

12th National CCWESTT Conference: Building on Success
May 29-31 2008
University of Guelph, Guelph, Ontario

NSERC CHAIR FOR WOMEN IN SCIENCE & ENGINEERING PROGRAM¹ – STRATEGIC
DIRECTIONS FOR WISE² INITIATIVES

A Report on an Interactive Session on Strategic Ways to Support and Promote WISE Initiatives
in Canada

Moderated by:

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&

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Date: May 31st 2008

¹ Natural Sciences & Engineering Research Council of Canada Chair for Women in Science & Engineering Program. Henceforth, referred to as the NSERC Chair Program or CWSE.

² Women in Science & Engineering

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NSERC Chair Program – Strategic Directions for WiSE Initiatives

The organizers of the 2008 Canadian Coalition of Women in Engineering, Science, Trades and Technology (CCWESTT) Conference convened a workshop to solicit ideas from conference participants on strategic directions for promoting the participation of women in SETT. The focus of the workshop was to discuss how the NSERC Chair for Women in Science and Engineering (CWSE) program³ can best support the work of relevant stakeholders and to identify what support and resources may be available from stakeholders to enable the CWSE program to function better.

The session was held on the final day of the 2008 conference (31ST of May 2008) and was attended by approximately 50 women who had participated in the conference. These women represented various interest groups (stakeholders) including: undergraduate and graduate students in science and engineering, social science researchers/academics, professional engineers and scientists, and those working in advocacy programs. The 5 current NSERC chairs representing (1) the Atlantic provinces, (2) British Columbia & Yukon, (3) Ontario, (4) the Prairie provinces, and (5) Quebec, were also in attendance.

The workshop participants were asked to grapple with two questions:

- 1.) How can the NSERC Chairs Programs make a meaningful contribution to the success of your work?
- 2.) How can your work make a meaningful contribution to the NSERC Chairs Program?

³ The NSERC WISE chair program was launched in 1996. The goal of the program is to increase the participation of women in science and engineering and to provide role models for women active in and considering careers in these fields

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Participants were encouraged to contemplate the questions with their specific interest group (e.g., student, researcher) in mind. The participants were assigned to 4 different groups. Three groups were asked to focus on question one and the fourth group was asked to focus on second question. Under the guidance of a facilitator, the groups held discussions and generated responses to the questions. Individual participants also responded to the questions on paper. This report summarizes the ideas generated from both groups and individuals during the session.

Part I: How can the NSERC Chairs Program make a meaningful contribution to the success of your work?

Central Themes & Ideas Arising from the Session

1. The creation of a central national network/forum for stakeholders
2. The creation of a central informational electronic resource for stakeholders
3. Chair visibility and the promotion of institutional/public knowledge about the work of NSERC WISE chairs
4. NSERC Chair Relationships/Work with Industry
5. Working for broader social change (changing public opinion on WESTT⁴ issues)
6. Research Agenda
7. Mentorship for youth and students in SETT⁵

⁴ WESTT – women in engineering, science, trades and technology.

⁵ SETT – science, engineering, trades and technology.

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Details on the information collected under each of these themes are presented below:

1. Several participants pointed to the need for a central national forum or umbrella network for all stakeholders doing advocacy work for women in WESTT. The goals of the network would be to:
 - a. promote networking and encourage partnership
 - b. encourage the sharing of resources among similar institutions
 - c. avoid unnecessary duplication of efforts (re-inventing the wheel)
 - d. provide a forum for advocacy organizations to promote/advertise their events, programs and activities
 - e. create a stronger representation for the WESTT cause

Suggestions on how this could be done include:

- a. Minimizing effort by creating regional networks (NSERC chair regions) first.
 - b. Encouraging interested parties to self-identify for inclusion in the network
 - c. Identifying interested parties for inclusion in the network by organizing a symposium on issues surrounding women in SETT and collecting identifying information (e.g., e-mail addresses)
 - d. Using professional engineering (science) organizations to identify interested mentors and/or advocates

2. Several participants proposed the creation of an electronic resource (website) that could serve as an informational and/or interactive resource for all relevant stakeholders

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including students, advocacy workers etc. The electronic resource could serve multiple functions including:

- a. Providing a database of relevant contact information for students (e.g., on who to contact for advocacy information, potential speakers for conferences and presentations, where to get career guidance etc.)
- b. Functioning as a depository of information on advocacy programs from all regions
- c. Providing a discussion forum for different stakeholders

Suggestions on the creation/functioning of the website include the proposal that the site be created in a Wiki format (similar to Wikipedia) so that different groups/stakeholders can upload their own information.

3. Several participants suggested that steps needed to be taken to improve the visibility of the NSERC Chairs and promote institutional (academic) and public knowledge about their work. The following are specific suggestions on how this can be done.
 - a. Improving the clarity of the content on the CCWESTT website and ensuring that there is contact information for each NSERC Chair
 - b. The NSERC Chair should work to have more direct contact with graduate students about their work/activities
 - c. The NSERC Chairs can visit universities in their respective regions in order to meet with members of undergraduate and graduate WISE groups (if they exist) or an invited audience of female students to help build communities, disseminate information and generate additional ideas on institutional advocacy

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- d. The NSERC Chairs should be available/willing to participate or provide talks at relevant public events (e.g., serve as keynote speakers)
4. Several participants suggested that the Chairs need to work to develop a better relationship with partners in industry in order to build awareness about the issues surrounding women in SETT. Suggestions on how this could be done include:
- a. The creation of the position of an NSERC WISE Chair in industry (versus academia)
 - b. Enabling the dissemination of information about women in SETT to industry partners
 - c. Engaging in diversity training with managers in the SETT industries
 - d. The delivery outreach workshops to men in SETT who have graduated and are working in industry
5. Several participants said that the NSERC chairs should serve as agents for mobilizing support to change public opinion about the situation of women in SETT and the need for advocacy. There were several suggestions on what could be done to help achieve this aim:
- a. Having unified addresses to the media by NSERC Chairs
 - b. More press releases by NSERC Chairs (e.g., in community newspapers)

