to be revealing in other ways either:

so you've got to remember it's got to be high, . . . it's got to be long enough so people don't see your belly, and that's a constant thinking as well.

Behaviour, as well as bodies, had to be managed or policed. Examples included avoiding drinking or swearing, since this could be disapproved of by men as inappropriate female behaviour, and 'proving oneself' by not making mistakes, but not doing too well either. In the words of one apprentice:

You don't want to get too far behind, because they'll all be going oh she can't do it, and you don't want to get too far ahead, because therefore she's a swot, erm it is constant thinking and it is really tiring.

Through all of this, the emphasis was on women needing to adapt and not on the work culture needing to change.

As the research showed, and as many of the studies cited in this article have suggested, complex negotiations of identities may be undertaken by women in relation to the demands of the non-traditional workplace (see also Evetts, 1996). Some women experience this as more problematic than others, as might be expected, given recent theoretical work on the complexity and diversity of gender identities, and the 'multiple and competing discursive constructions of who we could be' (Halford and Leonard, 2006: 2). Interpretations and strategies vary for any one individual as well as between women, depending on time and context. They can be multiple, overlapping and contradictory, incorporating elements of denial, resistance and conformity for example. A common finding in studies of women in non-traditional industries is of women 'becoming men' (Carter and Kirkup, 1990; Bagilhole, 2002; Clarke *et al.*, 2004; Du, 2006) or 'one of the boys' in order to survive, though this may be far from straightforward. One apprentice reflected extensively on such matters:

I feel like I'm starting to turn into a man, and I don't want to . . . I feel like I'm starting to talk like them, and then I've got to talk like them to fit in with them, be like them, erm, just do the things that they do, be like them, just to get along with them, and it's, I'm finding it easy, but hard, erm and it's going to for a long time, and I'm really, really happy, but it's just every day is, there's a new little challenge . . . constant struggle . . . So – I think your personality's got to really fit in as well, and it's annoying, that you've got to change to fit in with someone, erm, and I feel

in myself that I'm changing a lot, that I'm changing dramatically, erm, but I do like it. I like it at work when I fit in, but I don't like it when I get home because I'm not who I used to be.

Conclusions

Whilst structural and institutional barriers to the wider participation and progress of women in non-traditional industries remain, the ways in which individuals interpret their experiences may be more flexible and contradictory (Britton, 2000) and there are inevitably subjective elements to concepts such as barriers (Watts, 2006). Women's agency is apparent in the choices they make in negotiating entry to such occupations (sometimes due to a conscious desire to be 'different') as well as in their attempts to negotiate legitimacy and belonging. Factors such as personal disposition and motivation, previous education and experience, do impact on women's employability.

However, as Halford and Leonard (2006) argue, women and men are not equivalently positioned. Socially constructed boundaries between 'men's work' and 'women's work' are challenged by women in non-traditional industries but are also challenging for them. Marking of these boundaries (Cohen, 1985) can be intentional, both covert and overt, or more unconsciously influenced by underlying cultural assumptions and gendered expectations. As a result, women are still often seen and may see themselves as less employable in industries where technology has been constructed as a male domain. Despite this disadvantage, employability is frequently perceived to be a matter of individual attributes. If there is a possibility for development, this is often seen as largely the responsibility of the individual, in contradiction to Lave and Wenger's model of apprenticeship which sees learning and development as situated, context-specific activities (Lave and Wenger, 1991; Wenger, 1998.) The more individualistic view was frequently expressed by apprentices – 'you've either got it or you haven't' – as well as by trainers and recruiters, and this is not surprising, since it reflects the manner in which the concept of employability is often used by policy-makers, as well as wider discourses of responsibility (Moreau and Leathwood, 2006). Such narrow approaches to employability underplay the significance of social practices and power dynamics in interaction with individual agency. They ignore how gender expectations affect both the 'supply' and 'demand' sides of employability and fail to address adequately the extent to which labour markets, employer behaviour and occupational communities of practice are gendered. They also neglect how potential employee attributes such as knowledge, skills, personal and social identities and presentation of self, all involve socially constructed meanings, negotiation and contestation, processes which are themselves gendered.

