



Institutional Portfolio
University of Michigan

**University of Michigan Institutional Transformation Project:
University of Michigan ADVANCE**

Dates of Grant: Jan. 2002-Dec. 2007 (Round 1)

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Key Elements of the Overall Change Strategy

This project sought to increase and maintain the numbers of women (recruitment and retention), improve the climate, and enhance women's career development. These were viewed as interconnected elements of an overall change strategy: If women recruited to Michigan see the climate as supportive, they will more likely stay and thrive; if they advance to leadership roles, the climate will improve; and so on.

Other elements of their change theory are also explicit: Excellence is important and is enhanced by expanding the talent pool. The university is made of many subsystems that are interconnected; therefore, change must come from both top-down and grassroots efforts that are coherent and linked. Specific initiatives addressed campus-wide climate (including hiring), resources for individuals to address gender equity, and departmental transformation projects designed and carried out within specific units. This team noted the need for consistent institutional support for a slow change process, recognition and validation at the national level, and direct resources both for leaders who do the work of promoting diversity and for women scientists and departments to ensure that individual women survive and thrive.

Relevant Elements in the Institutional Context

- The medical school is large and was included in the ADVANCE project.
- Several pre-existing campus groups with expertise in women and STEM were tasked to carry out initiatives that were consistent with the ADVANCE goals.
- Carnegie: Public RU/VH; majority undergraduate.

Scope of the ADVANCE Initiative

STEM departments in the Colleges of Engineering and of Literature, Science, and the Arts (LSA), and in the School of Medicine, were included. Some grants were targeted to women; most were also available to male allies. Research faculty were included in data collection efforts and in a new awards program; it is unclear what other activities were open to researchers. There was explicit mention of faculty of color and GLBT faculty in statements about diversity, and specific attention to these groups in data analysis.

Project Elements

The project deployed a mix of top-down, cross-college efforts and more locally initiated activities for networking, faculty development, and consciousness-raising, as carried out by pre-existing groups, departments, or colleges using funds from ADVANCE. Signature efforts at Michigan include the following:

- STRIDE (Strategies and Tactics for Recruiting to Improve Diversity and Excellence): The original STRIDE committee was composed of faculty opinion leaders respected for their research excellence, who educated themselves collaboratively about gender bias in evaluation and, in turn, educated search committees and department chairs about recruiting and evaluating a diverse candidate pool and ensuring the success of those hired. STRIDE's in-person efforts were supported by written "best practices" materials and by some spin-off training and self-education activities called FASTER and STEP (now Faculty Leading Change). The wide reach of these efforts gave them influence that extended beyond hiring to other campus practices by addressing knowledge and beliefs for a wide faculty population.
- *Getting and Giving Career Advice* handbooks to support mentoring.
- Faculty development, including workshops on career skills such as leadership, negotiation, and running a lab; individual grants to women faculty for scholarship and advancement and/or diversity efforts by male faculty; and career advising for individuals.
- Departmental Transformation grants for self-study and self-initiated projects. One major grant was seen as successful, but overall this department-focused strategy did not yield the desired impact.
- The CRLT Players (from the Center for Research on Teaching and Learning), a campus theater group that performed research-based, humorous, interactive sketches to illustrate and prompt reflection on bias in everyday academic settings.
- Substantial data collection that fed directly into ADVANCE activities, including climate surveys, salary studies, and qualitative data.
- Largely informal but comprehensive efforts to inform and involve faculty, deans, and chairs and to engage the colleges.

Outcomes

- The percentage of new women hires in science and engineering (S&E) grew during the project period from 15% to 30% per year, on average. From pre- to post-ADVANCE periods, the net percentage of S&E faculty who are women rose within LSA, Engineering, and Medicine at a rate higher than the comparable increases in non-STEM fields. Leaders concluded that their main success was in recruiting.
- By the end of the project period, more S&E women who were made an offer accepted the offer. This was taken as an indicator that perceptions of climate are positive and improved.
- Retention of pre-tenure women improved to equal or better than that for men. This was seen as a positive indicator of climate.
- From an analysis classifying departments as having a proportion of women that is token or minority status (vs. sex-balanced demographics), there was progress toward more departments having women with less minority status in the Engineering, LSA, and Medical schools.
- At the project's end, there were more women department chairs, but this was not true for other faculty leadership roles. Anecdotally, there were more gender-aware chairs, including STRIDE committee members.

- STRIDE had reached over 500 faculty by 2010, and has been institutionalized and expanded to the whole institution. This model and the CRLT Players sketches have been frequently adapted by other institutions and have gained some national recognition.
- Diversity and climate reviews in the departments are now built into the institutional program review plan and are thought to help to support a culture of demand for data.
- ADVANCE activities continued with support from the provost (five years) and a PAID grant (2006-2010), and were broadened to address underrepresentation by race and ethnicity as well as gender. Many aspects of the project were institutionally supported when NSF funding ended, with an initial commitment from the provost through 2016.

Research Team Observations

- The PI was a scholar of women's studies and psychology rather than a STEM faculty member, which was a distinctive choice among the early ADVANCE IT awards. She forged strong links with STEM colleagues and with institutional administrators around the campus.
- This campus has been previously studied by Susan Sturm (2007), who examined the ADVANCE project as a case study and developed the notion of "organizational catalysts." These influential senior faculty are situated at institutional intersections and hold legitimacy and power through their scholarship and track record of advocacy for diversity; they can thus enlist others, build networks, coordinate leadership, and mobilize action.
- A strength of this project was its reflective and often innovative use of indicator data and other data sources in analyzing issues and developing interventions, as well as in publishing research findings. Periodic institutional climate surveys illustrate the long time frame required to observe climate improvements.

Reference Cited

Sturm, S. (2007). Gender equity as institutional transformation: The pivotal role of "organizational catalysts." In A. J. Stewart, J. E. Malley, & D. LaVaque-Manty, eds. *Transforming science and engineering: Advancing academic women*, Ch. 16, pp. 262-280. Ann Arbor: University of Michigan Press.

For Further Reading

The program website documents current and past ADVANCE activities.

<http://sitemaker.umich.edu/advance/home>

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