

Institutional Portfolio

University of Wisconsin-Madison (UW-Madison)

University of Wisconsin-Madison Institutional Transformation Project: Women in Science & Engineering Leadership Institute (WISELI)

Dates of Grant: January, 2002 – June, 2007 (round 1)

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Key Elements of the Overall Change Strategy

The Women in Science & Engineering Leadership Institute, or WISELI, was established as a centralized, visible administrative structure with a mission to address impediments to women's academic advancement and to make these issues for women engineers and scientists more visible within the organization. WISELI sought "to answer two questions: What are the barriers impeding the participation and advancement of women in science and engineering?" and "How can we eliminate or overcome these barriers?"

The original proposal did not espouse an explicit theory of change, but there was some thought about what levers would or would not result in desired change, and over time the project incorporated a "stages of change" model. Areas such as individual leadership development and mentoring were thought to be well covered on campus already and thus were not targeted. The project developed a focus on unconscious bias, as evaluation data from their workshops persuaded the team that providing new knowledge about unconscious bias made a difference in participants' attitudes. A sizable research and evaluation effort treated the university as a "living laboratory" for studying gender equity, implementing solutions to problems, and assessing their impact.

Relevant Elements in the Institutional Context

- The large size of the institution led the leaders to decide to work across 70 science and engineering departments in the biological and physical sciences rather than to take a narrower approach.
- The history of decentralization at UW was felt to be an advantage, since the project leaders did not need permission or sign-offs from senior administrators to take action steps or experiment with new ideas. On the other hand, the decentralized environment made measuring impact more challenging.
- Basic work/life policies and programs for women had already existed on campus—mentoring and
 childcare programs, policies such as tenure clock extension for family leave, and a process for salary
 equity review. Thus the project could experiment with and shape new initiatives beyond basic policies.

- A campus culture of strong faculty governance and leadership played a role in how the team structured WISELI programs. For example, workshops were organized around faculty-to-faculty peer teaching, guided by the assumption that faculty value interacting with other faculty.
- The support of the provost's office has been important, but overall WISELI is seen as a faculty-driven initiative, which is consistent with the culture and history of the university.
- Carnegie: Public RU/VH, comprehensive doctoral with medical/veterinary.

Scope of the ADVANCE Initiative

The project focused on biological and physical science (including engineering) faculty and staff in the six schools with the largest faculties in these areas: the Colleges of Engineering, Letters and Science, and Agricultural and Life Sciences, and the Schools of Veterinary Medicine, Pharmacy, and Medicine and Public Health. Overall, the project targeted approximately 70 units and 1,200 faculty.

Program Elements

Significant components of WISELI's work include the following:

Hiring workshops. Originally developed for chairs of faculty search committees, a workshop series on "Searching for Excellence and Diversity" was successful in guiding faculty searches and was then extended to all members of such committees. WISELI now offers "train the trainer" workshops to help other institutions develop their own workshops on this topic, which brings in revenue to support ongoing WISELI programs.

Departmental climate workshops. These workshops brought groups of chairs together who would survey their departments and use the survey results to identify issues and develop plans to enhance their department's working environment. Almost all the physical science departments participated and about one-third of the biological science did so. Chairs reported these workshops to be very useful, although climate survey data did not always show positive impact within individual units.

Life Cycle Professorships. This program provides funding to support faculty women and men at critical points when life events are negatively affecting their scholarly careers. These very popular grants were ultimately funded with private funds (although the university stepped in one year when the endowment was hit hard by the economy). The Vilas Life Cycle Professorship program has been honored by the ACE/Sloan Award for Faculty Career Flexibility and versions have been adopted at other institutions.

Increasing women's visibility. Grants for "Celebrating Women in Science & Engineering" support groups, including graduate students, brought women speakers to campus, thus increasing women's visibility in varied spheres, especially in departmental brownbag or lecture series. This program brought 66 women to campus between 2002 and 2006 and continues with support from various colleges and schools. WISELI also hosts an annual distinguished lecture named for Denice Denton. Based on the team's observation that attendance at campus-wide events lessened over time, the program now concentrates on one major event per year.

