Leadership

June 2, 2015

Whitehorse, Yukon

Westcoast Women in Engineering, Science & Technology
Our mission is to advance engineering and science as welcoming careers that serve our world through holistic understanding and creative, appropriate and sustainable solutions.

www.wwest.ca
• Washroom
• Emergency exit
• Fire procedures
• Confidentiality & safe space
Lacia Kinnear
Business Case Summary

- Access of employers to a broader talent pool
- Increased innovation potential and market development
- Stronger financial performance
- Improved governance
- Greater return on human resource investment


Increase Innovation

Diverse groups have different perspectives

Experience less “groupthink” and generate more ideas

& create more solutions

Diverse groups breed innovation
Women Board Directors (WBD) Align With Strong Performance at Fortune 500 Companies

Financial measures excel where women serve

- Return on Equity by Women’s Representation on the Board:
  - Companies with more WBD outperform those with the least by 53%
  - ROE: Bottom Quartile WBD = 9.1%, Top Quartile WBD = 13.9%

- Return on Sales by Women’s Representation on the Board:
  - Companies with more WBD outperform those with the least by 42%
  - ROS: Bottom Quartile WBD = 9.7%, Top Quartile WBD = 13.7%

- Return on Invested Capital by Women’s Representation on the Board:
  - Companies with more WBD outperform those with the least by 66%
  - ROIC: Bottom Quartile WBD = 4.7%, Top Quartile WBD = 7.7%

Conference Board of Canada:

**Boards with more than two or three women have stronger practices in:**

- Regular reviews of non-financial performance
- Measurement and implementation of corporate strategies
- Attention to audit and risk oversight and control
- Presence of conflict of interest guidelines and codes of conduct
- Effective two-way communication with stakeholders
- Consideration of measures of innovation and of social and community responsibility
**Agentic vs. Communal Behaviour**

**Women in Leadership Positions**
- Use of Communal behaviour
- Use of Agentic behaviour

- Respect from coworkers
- Both actions carry a risk of being disqualified from a job application.

**Observed Effects of Women Using Forced Agentic Behaviour**
- Increase ♀ ’s competence scores to equally agentic men
- Seem more threatening; less persuasive & less influential
- Decrease compliance of workers for ♀ managers

If women need to manage the impressions they give off, it can lead to stress, anxiety and reduced task performance.
Gendered wording subtly signals who belongs and who doesn’t. Below are examples of language in job advertisements and qualities of candidates.

### Feminine
- A company’s “excellence” in the market
- “Understand markets to establish appropriate selling prices”
- “We are committed to providing top quality health care that is sympathetic to the needs or our patients”

### Masculine
- A company’s “dominance” in the market
- “Analyze markets to determine appropriate selling prices”
- “We are determined to deliver superior medical treatment tailored to each individual patient”

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### Sample Gendered Words

#### Feminine
- Affectionate
- Cheer*
- Commit*
- Communal
- Compassion*
- Connect*
- Considerate
- Cooperat*
- Depend*
- Emotona*
- Empath*
- Flatterable
- Gentle
- Honest
- Interdependen*
- Interpersona*
- Kind
- Kinship
- Loyal*
- Nurtur*
- Pleasant*
- Polite
- Quiet*
- Respon*
- Sensitiv*
- Submissive
- Support*
- Sympath*
- Tender*
- Together*
- Trust*
- Understand*
- Warm*

#### Masculine
- Active
- Adventurous
- Aggress*
- Ambition*
- Analy*
- Assert*
- Athlet*
- Autonom*
- Challeng*
- Compet*
- Confident
- Courag*
- Decide
- Decisive
- Decision*
- Determin*
- Domina*
- Force*
- Hierarch*
- Hostil*
- Independen*
- Individual*
- Intellect*
- Lead*
- Logic
- Objective
- Opinion
- Outspoken
- Persist
- Principle*
- Stubborn
- Superior
- Self-confiden*
WARM LANGUAGE & PUBLIC (DIS)APPROVAL

AS CONGRESS’S LANGUAGE GOES NEGATIVE SO DOES THEIR APPROVAL

PROSOCIAL LANGUAGE
PUBLIC APPROVAL RATING

1996 YEAR 2014
What do you Value?

integrity
diversity
leadership
performance
excellence
quality
commitment
agility
people
service
caring
respect
innovation
honesty
teamwork
adaptability
environment
safety
professionalism
relationships
trust
For diversity to be considered a value of a particular company, all members of the company must be able to articulate:

- How diversity affects the company’s **business case**
- How diversity is communicated and demonstrated in corporate practice

For an organization to benefit from safety, they most develop a **safety culture**.
For diversity to be considered a value of a particular company, all members of the company must be able to articulate:

- How diversity affects the company’s business case
- How diversity is communicated and demonstrated in corporate practice

