

WOMEN ENGINEERING STUDENTS' WORKPLACE EXPERIENCES

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Background

- Economic and Social Research Council funded study (RES-000-23-0426)
- Impact of women engineering students' industrial placement on career intentions
- Addresses women engineering students' perspectives of engineering education and work
- Do views change with progression through education and placement?

Perceptions of Engineering

- Dull, uncreative, 'old economy'
- Tough, heavy and to do with machinery
- Hard sums and greasy metal
- Male dominated, but also 'macho' culture and ethos
- Self-fulfilling cycle, reinforcing masculinity of sector
- All factors reproduce view that engineering is unsuitable for women

Women in Engineering

- Initiatives to increase nos. of women entering engineering e.g. WISE
- 1973 – 3% engineering students female
- 2004/05 – 15% engineering students female
- But increasing nos. of female students across all disciplines
- Only 1.6% of all female students are engineers

Methodology

- Longitudinal, mixed methods approach
- Interviews with 24 women engineering students before and during placement
- Focus groups with 13 of same cohort post placement
- Additional 16 interviews with women who had chosen not to go on placement
- Email survey of all men and women engineering undergraduates (N.656)

KEY FINDINGS

Engineering degrees are perceived as a good basis for a variety of career paths, not just in the engineering sectors. Women engineering students have not necessarily decided to pursue an engineering career.

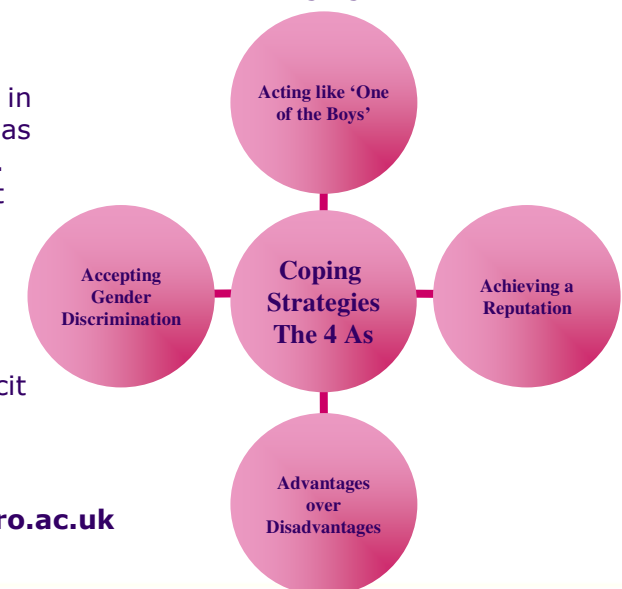
Students that go on industrial placement are more likely to have clear career ambitions than those who choose not to.

Women engineering students are not always comfortable with the teaching and learning methods used in HE. Women and men want a more practical, relevant curriculum.

Women engineering students found that the skills most transferable from HE to the workplace are practical and generic skills, such as report writing and presentation skills, not the technical knowledge gained throughout their degrees.

The transition from education to work can be difficult for students in terms of adjusting to the practicalities and routines of work as well as the context of their work (including bureaucracy and office politics). The industrial placement can facilitate the transition to employment following graduation.

Women engineering students adopt a variety of strategies for coping both as an industrial placement student and in a male dominated environment. These coping mechanisms tend to focus attention on the women themselves rather than on processes implicit within organisations.



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