Evaluation and research. The program gathered data on gender equity indicators and campus climate; evaluated campus programs for their effectiveness in enhancing gender equity; and studied topics such as departmental climate, why women leave the faculty, and the efficacy of track changes from academic staff to faculty.

Outcomes

- As of the end of the grant period, the proportion of women faculty had increased in biological and physical science departments (15.3% in 2000 to 20.0% in 2006). Women chairs in these fields rose from 4.5% of chairs in 2000 to 14.7% in 2006. Men's and women's salaries were approximately the same after controlling for rank and division. However, women still left the university at higher rates than men, and there was no change in the number of women directing centers or institutes.
- Workshops for members of faculty hiring committees led to increases in offers to and hiring of women candidates; there was also evidence of increased satisfaction among the new hires and increased awareness of climate issues more generally.
- Evidence about the impact of WISELI activities on attitudes is mixed. Overall data show that faculty
 perceptions of the climate are more positive, but participation in WISELI events is associated with more
 negative views of climate among women and faculty of color. Perceptions of the quality of departmental
 climate declined among chairs who took part in the climate workshops, presumably because they were
 more aware of climate-related issues.
- The program is well institutionalized, as WISELI became very visible on campus and nationally. It is housed in the College of Engineering with space and staff and funded by various UW colleges and through other grants. Project leaders tracked which colleges used what percentage of WISELI resources, which helped them to secure funding from those colleges to sustain WISELI. Some activities are revenue-generating as the institute provides other campuses with consulting, workshops, publications, and resources on issues for women in science and engineering.

Research Team Observations

- The project demonstrates how a clear and selective focus on addressing knowledge and beliefs about hiring can serve as a means to affect institutional culture more broadly.
- Creating WISELI outside the central administration enabled the project leaders to have considerable
 autonomy in how they organized their work. They could create a faculty-led project in which, they
 explained, faculty members could talk with faculty members. The role of the provost's office was to
 provide support but not to intrude upon or manage the project. The project did not identify as needs, or
 seek to address, formal issues of institutional policy or procedures that would have required more
 involvement of administrators in specific institutional roles.
- The team's final report offers thoughtful analysis of some things that did not work well: initially
 expecting faculty to attend too many meetings, focusing some initial workshops on single departments,
 and trying to encourage changes for women from non-tenure-track appointments to tenure-stream
 faculty appointments.

Project Team Observations

Since the end of its ADVANCE IT award in 2007, WISELI has continued to implement all major initiatives begun with the ADVANCE IT award and to innovate in research and programming to promote the advancement of women in academic science and engineering at UW-Madison and nationally. WISELI has disseminated our *Searching for Excellence & Diversity®* hiring workshops to over 25 colleges and universities via on-site train-the-trainer workshops. We also worked with nine universities to disseminate our *Enhancing Department Climate* workshops. In 2009, WISELI was awarded an NIH grant to create a new workshop,

entitled *Breaking the Bias Habit**. Presented at the department level, this 2.5-hour workshop was shown in an experimental study to positively affect awareness of bias, motivation to act without bias, and actions to reduce bias (Carnes et al., in press). In addition, some measures of climate at the department level improved for departments who received the workshop. Detailed workshop materials and video clips for facilitators are available on the WISELI website, and WISELI is available to administer the workshop on other campuses.

Carnes, M., Devine, P. G., Manwell, L. B., Byars-Winston, A., Fine, E., Ford, C. E., Forscher, P., Isaac, C., Kaatz, A., Magua, W., Palta, M., & Sheridan, J. (forthcoming, 2014). A cluster randomized trial of an intervention to break the gender bias habit. *Academic Medicine*, in press.

For Further Reading

WISELI's website provides extensive detail on its programs, resources and reports. http://wiseli.engr.wisc.edu/

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