For an organization to benefit from diversity, they must develop a diversity culture.
Be authentic.
Lead from where you are.
Challenges

• Solutions
• Ideas
• Leverage Points

Strengths
• Put your strategy in the centre
• At each point, write as many questions about the strategy as possible that start with the prompt. For example:
  – Who will this benefit?
  – Who will resist this?
  – Who will champion this?
  – Who will help?
  – Who has the authority to make the change
Strategy Star

Once you have an idea of how to make a friendlier workplace, the strategy star can help you determine what steps to take next. Write your strategy (e.g. ensuring that appropriate male and female washroom facilities are available at your work site and not an hour away) in the center of the star. Write questions about the strategy that begin with the prompts at the tip of each star - this is your starting point.
Leadership styles
Why should STEM people lead?

• Societies needs scientists and engineers that understand societies
  – “Engineers are the gardeners of society”.
  – Our built environment and our technological developments shape our day to day lives.
Does it Matter?

• Professional standards require training in leadership attributes - (CEAB graduate attributes)
  – being a member and a leader of a team;
  – communications skills;
  – professionalism;
  – impact of engineering on society and the environment;
  – ethics and equity;
  – economics and project management;
  – and life-long learning
My Why

• Entrenchment and valuing of service as part of leadership practice in engineering.
• Educational value - reflecting on engineering experiences provides a broader view and life long learning.
• Move the narrative about engineering from technological hero to societal servant.
• And through that change in narrative to attract more women to the engineering profession
Leadership and the Participatory Process

Partnership: power is shared by citizens and power holders. Planning and decision-making responsibilities are shared.

Delegated power: Citizens achieve dominant decision-making authority over a particular plan or program through negotiation with power holders.

Citizen control: participants / citizens are in full charge of policy and managerial aspects and be able to negotiate the conditions under which ‘outsiders’ may change them.
<table>
<thead>
<tr>
<th>Technocratic engagement (Traditional)</th>
<th>Democratic engagement (Participant)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mutuality</strong></td>
<td>Reciprocity</td>
</tr>
<tr>
<td>Deficit-based</td>
<td>Asset-based</td>
</tr>
<tr>
<td><em>For the public</em></td>
<td><em>With the public</em></td>
</tr>
<tr>
<td>Applied</td>
<td>Inclusive, collaborative, integrative problem-solving</td>
</tr>
<tr>
<td>Uni-directional flow of knowledge from credential experts within the academy</td>
<td>Multi-directional flow of knowledge within a web of knowledge centres who share authority</td>
</tr>
<tr>
<td>Distinction between knowledge producers and knowledge consumers</td>
<td>Co-creation of knowledge; capacity building for collaborative knowledge production and action</td>
</tr>
<tr>
<td>Primacy of academic knowledge</td>
<td>Shared authority for knowledge creation</td>
</tr>
<tr>
<td>University as the centre of teaching, learning and knowledge production which can be focused on solving problems ‘out there’</td>
<td>University as one part of an ecosystem of teaching, learning and knowledge production which is characterized by an orientation toward public purposes and problem-solving</td>
</tr>
<tr>
<td>Often transactional exchanges</td>
<td>Potentially mutually-transformative partnerships</td>
</tr>
<tr>
<td>Hierarchy / traditional power dynamics</td>
<td>Co-roles / powershift</td>
</tr>
</tbody>
</table>

Change how STEM practitioners look at problems

<table>
<thead>
<tr>
<th>Technical Problem</th>
<th>Adaptive Challenge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem is known – previous experience</td>
<td>Problem/Solution is not known</td>
</tr>
<tr>
<td>Solution is known</td>
<td>Expert knowledge is limited or not available</td>
</tr>
<tr>
<td>The group has established processes and authorities to provide a solution</td>
<td>No processes or solutions that can address the challenge</td>
</tr>
<tr>
<td>No need for further learning</td>
<td>Need for learning and capacity development</td>
</tr>
<tr>
<td>Solution exists before the problem arises</td>
<td>Problem exists before the solution</td>
</tr>
</tbody>
</table>

Gonzalez, 2013
Developing Leadership through Service Learning Experiences

• Service Learning
  – Experiential education broadens world–view
  – Practice of critical reflection gives opportunity to connect experience to learning.