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- c. Having Chairs speak out when there are major public incidents with regard to gender discrimination for women in SETT in order to publicize their cause and address the injustice
 - d. The chairs should find a way to advise government on policy
 - e. As an institution NSERC can exert more influence on university administrators (Deans) to get them to champion the WESTT cause
 - f. The NSERC Chairs can find ways to make relevant/potential partners see how supporting and championing the cause of women in SETT is functional/instrumental to them
 - g. Work needs to be done to improving the social profile of SETT professions
 - h. Recruiting high profile men to champion the WESTT cause
6. The Chairs need to take the lead in directing a research agenda that promotes the value of WISE initiatives and generates data that (advocacy) organizations can use to justify and support their efforts. Suggestions on how this can be done include:
- a. Spelling out relevant, fundable research questions
 - b. Promoting the value of funding social scientist researchers working on research questions relevant to the WISE agenda
 - c. Promoting research on the operations of advocacy programs
7. The Chairs should promote the mentorship of high school students and female students in SETT. Suggestions on how this can be done include:

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- a. Linking potential mentors with interested students via an electronic resource
- b. Creating opportunities to promote awareness among the youth about the careers available in SETT
- c. Developing regional support networks for female graduate students in SETT
- d. Recruiting more women and men in SETT to serve as mentors

Additional Ideas Arising from the Session

Data that could not be categorized under the above themes is presented below:

1. The NSERC Chairs should work to develop a better relationship with organizations that can impact decisions about the high school curriculum
2. The Chairs can work toward ensuring that more information is made available about advocacy work for Aboriginal communities
3. The NSERC Chairs should ensure continuity and momentum for initiatives started once they vacate their positions
4. The NSERC Chairs should organize formal national gatherings (such as the CCWESTT conference) for relevant stakeholders
5. The NSERC Chairs should enable (or participate in) the distribution of resources related to equitable recruitment and selection to universities with the ultimate goal of increasing the number of women faculty. This work could include:
 - a. Assisting in the development of standards/guidelines for academic faculty recruiters on how to overcome implicit gender bias – a tool for selection committees aimed at faculty in Canadian institutions

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6. Funding should be made available for students to attend conferences such as the biennial CCWESTT conference
 7. The Chairs can work to see that more emphasis is placed on support/advocacy for women in the trades
 8. The Chairs could work toward initiatives that provide more information on WISE to parents
 9. The Chairs can advocate for more resources to support women in SETT
 10. The NSERC Chairs can work to highlight important (and successful) initiatives and make them available to other outreach projects across Canada
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Part II: How can your work make a meaningful contribution to the NSERC Chairs Program?

Ideas Arising from the Session

1. Current stakeholders can work to disseminate information from the Chairs to relevant audiences. There were several suggestions as to how this could work.
 - a. Stakeholders in industry can work to provide audiences for the NSERC Chairs outside of academia
 - b. Certain stakeholders can write reports or articles on the work of their NSERC Chair for their peers

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- c. Different stakeholders can make the Chairs' work more visible by providing links on their work/initiatives on their websites.
 - d. Existing advocacy organizations can work as conduits of information for the NSERC Chairs by passing on information about perspectives and circumstances in the field to the Chairs (and vice versa). For example, ACTEW (A Commitment to Training and Employment for Women) would be willing to partner with the NSERC Chairs on events that are Ontario-based
 - e. The undergraduate community of female students in Science and Engineering can be as a resource for NSERC Chairs by helping them establish channels of communication with students within universities. The Chairs can also solicit valuable feedback from students working on co-op, internships etc. about their experiences
2. Stakeholders in industry can work to get financial support for WESTT causes and/or initiatives from potential industry partners
 3. Academics can continue to conduct scholarly research on various aspects of women in SETT in order to find empirical evidence to support the Chairs' work
 4. Stakeholders can serve as advocates for women in SETT and as volunteers for advocacy initiatives organized by the NSERC Chairs.
 - a. Individual stakeholders can work for gender equality in SETT in their own institutions

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5. Successful programs can be used as ‘best practice’ models for new initiatives. This could include using the expertise of WESTT stakeholders from the US who have worked on similar initiatives.
6. Different stakeholder groups and advocates can work with girls and young women to develop their interest in SETT and provide career support. There were several suggestions about how this could be done.
 - a. Academics can work to create discussion forums among female undergraduates, graduate students, faculty and university administrators at their respective institutions.
 - b. Certain advocate groups can continue to work with female youth to help them recognize/discover their potential in science and engineering through hands on activities
 - c. Advocates can work to ensure that there are opportunities for youth who are underprivileged and underrepresented in science and engineering (e.g., through bursaries and sustained outreach initiatives in underrepresented communities).
7. Faculty can work within their own institutions for improved recruitment and retention of female faculty in the sciences and engineering
8. The Women in Engineering Advisory Group (WIEAG) can work to link the NSERC Chairs with provincial Engineering and Geosciences Association. Representatives from each association/regulatory body can provide advice and share ideas/initiatives with CCWESTT members.

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9. Professional Engineers (and other professionals) can work to support the cause for

women in SETT throughout their careers by:

- a. Supporting recruitment and retention efforts to get more women in SETT
 - b. Providing networking and mentoring support to help young professionals progress
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NOTE:

Co-Facilitators for the Strategic Directions Session were:

Ann Holmes

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ⁱ *This report was prepared by Betty Onyura. Date: July 7th 2008*