

Women's Startup Network: A Peer Mentoring Program to Develop Entrepreneurial Intent and Self-Efficacy for Women in Science and Engineering*

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Summary We present the results of two years of a pilot program to develop entrepreneurial intent and entrepreneurial self-efficacy in engineering, technology and computer science women students.

1. Relevance

Women have traditionally been underrepresented in science and engineering and in entrepreneurship. Many explanations have been proposed for these lower levels of participation: masculine stereotypes and language, socio-cultural pressures to conform to traditional female roles, and a lack of female role models. Studies in entrepreneurship have shown that female students have lower levels of entrepreneurial self-efficacy (i.e., confidence in their ability to become an entrepreneur), and intent (i.e., interest in starting a business). Given these barriers, how can we promote women's involvement? There is early evidence to suggest that entrepreneurship education can make a positive difference; and the impact may be greater for women than men.

2. Aims & Objectives

Our aims were to determine the extent to which entrepreneurial competencies, self-efficacy, and intent were developed through a peer mentoring program for women engineering and computer science students at the University of Ottawa.

3. Methods

We developed a peer mentoring program for women in engineering, technology and computer science entrepreneurship. Results of the two years of the pilot program are reported in this poster. Mentors responded to pre- and post-program surveys and were interviewed following the program, providing a mixed-methods, quantitative and qualitative, approach to our evaluation of the program.

4. Results

Results from a sample of 16 mentors in the program are presented. Post-program data revealed that entrepreneurial intent, evaluated as the intention to launch a business in the next 5 years after graduation, increased for most participants. Self-efficacy also increased. Most importantly, qualitative results indicated that participants developed an "entrepreneurial identity" – that is, they could "see themselves as a successful entrepreneur", and they expressed interest in becoming one. Through development of their ventures over the course of an academic year and participation in several entrepreneurship pitch competitions, the students reported increased self-efficacy, most notably in the planning and marshalling of resources phases.

5. Conclusions

Entrepreneurship skills can be developed in women in science and engineering by providing a supportive learning environment with a strong experiential and networking component. Female role modelling is also key.

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