2021

Opportunities to Advance Gender Equity in Engineering & Geoscience: Feedback from the Manitoba 2030 Coalition Representatives

The number of women in engineering.

The number of men in engineering.

Justine Narine (Engineers Geoscientists Manitoba) on behalf of Manitoba 2030 Coalition Chairs Gabriela Bokhaut and Shane Mailey

2/4/2021

Background

In October 2020, the Chair, Co-chair and support staff from Engineers Geoscientists Manitoba invited the representatives from the Manitoba 2030 Coalition to a two-part discussion. There are many media articles describing the gendered impacts of the pandemic in various sectors. Engineering and geoscience worksites vary greatly, from the office to the field, the classroom and research labs to the manufacturing floor. Increased work-from-home realities and flex time options may have both positive and negative impacts on workplace gender equity in our professions. In this time of wide scale transition, adaptation and upheaval may reveal both opportunities and challenges vis-à-vis the hiring, retention and promotion of women engineers and geoscientists.

Representatives from the Coalition member organizations were asked to prepare to discuss how these opportunities and challenges played out in our Manitoba engineering and geoscience workplaces.

- How have workplace changes, if any, affected you, your colleagues and the women in your workplace?
- What changes have been positive?
- What challenges have arisen?
- Have barriers been created or removed?
- Is a gender-based analysis happening in your workplace?
- If gendered barriers have been removed, is there opportunity for long-term culture/policy changes? Is leadership aware of/discussing these barriers?
- If gendered barriers were created, can they be removed? What are the challenges? How can they be overcome? Is leadership aware of/discussing these?
- What are next steps for action?

The following feedback themes from the discussions were compiled and enriched with related research materials by Justine Narine, M.A. Soc, Equity and Representation Research, Outreach and Administrative Assistant.

Manitoba 2030 Coalition Feedback Themes

1. Flexible work arrangements
   - This includes flexible onsite working hours and advocation for radical acceptance of alternate work arrangements. Flexible work arrangements enable professionals to have more control over their schedules and balance work and homelife responsibilities

Based on the Technical Women in Consulting Engineering (TWICE) report (2015) 96% of female respondents said flexible on-site working hours was important to them, however only 10% felt comfortable using flexible on-site working hours.

   - **Questions to consider:**
     - ✓ Did you know that women are still shown to, knowingly or not, take on upwards of 70% of caregiving responsibilities? (Regis et al., 2019)
     - ✓ Is the availability of work-life initiatives a major determinant of employees' perceptions of organizational support?

2. Maternity/paternity/parental leave develops skills, including emotional intelligence
   - Though not always viewed as such, the skillset of time management, communication and adaptation that come with care work during a family leave are an asset to a professional and the organization they work for. Elder care and gender reassignment leave also bring valuable perspectives and experiences to an organization.

*According to Butts (2013), multiple studies exist on the implementation of work-family policies within the workplace and particularly in engineering, however these initiatives are not always linked to the impact of workplace **attitudes**. They determined that there is a positive correlation between work-family policies and workplace attitudes. Moreover, the policies had a positive relationship **with job satisfaction, affective commitment, and intentions to stay***.

- **Questions to consider:**
  - ✓ Is taking leave (maternity, paternity, parental, elder care, gender reassignment, illness, stress, educational) facilitated and supported in your organization, including for those who haven't historically been expected or encouraged to do so?
  - ✓ Does your workplace culture celebrate taking leave as a vital part of a professional's development and well-being or is it simply tolerated at best and silently or actively punished at worst?
  - ✓ Did you know that men leave the engineering profession just as much as women but for reasons other than parental leave? (TWICE, 2015)

3. <u>Mentorship and culture shift in definition of professionalism</u>
   - Professionalism is an objective term born out of meritocracy. Respect is a subset value of this term and with it respect for those who share 'sameness'. Professionalism and productivity can be more than the time and number of hours worked. It can be redefined to account for gendered, racial and cultural differences which help shape and develop the fields of engineering and geoscience.

According to Seron et al (2018, pg. 7.) "To raise concerns about inclusion or marginalization is not only out of step with the presumed political neutrality of engineering, but may be interpreted by some as threatening the objectivity of engineering itself as well as a meritocratic foundation for tapping those with the potential to become engineers". It is not only necessary to change policies, but to change attitudes as well.

- **Questions to consider:**
  - ✓ Do you have a formalized mentorship program?
  - ✓ Do your junior personnel see themselves reflected in management, leadership and executive positions?
  - ✓ Is Allyship, as active anti-racism, anti-sexism and anti-oppression, built into your organizational structure to materially (power, salary and resources) repair the consequences of historical and ongoing exclusive biased assumptions, attitudes, policies, programs and practices?
  - ✓ Is there a glass ceiling in your organization for underrepresented groups in engineering and geoscience?

4. Equitable training opportunities and visibility of junior employees

- Some junior interns report a decline in what would have been organically occurring training opportunities with pre-pandemic in-office and on-site interaction. Under regular circumstances, some interns and professionals have reported that informal networking and mentorship relationships are birthed from workplace activities that they may neither have the interest or the time for, like a hockey pool, for example. Intentional mentorship, sponsorship, networking and career development for interns is important for retention.

Barabino and colleagues (2019) proposed that a change in the mindset of power and effective leadership is crucial towards gender balance. In addition, the development of cultural intelligence is necessary to achieve the change.

- **Questions to consider:**
  - ✓ Are there opportunities to provide training to compensate for the current conditions?
  - ✓ Is there an awareness and intention to make sure that all new and junior staff receive training in an equitable way?

5. <u>COVID-19 and power dynamic impacts on individuals and team communications</u>

- Effective communication is necessary in any organisation. This holds true for both technical and non-technical colleagues, speakers and audiences.

According to the Anti-Oppression Resource and Training Alliance (2017), "when someone does or says something that causes harm or supports the values of oppressive systems, it is not their intention to do so. But when we use our good intentions to deny (or avoid being accountable for) the harm, more harm is caused." Acknowledgement of the different cultural expectations everyone brings to table is vital to facilitate effectively. Focusing on skills of negotiation, listening and interpersonal interaction is just as vital as the content discussed and/or presented.

- **Questions to consider:**
  - ✓ What are the challenges in communication and collaboration in your workplace before, during and after COVID-19?
  - ✓ Are regular and ongoing feedback from staff to leadership structured formally and/or informally, welcomed and normalized?

For questions, comments and how to participate in the Coalition please refer to contacts:

Lisa Stepnuk
Director, Equity and Representation
(204) 474-2736 Ext. 242
LStepnuk@EngGeoMB.ca

Justine Narine
Administrative Assistant, Research and Outreach
(204) 474-2736 ext. 243
JNarine@EngGeoMB.ca

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