• Community Service Learning
  – Strong fit with design practice
  – Well established in universities in US and Canada

• International Service Learning
  – Service learning with strong cultural learning component
  – High impact but limited opportunities for students due to cost, co-op and other curricular limitations
Service Learning Cycle

http://www.ldu.leeds.ac.uk/ldu/sddu_multimedia/kolb/static_version.php
UBC Global Engineering Leadership Course Design

APSC 461 (May-June)
• Speaker Series and Workshops
• Readings, Reflections and Conversations
• Community Service Learning Project

APSC 462 (July-August)
• International Service Learning placement at Tsomanotik, Chiapas, Mexico
• Training by UBC ISL unit
• Series of essays, journal, 360 Review
ISL – Appropriate Technology Development

• Working with community members and Mexican engineering students
• Examples: Food dryers, Bicycle water pumps, Solar hot water heaters
• Largest impacts on project – language, culture, and relationships.
Non-Work Leadership Opportunities

• Community and/or professional group chair
• Mentor/lead student groups
• Workshop organization
• International leadership opportunities
  – Engineers without Borders
  – Red Cross/Crescent
Key Leadership Strategies

• Learn the ropes first – try a wide variety of roles so you truly learn about the situation
  – Builds authenticity and trust (servant leadership)
  – Helps you to understand the problems
• Co-Lead (try before you buy)
• Develop allies internally and externally
• Surround yourself with people who are smarter than you (and don’t be threatened by them)
• Be open and honest with your team
• Take some risks
• Plan for succession
Question:

Why do you want to lead?
Leadership responses
A variety of leaders

• Over our careers, we are supervised by a variety of leaders

• Each may have different styles and characteristics

• We don’t always respond well to all of these differences

• To thrive in our careers, we need to learn how to adapt and maintain our performance to these less appealing styles and
Questions

Think about the leadership styles of the people you work with and the way you react to them.

• What inspires and motivates you?
Think about the leadership styles of the people you work with and the way you react to them.

- What inspires and motivates you?
- What discourages and disheartens you?
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• What inspires and motivates you?
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• How can you overcome discouraging leadership?
Think about the leadership styles of the people you work with and the way you react to them.

- What inspires and motivates you?
- What discourages and disheartens you?
- How can you overcome discouraging leadership?
- How can this inspire your own leadership approaches?
Aynslie Ogden
Find Advocates

Build a Peer Network

Make Small Changes

Make Strategic Choices

Strategies
• Look for allies who are in a position to speak out
• Encourage others to echo your thoughts
• Help one “mover” understand the issue so they can move it for you

Find Advocates
• A group of peers will understand where you are
• They can provide both support and critical mass for change
• If there is no one at the top of the mountain, find people to climb it with you
• A puzzle is made of hundreds of pieces
• Each piece is essential
• You put the puzzle together one piece at a time
• A single drop into a pond can have a big effect

Make Small Changes
• Pick your battles - you can forfeit some and still win the war
• Sometimes it is better to argue with actions than words
• Decide when it’s time to have someone else involved
Organizational Measures

• Diversity Audit (Cukier et al.)
  – Leadership & Governance
    • CEO engagement
    • Policy and communication on diversity
  – Diversity metric tracking
    • Proportion of female employee in relation to the pool
    • Level and rate of advancement, compensation tracking
    • Comparison of diversity metrics vs. competitors
  – Quality of Life and Workplace Culture
    • Flexible work options
    • Family-friendly policies
Organizational Measures

- Human Resources Practices
  - Alternate routes to senior positions
  - Active recruitment of women
  - Training and development

- Integration and Mainstreaming of Diversity Culture
  - Reflect diversity in product development and design
  - Include diversity values in marketing and reporting

- Develop the Diversity Pool
  - Support programs that raise awareness of engineering as a positive career choice for women
  - Work with professional association and universities to increase the profession’s share of talented women
## Diversity Audit

<table>
<thead>
<tr>
<th>Practice</th>
<th>Example</th>
<th>Organization</th>
<th>Initiative</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do senior executives pro-actively communicate the importance of diversity inside and outside the organization?</td>
<td>In addition, by having management initiate the process, the strategy becomes incorporated in the firm’s operational activities</td>
<td>Scotiabank</td>
<td>Connects strategy to advance women to performance targets</td>
<td>All information is on the company’s diversity intranet site, including a toolkit for managers, <em>Diversity in Action</em></td>
</tr>
<tr>
<td>Do leaders reflect the composition of the workforce?</td>
<td>When senior management is representative of the workforce, it can more effectively develop the pipeline (i.e. offer training and development to under-represented groups)</td>
<td>TD Bank</td>
<td>Communicate consistently and clearly diversity commitments and initiatives</td>
<td></td>
</tr>
<tr>
<td>Is there a diversity council?</td>
<td>As a result, members of under-represented groups report more job satisfaction and greater participation</td>
<td>RBC</td>
<td>Senior management/CEO discuss the importance of diversity to the employees and to their constituents</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Responsible for creating and implementing policies to increase diversity</td>
<td>RBC</td>
<td>RBC’s Diversity Leadership Council</td>
<td>Chaired by the President and CEO of the company</td>
</tr>
</tbody>
</table>