

Fostering Engagement with Female Engineering Applicants*

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1. Relevance

In Canada, women only represent about 20% of engineering students. Increasing diversity will ensure that the engineering profession innovates to serve the changing needs of students, industry, and community.

2. Aims and Objectives

The Schulich School of Engineering (SSE) believes that lower female applications are due to a lack of understanding, rather than a lack of interest, in the field of engineering. The goal of the SSE is to increase this understanding by fostering meaningful engagement with female applicants, and thereby reduce the gender gap.

3. Methods In order to facilitate effective communication between female applicants and the university, an extensive and multifaceted outreach program was developed where each female applicant was presented with a variety of opportunities to connect with the school. This has allowed the applicants to share their concerns about engineering, and allowed the school to address and break down negative engineering stereotypes. The diversity plan included:

1. Engineering presentations with hands on demonstrations at High Schools. 2016-2017 school year: 80 presentations and approximately 2000 students reached.
2. Individual phone calls and emails from a recent graduate to applicants to address any questions.
3. Invitations to visit campus with parents for a personal tour, and to events and workshops on campus to connect with current students.
4. Mail out welcome packages.

4. Results

This program allowed the university to empower female applicants with the knowledge that the problem solving foundation of an engineering degree is a strong and unique platform for a range of careers including medicine, law, and technology. The peer to peer engagement provided opportunities to create connections between the applicant's passions and a career in engineering. Applicants were able to experience the support and community of the engineering program, and were encouraged with this knowledge that they too could be successful.

Through this initiative, the SSE gained a greater understanding of the barriers that female applicants are currently facing when looking at a career in engineering. There is a lack of understanding from applicants, their parents, and teachers, of the scope of the engineering field and the opportunities that exist. There is a perception that it is too challenging to succeed academically, and that students are not supported. Applicants do not know that there are multiple ways to pursue this degree, and that they can tailor the program to suit their personal interests and career goals.

5. Conclusions

This outreach helped applicants understand why engineering is relevant and how the pursuit of this profession can provide them with a meaningful and rewarding career. Providing multiple opportunities to connect with the school helped applicants engage personally with engineering, and is a promising way to increase female populations in engineering.

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