STEM WOMEN BRANCHING OUT: A COMMUNITY INITIATIVE AT FLINDERS

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ABSTRACT

Background

Women are currently under-represented in all areas of Science, Technology, Engineering and Mathematics (STEM). In 2011, only 33% of all tertiary qualifications were awarded to Australian women in STEM fields (Roberts et.al, 2014) The notion that men are more dominant in the field of STEM than women and that STEM women are outside the norm in all their social encounters with their peers remains a common belief (Solomon et.al, 1997). Longstanding stereotypes, as well as a shortage of visible role models, may be contributing factors to this belief. Compared to men, women are less likely to have role models and therefore get limited advice on navigating career development (Macfarlane et.al 1998; Rosser 2004).

Objectives

We aim to help change the stereotype that STEM is predominately for males and that there are very successful females amongst our community.

Method

In August 2015, we initiated a group for young women studying STEM at Flinders University called STEM: Women Branching Out, to support and encourage female students within STEM disciplines, and to provide role models to help motivate young females to stay within their choice of STEM study. We also wanted to increase the visibility and authority of women in science which is a key element in attracting young women to science.

Results

We developed an online LMS site and program that has grown from 16 students in the first rolemodel workshop (August 2015) to 302 within 9 months (June 2016). The students were engaged through activities like LOGO competition, Role-Model workshops, Leadership Laboratory, and Thinker in Residence series. Our commencing undergrad female STEM enrolments have grown by 11% from 2015-2016.

Conclusions

In this paper, we sought to describe the usefulness and need of this type of initiatives by describing unique initiatives aimed at post graduate, undergraduate and high school gives and to provide outcomes we have achieved so far.

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