Master Class: Preparing Students for Gendered Workplaces

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BACKGROUND
This masterclass is based on findings from a study of the gender inclusivity of engineering students’ experiences of workplace learning. To Australian society’s detriment, women are under-represented among professional engineers and leave the engineering workforce at a higher rate than men. Although students at all Australian universities that offer undergraduate engineering programmes are encouraged to undertake workplace learning in the form of vacation employment or internships, until now the gender inclusivity of engineering students’ workplace experiences had not been investigated.

Using a survey and interviews, the Project Team explored the gender inclusivity of students’ experiences of engineering workplaces, especially personal interactions in the workplace. Findings confirmed that workplace learning offers transformative opportunities for students. However, gendered cultures that could marginalise women, and also men with stereotypically feminine interests, were experienced by students in the study.

Based on the study, the Team developed a workshop to help students interpret and make informed decisions about gendered workplace interactions. The workshops were tested at four universities. They are designed to help female and male students to thrive in male-dominated engineering workplaces, and in the longer term to help future engineers question and reduce gendered practices in engineering workplaces.

TARGET AUDIENCE
Engineering educators including academics and professional staff who work with students to support their workplace learning, and who prepare students for engineering practice, will benefit from this masterclass.

METHOD
The masterclass will include an introduction to the theory of gendered organisations, followed by a mock student workshop in which participants will take on the role of students. This experience will facilitate discussion as to where such workshops should be inserted into the curriculum to provide the most value.

INTENDED LEARNING OUTCOMES
Masterclass participants will gain the knowledge, resources, and skills required to offer their students workshops in which students learn to identify features of personal interactions in the workplace as systemic rather than individual, and to recognise features of culture to which they might otherwise be unaware.

ACKNOWLEDGEMENTS
The student participants are sincerely acknowledged. Support for this masterclass has been provided by the Australian Government Office for Learning and Teaching. The views in this masterclass do not necessarily reflect the views of the Australian Government Office for Learning and Teaching.

PRESENTERS
Seven of the Project Team Members will facilitate the masterclass. All are engineering and mathematics educators. The Lead, Sally Male, has seventeen years’ experience improving the status of women in engineering, including managing the Women in Computing and Engineering Program at Curtin and serving on the \textit{Engineers Australia National Women in Engineering Committee} that secured the 2007 Engineers Australia Year of Women in Engineering.