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Turning Good Policies into Good Practice: Why is it so Difficult?

Lisa Lee and Wendy Faulkner

University of Edinburgh, UK

Carme Alemany
CEDIS (Centre d'Estudis Dona i Societat - Centre for Studies on Women and Society)Barcelona, Spain

ABSTRACT
Many engineering employers have introduced policies to improve the retention and progression of women engineers. However, a recent EU project reveals that the uptake and the impact of such policies is generally limited and often uneven; having a good set of policies on paper does not necessarily translate into good practice on the ground. We explore the reasons why highlighting first of all organisational failings in the effective implementation of such policies and in employers' commitment to gender change; and second, attitudinal barriers of awareness and attitudes to gender politics. This analysis adds weight to arguments that engineering organisations need to undergo major 'culture change' if good gender equality and diversity policies are to be turned into good practice.

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INTRODUCTION

Engineering has proved remarkably resistant to gender change, in spite of three decades of public and private sector backed efforts in many countries to improve the representation of women in its ranks. There is a well established consensus about what kind of policies should help redress the poor recruitment, retention and progression of women in engineering. Indeed, increasing numbers of large employers 'tick all the boxes' at corporate level. Time and again, however, one finds that having a set of good *policies* does not in itself guarantee that good *practice* is happening on the ground.[1] This was a major conclusion of a recent EU-wide collaborative study of the retention and progression of women working in engineering research entitled Prometea (Genin, 2010). Whilst we identified a wide range of potentially useful initiatives in both public and private sector organisations, the uptake and the impact of these policies was generally limited and often uneven. Why do 'good policies' in this sector so rarely translate into genuinely good practice? Are there failings in the implementation of such policies or is organisational commitment inadequate? How much is the problem attitudinal?

This paper addresses these questions, drawing on the Prometea research. The project involved 12 partners from across Nordic, East and West Europe. Its core elements sought to identify factors supporting or inhibiting women's careers, based on case studies in higher education, research institutes and businesses.[2] Amongst other things, these studies enabled us to audit the wide range of organisational and national policies geared to supporting women engineers, and provided insights into the strengths and weaknesses of these policies. This data was supplemented by eight case studies of relevant good practice, conducted between July 2006 and February 2007, which sought to evaluate particular (packages of) policies in more depth. This involved interviews with human resource (HR) managers and interviews or focus groups with staff targeted by the policies, thus allowing us to gain a better understanding of why and how particular policies are implemented, and of how these are experienced by women and men engineers on the ground.

The full analysis of this material is available in Lee et al. (2007).[3] What we offer here is a distillation of our analytical conclusions concerning the gap between policy and practice. First, a few general observations about the main areas of policy seeking to tackle the poor retention and promotion of women in engineering.

KEY ISSUES

In aggregate, women's careers progress less far and less rapidly than do men's in engineering (Carter and Kirkup, 1990; McIlwee and Robinson, 1992;

Bagihole, 1998; Greenfield 2002). In a situation where line managers can have a huge bearing—positive or negative—on individual career trajectories (Faulkner, 2005), Prometea and other research reveals that many managers simply fail to support adequately the career development of their women staff (Thaler, 2010; Wächter, 2010). The best career related measures include efforts to empower women in their careers by building up their professional confidence and self-belief, with many employers and analysts (e.g., Sørensen et al. forthcoming: ch 9) seeing women-only initiatives as a powerful means of achieving this. Positive reinforcement is critical because of the *in/visibility paradox* whereby women engineers are highly visible as women but invisible as engineers, and so have to work harder throughout their careers to (re)establish their engineering credentials (Faulkner 2009a).

The in/visibility paradox also has a major bearing on the everyday workplace cultures that shape who is seen as 'belonging' or not in engineering (Faulkner, 2009b). Women engineers face pressures to become 'one of the lads' but at the same time 'not lose their femininity' (Carter and Kirkup, 1990; Tierney, 1995; Watts, 2007)—and so, in some sense, struggle to be seen as 'real' women as well as 'real' engineers. There is very little awareness in the sector of how undermining these subtle dynamics can be, and no organisations we studied had addressed this issue. Nonetheless, some engineering employers do seek to nurture a more inclusive workplace culture through diversity training.