There was generally little suggestion from those participating in this research that the onus should be on non-traditional (male dominated) industries to examine in depth their own attributes and practices, rather than those of women, or that this might be desirable. There were some notable exceptions to this from training staff and workers who believed change was overdue, and other less explicit statements which nevertheless suggest the continuing strength of gender boundaries, like the following from one apprentice:

There has been times when I've wanted to give up, just say, I'm a woman, I'm not supposed to be here.

The increasingly challenged but persistent notion that women are 'not supposed to be there' in non-traditional industries continues to operate to the detriment of those who would therefore not contemplate such work, those who would like to but may find barriers in the way of entry and those who succeed in the initial stages but may encounter barriers in maintaining and progressing their employment. None of these situations can be adequately addressed by policy approaches to employability which privilege the individual over the social as the main focus of attention. Such approaches are unlikely to result in significantly increased numbers of women entering non-traditional industries, with associated consequences for attempts to resolve skills shortages and close the gender pay gap. There may be a discourse of gender equality but this does not necessarily lead to concrete measures to bring about changes within the industries themselves (Clarke *et al.*, 2005). Achieving change requires broader, more holistic approaches which place greater emphasis on the interaction of both demand-side and supply-side factors and do not leave organisational cultures, workplace practices and wider discourses of gender relatively untouched.

Acknowledgements

Earlier versions of this paper were presented to the 'Women, Identity and Employability' conference at the University of Teesside, UK, 7 February 2008 and the Social Policy Association Conference in Edinburgh, UK 23–25 June 2008. I would like to thank all contributors to conference discussion and all participants in the research. Thanks are also due to colleagues at the Open University and to the anonymous referees for their comments and suggestions.

References

- Bagilhole, B.** (2002), *Women in Non-Traditional Occupations: Challenging Men*, Basingstoke: Palgrave Macmillan.
- Beck, V., Fuller, A. and Unwin, L.** (2006a), 'Increasing risk in the "scary" world of work? Male and female resistance to crossing gender lines in apprenticeships in England and Wales', *Journal of Education and Work*, 19, 3, 271–89.
- Beck, V., Fuller, A. and Unwin, L.** (2006b), 'Safety in stereotypes? The impact of gender and "race" on young people's perceptions of their post-compulsory education and labour market opportunities', *British Educational Research Journal*, 32, 5, 667–86.
- Berner, B. and Mellstrom, U.** (2000), 'Looking for mister engineer: understanding masculinity and technology at two Fin de Siecles', in B. Berner (ed.), *Gendered Practices: Feminist Studies of Technology and Society*, Linköping, Sweden: Department of Technology and Social Change, Linköping University, Distributed by Almquist and Wiksell International, pp. 32–68.
- Britton, D.** (2000), 'The epistemology of the gendered organization', *Gender and Society*, 14, 3, 418–34.
- Carter, R. and Kirkup, G.** (1990), *Women in Engineering: A Good Place to be?*, Basingstoke: Macmillan Education.
- Clarke, L., Pedersen, E.F., Michielsens, E., Susman, B. and Wall, C. (eds.)** (2004), *Women in Construction*, Belgium: CLR/Reed Business Information.
- Clarke, L., Pedersen, E.F., Michielsens, E. and Susman, B.** (2005), 'The European construction social partners: gender equality in theory and practice', *European Journal of Industrial Relations*, 11, 2, 151–77.
- Cockburn, C.** (1987), *Two-Track Training: Sex Inequalities and the YTS*, Basingstoke: Macmillan.

