

## **Women in Engineering Blog**

**20 November 2013 Dawn Bonfield**

**Finally! The engineering world has woken up to the fact that diversity in engineering is something that is missing, needed, and urgent. This has been a long time coming, but we are starting to have more confidence that we now have the momentum to make the significant progress that is required, through action.**

What we need to do now is identify the action that is required and...well, get on with it. From our perspective this action falls into two categories – the short-term fix, and the longer-term solution.

The short-term fixes are necessary to make the best of the situation we currently have, and these fixes are required in schools, higher and further education, and the working environment (in terms of cultures, pay equality, career breaks and board positions). These are necessary because women are still in such a minority, and the problems exist as a result of this factor alone.

The longer-term solution involves finding a way to flood the pipeline with the next generation of female engineers, and once this happens and we get a critical mass of women in the engineering workplace, the shorter-term fixes will no longer be necessary, and the significant benefits of true diversity will materialise.

The long-term solution has to focus on schools and young people, with career advice and the cultivation of education/business links being the keys to success. Better careers advice will come from: the training of subject and careers teachers about the benefits of careers in engineering (through work experience, closer links with local employers, better pay for teachers with relevant industrial experience, etc); specific career links from the National Curriculum; a “gender neutralisation” of science subjects; and a publicity campaign to raise the profile generally about engineering and its associated pay and career prospects.

Girls need to be targeted specifically to show them that it’s a career that is suitable for their skills set, and we need to subtly change the language we are using when speaking to them to ensure that we match their attributes to the skills we need – such as creativity, problem solving, desire to make a difference, and great communication skills.

### **Working together**

Companies need to forge real and sustained links with their local schools, and this will help to ensure that they get the skills they need, the applicants for the apprenticeships or graduate jobs that they have on offer, and that they have access to a way of persuading the parents as well as the students that a career in engineering is a great choice.

The maritime and oil and gas industries are examples of sectors which fare worse than the engineering average in terms of recruiting women engineers, where a staggering 67 per cent of respondents to a recent survey of key industry stakeholders (by Matchtech and

IMarEst) confirmed that their workforce is currently made up of less than five percent of females, and for 36 per cent of organisations, this was less than one per cent. Whilst it is encouraging that 42 per cent of organisations responded that there have been some positive improvements in diversity, 54 per cent of respondents reported no change at all. Despite a number of incentives and initiatives to increase female engineers over recent years, it would appear that organisations within this industry are not reaping the benefits. If this trend continues, the opportunity of bridging the skills gap by encouraging more women in to the industry will be negligible, so real benefits could be achieved by a targeted campaign in these particular sectors where there is so much to gain.

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At the other end of the spectrum, getting more women into senior managerial positions - not just as role models but also as instigators of change - is another area of work that needs some disruptive action. Boards should take seriously the need to ensure diversity at this level. Increasingly this is being demonstrated as not just a "nice thing to have" but a business imperative, and companies need to ensure that they find ways to retain their senior women after career breaks, and ensure that they actively promote them.

The Perkins Report calls for innovative solutions to these problems, and at WES we have lots of ideas for the short-term fix and the longer-term solutions, so if you are serious about taking action, now is the time to do it.

*This blog appeared in the Mediaplanet publication on Women in STEM in The Independent newspaper on 4 December 2013. <http://sites.mediaplanet.com/gb/women-in-stem/taking-steps-for-a-brighter-future>*