Prometea research confirmed the negative impact of having children on the working lives and careers of many women in engineering research (Thaler, 2010; Wächter, 2010) as elsewhere (Hakim, 2004; Bagilhole, 2006). Few workplaces we studied adequately accommodate or take into account childbearing and rearing. Family-friendly policies are widely seen as 'a women's issue', and returning to work in engineering seems to be more difficult than in other occupations. Work-life balance is a related issue. Yet the introduction of flexible working practices and reduced hours options has done little to alter the 'long hours culture' (DTI, 2004; Kodz et al., 1999) or expectations of availability and presenteeism in the sector (Valenduc et al., 2004).

ORGANISATIONAL BARRIERS

The Prometea research revealed four common organisational failings that inhibit the effective implementation of gender equality and diversity policies in engineering organisations. First, policies are not adequately publicised and promoted. Time and again we encountered staff, even managers, who simply did not know about existing policies and procedures, and often the HR people responsible were unaware of the extent of this ignorance. It is not enough if a policy is 'on the books'; organisations need to follow through by making staff aware of specific measures and creating opportunities to discuss any questions or issues they may have.

Second, a number of changes in organisational practice are often necessary in order to achieve policy objectives. These might be quite trivial: for instance, shifting departmental meetings from a Friday to enable staff to use the 'nine-day fortnight' policy to take long weekends periodically. Or they might be more profound. Tackling the long hours culture, for example, requires a major organisational and cultural shift—to find ways of getting the same work done in fewer hours, and entrenching an ethic that it is bad for people to work more than 'normal' hours.

Third, line managers often impede the uptake of equality and diversity policies. Many of those we heard about block flexible work policies in their departments. By contrast, those who are committed to improving work-life balance are more likely to support staff in finding appropriate solutions for their circumstances, and to facilitate flexibility by changing existing working practices. They are also more likely to set a good example, for instance, by refusing to hold meetings after a certain hour so that they and colleagues can spend regular time with their children.

To get managers on board and willing to 'lead from the top', organisations must not only win them around to the policy objectives, they must also train them in the techniques or procedures needed to realise those objectives. A major priority must be to improve line managers' ability to give their staff ongoing guidance and support in career management and development. Prometea revealed many cases across the regions where appraisals and promotions had been handled disastrously by department heads in academia (see also Kjeldal et al., 2005). Explicit training is clearly needed in constructive approaches, to realise the full potential of all staff by building up rather than undermining confidence and horizons. Managers might also be engaged in discussions about how to avoid penalising candidates in promotion rounds for taking periods of parental leave or for working reduced hours in order to care for family members.

The fourth organisational failing we identified is a dearth of any rigorous monitoring and evaluation of the implementation and impact of equality and diversity policies. Generating and disseminating systematic evidence about this issue is obviously critical if organisations are to identify and learn from effective good practice. This means monitoring progress made towards set targets (gender balance, equal pay and so forth), and collecting qualitative feedback from staff as to what does and does not work in practice. Self-evidently, all evaluations and feedback from staff must be followed through and acted upon. Results should be fed back to staff so that they remain engaged in the process, and to those charged with developing good practice so that they learn how to do it better. It can help if organisations are made publicly accountable to external bodies for their progress (or lack of it) toward gender equality targets. It can also help if instances of good practice are rewarded and made visible for others to learn from, through national or employer-level prizes.

Underlying the failure to turn good policies into good practice is a widespread lack of 'deep' organisational commitment to gender equality and, consequently, a lack of resources. Achieving equality and diversity costs money! All of the follow-through activities identified above as necessary to effective implementation cost money. Yet our good practice case studies revealed that lack of funding and other resources remains a major obstacle.

By contrast, the very best cases of good practice we studied—the Spanish government-backed Optima programme in one IT company and the Finnish Research Council's Equality Plan (Husu, 2007)—share important similarities. Both have introduced a package of measures to address the issues; both devote considerable resources to these efforts; both are endeavouring to get the support of the whole organisation behind them; and both share a commitment to learning how to do and improve on good practice. Commitment from the very top means that gender equality and diversity occupy a central place in the organisational agenda, rather than remaining on the margins. Gender equality and diversity measures and objectives are integrated into the organisation's core activities, as in the affirmative action measures embedded in the Finnish Research Council's funding procedures.