- Cohen, A.P.** (1985), *The Symbolic Construction of Community*, London: Routledge.
- Collinson, D.L., Knights, D. and Collinson, M.** (1990), *Managing to Discriminate*, London and New York: Routledge.
- Dale, A., Jackson, N. and Hill, N.** (2005), *Women in Non-Traditional Training and Employment*, Working Paper Series, 26, Manchester: Equal Opportunities Commission.
- Dryburgh, H.** (1999), 'Work hard, play hard: women and professionalization in engineering – adapting to the culture', *Gender and Society*, 13, 5, 664–82.
- Du, X.-Y.** (2006), 'Gendered practices of constructing an engineering identity in a problem-based learning environment', *European Journal of Engineering Education*, 31, 1, 35–42.
- Equal Opportunities Commission** (2001), *Sex Stereotyping: From School to Work*, Manchester: Equal Opportunities Commission.
- Equal Opportunities Commission** (2004), *Plugging Britain's Skills Gap: Challenging Gender stereotyping in Training and Work*, Manchester: Equal Opportunities Commission.
- Evetts, J.** (1996), *Gender and Career in Science and Engineering*, London: Taylor & Francis.
- Faulkner, W.** (2005a), 'Belonging and becoming: gendered processes in engineering', in J. Archibald, J. Emms, F. Brundy and E. Turner (eds.), *The Gender Politics of ICT*, Middlesex: Middlesex University Press, pp. 15–26.
- Faulkner, W.** (2005b), 'Engineering workplace cultures: men's spaces and in/visible women', Webcast lecture for the launch of 'Science, engineering and technology: a course for women returners', The Open University, 3 November 2005, <http://stadium.open.ac.uk/berrill>.
- Halford, S. and Leonard, P.** (2006), *Negotiating Gendered Identities at Work*, Basingstoke and New York: Palgrave Macmillan.
- Henwood, F.** (1998), 'Engineering difference: discourses on gender, sexuality and work in a college of technology', *Gender and Education*, 10, 1, 35–49.
- Kvande, E.** (1999), 'In the belly of the beast: constructing femininities in engineering organizations', *European Journal of Women's Studies*, 6, 305–28.
- Lave, J. and Wenger, E.** (1991), *Situated Learning: Legitimate Peripheral Participation*, Cambridge: Cambridge University Press.
- Miller, L., Neathey, F., Pollard, E. and Hill, D.** (2004), *Occupational Segregation, Gender Gaps and Skill Gaps*, Working Paper Series, 15, Manchester: Equal Opportunities Commission.
- Miller, L., Pollard, E., Neathey, F., Hill, D. and Ritchie, H.** (2005), *Gender Segregation in Apprenticeships*, Working Paper Series, 25, Manchester: Equal Opportunities Commission.
- McDowell, L.** (1997), *Capital Culture: Gender at Work in the City*, Oxford: Blackwell.
- McDowell, L.** (1999), *Gender, Identity and Place*, Cambridge: Polity.
- McQuaid, R., Green, A. and Danson, M.** (2005), 'Introducing employability', *Urban Studies*, 42, 2, 191–5.
- McQuaid, R. and Lindsay, C.** (2005), 'The concept of employability', *Urban Studies*, 42, 2, 197–219.
- Moreau, M.-P. and Leathwood, C.** (2006), 'Graduates' employment and the discourse of employability: a critical analysis', *Journal of Education and Work*, 19, 4, 305–24.
- Priola, V.** (2007), 'Being female doing gender: narratives of women in education management', *Gender and Education*, 19, 1, 21–40.
- Ridgeway, C.L. and Correll, S.J.** (2004), 'Unpacking the gender system: a theoretical perspective on gender beliefs and social relations', *Gender and Society*, 18, 4, 510–31.
- Rodd, M. and Bartholomew, H.** (2006), 'Invisible and special: young women's experiences as undergraduate mathematics students', *Gender and Education*, 18, 1, 35–50.
- Sagebiel, F. and Dahmen, J.** (2006), 'Masculinities in organizational cultures in engineering education in Europe: results of the European Union Project WomEng', *European Journal of Engineering Education*, 31, 1, 5–14.
- Stonyer, H.** (2002), 'Making engineering students – making women: the discursive context of engineering education', *International Journal of Engineering Education*, 18, 4, 392–9.
- Wall, C. and Clarke, L.** (1996), *Staying Power: Women in Direct Labour Building Teams*, London: London Women and Manual Trades.

- Watts, J.** (2006), 'The outsider within: dilemmas of qualitative feminist research within a culture of resistance', *Qualitative Research*, 6, 3, 385–402.
- Weller, S.** (2007), 'Discrimination, labour markets and the labour market prospects of older workers: what can a legal case teach us?', *Work, Employment and Society*, 21, 3, 417–37.
- Wenger, E.** (1998), *Communities of Practice: Learning, Meaning and Identity*, Cambridge: Cambridge University Press.
- Whitlock, M.** (2000), *Feminising the Masculine? Women in Non-Traditional Employment*, Aldershot: Ashgate.
- Yandell, J. and Turvey, A.** (2007), 'Standards or communities of practice? Competing models of workplace learning and development', *British Educational Research Journal*, 33, 4, 533–50.