

GVSU - UM Partnership for Advancing Women in Science and Engineering



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GOALS OF THE PROJECT

Grand Valley State University's NSF-PAID project is a partnership with the University of Michigan aimed at advancing the participation of women in the academic sciences and engineering at GVSU. Our grant adapted four strategies that were effective for UM-ADVANCE and introduced a new synergistic component to create a collaborative pipeline for future faculty to benefit both institutions.

ADAPTATIONS

I. Strategies and Techniques for Recruiting to Improve Diversity and Excellence (STRIDE)

The STRIDE committee at GVSU developed a presentation based on research about gender equity and aimed at educating peers about obstacles and solutions in the recruitment of women. More than sixty faculty — most of them members of search committees — attended one of the four presentations and found the materials valuable to their hiring process. More than 95% of the participants indicated that the workshop was relevant to their work at GVSU, and 93% indicated that it had enhanced their understanding of the issues related to gender equity.



II. Interactive Theater

Interactive performances by the UM Center for Research on Learning and Teaching (CRLT) Players centered on how hiring decisions are made also helped faculty and administrators think about and discuss issues related to recruitment and retention of women. This skit was performed to three different audiences — administrators, department chairs, and faculty — and all evaluated the performances favorably, with more than 90% indicating that it had been useful in stimulating relevant discussion. Participants described it as "engaging and interesting" and a "safe way to study some dynamics in my department."

III. Professional Development Grants

Professional development grants were awarded to 18 current faculty to support new and ongoing professional activities and to 6 new hires to enhance their start-up fund packages. First round grant recipients have completed their projects and we are currently in the third funding cycle. Activities funded by the professional development grants included:

- Research supplies
- Research assistance
- Matching funds for equipment purchase
- Faculty stipends
- Start-up for new faculty hires
- Travel by faculty and research group to conferences
- Travel to external labs and research facilities
- Child care and elder care

Comments from grant recipients:

"The NSF Advance professional development grant allowed me to dedicate time and resources to this effort, and in fact with the use of these funds I have become the first researcher ever to use radioisotopes at GVSU in Allendale, MI. This will certainly open areas of collaboration and research to me that were not before possible."

"The results of the study presented at an international conference brought many researchers' attention to the stability issue of amorphous silicon solar cells and further established my lead researcher role in this area. As all the other fields in Engineering, this field is male-dominated. The NSF Advance professional development grant directly contributed to my success in this under-represented field."

"I have developed a strong project with the assistance of this grant. This project is in the process of being built into a state-wide health-related fitness assessment on school-age children...I have truly benefited professionally from this grant."

IV. Network of Women in Science and Engineering



We facilitated presentations by several speakers as well as large and small group meetings. Small group meetings resulted in a significant increase in the number of faculty applying for the Professional Development Grants.

INNOVATIVE COMPONENT

Collaborative Pipeline

The collaborative pipeline is an innovative component that suggests a new model for increasing the number of women in science and engineering, and potentially has valuable outcomes for students and well as academic departments. As imagined, the Collaborative Pipeline would offer benefits to each partner institution (and their students). For University of Michigan, recent PhDs and advanced graduate students would gain experience and confidence through GVSU's mentoring, teaching workshops, research grants and networking; for GVSU, the benefit would be that highly skilled scientists would find teaching in a liberal arts university appealing, and strongly consider applying for regular faculty positions. The Collaborative Pipeline has taken longer to implement than we anticipated. For the graduate students, the distance between our two universities (roughly 2.5 hours one way) has been a major obstacle. We have made important progress with the postdoctoral fellowship component, although we have yet to make a formal hire. In Summer 2007, we got to the interview stage with our first candidate (Computer Science) and in Winter 2008, we interviewed a candidate (Biology). In each case, the applicants accepted other offers (a research postdoctoral position and a tenure-track position, respectively). We are processing two applications (in Geology and Chemistry) for 2009-2010 by candidates who will complete their Ph.D.s in December 2009.



PROBLEMS FACED AND LESSONS LEARNED

As we reflect on the past 18 months, we have a clearer picture of the areas where the NSF ADVANCE-PAID grant activities can help bring about change on our campus.

- Early on we confronted issues related to understanding sexism and in determining what's "fair." After the first round of Professional Development Grants, we found out that some women faculty members were hesitant to apply for a grant that excluded their male colleagues. Others worried that such a grant might carry the implication that they were unable to obtain more competitive grants and hence, could negatively impact their evaluations by peers. Now a year later, much of that initial concern has abated because colleagues have a better understanding of the goals of the NSF ADVANCE grants, twice the number of grants were awarded in round 3 (n = 8) as in round 1 (n = 4).
- Faculty members on the STRIDE committee initially struggled with the social science literature; however over time they developed a base of knowledge that has served them well as they educate their peers in formal presentations and hallway conversations. While it is too early to measure the committee's effectiveness in educating search committees, the members have identified several possible obstacles to recruiting and retaining women at GVSU. After an initial focus on gender schemas and other biases in recruitment, they are now focusing on developing policy for a flexible time clock to tenure and a more clearly stated family leave policy. A larger committee would have been useful in ensuring a critical mass at each meeting.
- The Network of Women Scientists and Engineers did not take off in the way we initially envisioned and this is partly attributable to the heavy teaching and advising loads. Our alternative strategy, of small group meetings, was more successful and contributed to the increase in applications for professional development grants. The small group meetings also helped us identify the topics that women faculty want addressed, such as leadership skills and mentoring for promotion.
- The Collaborative Pipeline has taken longer to implement than we had originally anticipated. For graduate students at UM considering the Future Faculty Fellow positions, it simply is not practical to drive 2.5 hours each way to teach. For those who are completing or have recently completed their Ph.D.s, the Teaching Postdoctoral Fellow positions are more attractive; however we need to develop closer contacts with UM faculty to alert students to the value of the Pipeline and the Teaching Postdoctoral Fellowships.

FUTURE DIRECTIONS

- Continue work on recruiting for the Collaborative Pipeline and facilitate Teaching Postdoc Fellow positions for two applicants in Geology and Chemistry, respectively.
- Address policy changes that will enhance both recruitment and retention of women at GVSU, specifically flexible tenure clock and family leave policy.
- Tailor activities of the Network of Women Scientists and Engineers to more closely match the needs and availability of GVSU faculty.
- Analyze results and disseminate lessons learned from the project.

ACKNOWLEDGMENTS

This project is supported by an NSF-PAID grant. We would like to acknowledge the support and contributions of Provost Gayle Davis, Deans Fred Antczak and Paul Plotkowski, John Golden, Paul Leidig, Figen Mekik, Robert Smart, and Janet Vigna (STRIDE committee members), our Advisory Committee members, reviewers of the Professional Development Grants, Ellen Shupe (project evaluator), Courtney Sherwood (administrative assistant), and Emily Swart (graduate assistant).