Significantly, the uneven uptake of good practice often occurs in a situation where the policies are optional—as with flexible or family-friendly work practices. This suggests that a degree of compulsion may be needed in order to oblige organisations to alter their practices. Of course, government legislation is the ultimate form of compulsion here. On its own, however, placing legal requirements on employers tends to breed a 'compliance' mentality, of 'ticking the boxes', without necessarily generating any real commitment to change or any real understanding of why change is necessary or how to achieve it. This point underlines the need to 'win hearts and minds', and overcome attitudinal barriers to equality and diversity policies—to which we now turn.

ATTITUDES AND AWARENESS

The Prometea research revealed considerable resistance to gender equality goals and measures, across different types of organisations and different countries. Many women and men say that they don't believe that gender is in any way relevant to their careers (see also Jorgensen, 2002). There is particular resistance to initiatives targeted specifically 'for women'. Many women do not want to be part of women-only career development programmes and networks, for fear that this will create unwanted barriers with their men colleagues, or be seen as meaning women need help to get on. This is understandable in light of the women's strong motivation to 'belong' and to be taken seriously as engineers noted earlier. Similarly, many men and women engineers are adamantly opposed to anything they perceive as giving women 'unfair' preferential treatment, especially 'positive discrimination' (even though this is not widely practiced in engineering). The presumption is that women engineers are getting into the profession, and getting promoted, 'because they are women and not because they are good

enough'. This view clearly brings into question the competence of women engineers, and serves to further undermine their professional self-esteem.

Such resistance reflects not only a defensiveness on the part of some men engineers, but also the persistence of gender stereotypes and norms (Sagabiel, 2010; Dahmen, 2010). Traditional views about children and domestic work being women's responsibility are particularly evident in the East European organisations studied for Prometea. More widespread, but covert, is the belief that women make less good engineers or leaders than men. Underlying such views is a pervasive tendency to dichotomise gender, playing up presumed differences between women and men engineers, even in the face of evident plurality of practices (see Sørensen et al forthcoming).

A common organisational response to such resistance is to make the policies available 'for all'. In three cases, policies initially designed to support career planning and management for women were subsequently opened up to men as well. Quite apart from side-stepping any resistance to 'preferential treatment', this approach can create a 'win win' situation in which working conditions are improved for everyone. It also has the potential to prompt shifts in gender awareness, such as the common perception that children are 'a women's issue'. In the Spanish IT company, making flexible work options available to all has encouraged and supported some men to take a greater share of their responsibility for childcare and domestic work.

An alternative response to the resistance is to persuade staff (and their managers) of the reasons why radical measures are needed. This may seem a tall order, but it is not impossible. In the case of a 'Women into Computing' initiative at the Norwegian National University of Science and Technology, studied by Vivian Lagesen (2007), staff and students backed entrance quotas (amongst other measures) because (i) there was a general consensus that they needed to get more women into computer science and engineering, and (ii) they were persuaded that the quotas were proportionate (i.e., that the women entrants were still very able!).

Whatever the relative merits of 'for all' and 'for women' approaches, there is obviously a crying need to tackle head-on the persistence of stereotyped attitudes, and the resistance to gender change. We propose three major steps to 'making the case' for gender equality and diversity policies. First, *people have to be persuaded that there is indeed inequality*. Data is a powerful but often missing prerequisite here. The UK Resource Centre for Women in Science, Engineering and Technology, for example, offers a 'gender audit' as a first step in persuading organisations and their staff of the need for change and intervention. The point—which should not be lost on engineers!—is to encourage more open and less trivialising discussions about gender, by providing 'hard evidence' to demonstrate the extent of gender imbalances at all levels. Data on 'leaky pipelines' (Greenfield, 2002) and on career inequalities is needed in order to identify where the problems lie. This

can only meaningfully be collected and analysed by individual organisations, and few bother.

Second, *people have to be persuaded that there are good reasons for seeking to change the situation revealed by the data*. Some engineers attribute evidence of gender imbalances in retention and progression to individual choices or (worse) gender differences in ability and inclination, thus denying that there is any 'real' inequality or (by implication) discrimination. Gender equality and diversity measures are generally promoted on the grounds of 'social justice' and/or, for the more reluctant, variations of the 'business case'—usually couched in terms of the need for a strong skill base and for the workforce to reflect the diversity of the market. Within the latter framing, one could point out that poor career progression is a significant reason why proportionately more women than men leave engineering mid-career, and that by failing to support adequately the career development and management of *all* engineers, the sector not only fails to utilise fully the talents of women staff in more senior positions, it also reduces the total pool of engineers available.

Third, *people need to be persuaded of the case for specific gender equality and diversity policies*. By implication, this means increasing awareness of how gender inequality happens: e.g., the impact of gender norms and stereotypes, the in/visibility paradox, the career penalties for women of having children. Many well meaning engineers are simply unaware of how they individually, or the wider organisation, contribute to enhancing or inhibiting gender equality—especially the more subtle dynamics by which belonging in engineering workplace cultures is gendered. Such awareness is therefore a key prerequisite to identifying how each member of staff might make a difference to furthering gender equality. In addition, organisations need to highlight the benefits of specific policy objectives, which often extend beyond gender change. The case for flexible work practices typically points to the benefits for employees of a better work-life balance, and for employers of a healthier and more efficient workforce. Any move to reduce the career penalties for women of childbearing and childcare requires a radical shift in attitudes—not only in relation to the rights and responsibility of fathers, but also in relation to the importance of children to society as a whole.

THE NEED FOR 'CULTURE CHANGE'

To recap, good practice concerning the retention and progression of women in engineering does not happen simply because the 'right' policies are in place. A whole set of follow-through measures also needs to be in place, and adequately funded, if such policies are to be effectively implemented. These measures include: publicity and policy awareness, training and engagement, and monitoring and evaluation. Achieving good practice often involves significant change in organisational practices and ethics, which demands top-level commitment to equality and diversity backed up by adequate resourcing. The evidence about resistance to such measures, and the impact individual managers can have on their outcomes, underlines the central

conclusion of our study: good practice with respect to furthering the position of women in engineering—and in any occupations traditionally dominated by men—requires awareness of and support for gender equality and diversity across the whole organisation.

Sonia Liff and Ivy Cameron (1997) called for such 'culture change' over ten years ago. Echoing closely the evidence and analysis presented here, they argued for a more proactive approach to gender equality recognising the 'need to win hearts and minds rather than just achieve reluctant compliance' (p.44) and 'based on the view that *it is organisations not women* who have the problems' (p.36, emphasis original). The slogan 'culture change' is now commonly used by women into science and engineering organisations in the UK and elsewhere. It is helpful because it signals that policy change will have only limited impact unless it is backed up by changes in both attitudes and practices throughout the organisation.

We have suggested that 'winning hearts and minds' must involve the following elements: demonstrating the need for intervention with 'hard evidence'; highlighting the organisational, social and personal benefits of gender equality and diversity; increasing awareness of how gender inequality happens and promoting specific measures, so that all members of the organisation become part of the solution. Effective good practice in this area needs the 'buy in' not only of key players like senior and line managers, who are in a position to lead by example and shape outcomes, but also of 'rank and file' staff in labs and offices, who may otherwise resist gender change.

Crucially, as we have signalled, the needed 'culture change' encompasses a shift in wider gender awareness and practices, as well as changes in workplace culture and organisational practice. Culture change in this sense is inevitably a long-term project, demanding sustained and concerted efforts to reach all sections and levels of an organisation. But it is achievable.

ENDNOTES

[1] The label 'good practice' is typically used rather broadly, to encompass national laws, organisational policies and/or informal practice designed to meet particular objectives. We have chosen to reserve the term for any of these efforts which make a real contribution towards the stated objectives, in this case improving the position of women in engineering

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[3] Lee et al. 2010 also contains an overview of the policies and practices studied.

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