Mentoring is practiced at 81% of post-secondary institutions that attempt to improve women’s representation in computing. It is a form of professional development that leads to better instructors, increases retention, promotes understanding of academic values, and raises self-confidence in the skills needed for academic success.

**Faculty mentoring** often addresses topics such as research, publishing, and scholarship; teaching, tenure and retention; and relationships with colleagues. Formal mentoring programs that include group meetings of mentoring pairs allow mentors to learn from each other, and mentoring pairs are supported through difficult periods.

The time pressures that faculty typically experience can work against the regular meetings that contribute to a successful mentoring experience. However, competing demands always require priority setting, and mentoring is worth the time it takes. In the end, participants often wish they had devoted even more time to their mentoring activities. A carefully evaluated faculty mentoring program at SUNY Stony Brook reports that protégés found that mentoring saved more time than it cost.

**Important ingredients** for successful faculty mentoring programs include: structured activities, including group meetings of mentoring pairs; early participation of new faculty; information from protégés about what characteristics they want in a mentor; a formal program that persists until pairs feel bonded and meet regularly; close friends are not paired; participants are warned early on about the dangers of sexual harassment or overly dependent protégés; the program has a coordinator who facilitates frequent meetings of mentoring pairs; and there is regular contact during which participants report on their activities. The SUNY Stony Brook program also attributes much of its success to matching new faculty with mentors outside their department who have three to five years of experience.

**WHAT IS MENTORING?**

Mentoring occurs when an experienced person serves as a trusted counselor, teacher, and advocate to an inexperienced protégé. Mentoring usually happens on a personal level in the context of a relationship that develops over time, in contrast to the more remote and one-dimensional role modeling. Mentoring may combine affective support, such as offering a sympathetic ear, with instruction in professional behavior and tasks. It includes actions such as sponsoring, coaching, acquiring resources, and providing exposure and protection to the protégé.

Formal mentoring programs usually have several components. They match mentors with protégés, offer events or activities to develop mentoring relationships, provide resources and instruction for achieving the desired outcomes, and evaluate results for participants and the organization. Effective mentoring programs are carefully planned, with attention to specifying, communicating, and measuring objectives, and developing sufficient resources to implement fully.

Mentoring programs most commonly fail due to unanticipated high costs of operations; usually time costs for program facilitation are severely under-estimated. Although mentoring is not always a positive experience, it usually enhances career commitment for men and women, including women in male-dominated fields such as IT. Benefits include more rapid career advancement and career satisfaction, as well as enhanced academic self-confidence of women in disciplines where the majority of faculty members are men. Both same-sex mentoring and mixed-sex mentoring are effective, although participants may find same-sex mentoring more comfortable.
The Georgia Tech Mentoring Program for Faculty Advancement is an integrated institutional program for supporting women's full participation and advancement, and for modeling best practices.

The program has three aspects:

1. An interactive, game-like tool, “Navigating Your Career,” (developed by Advance Director, Dr. Carol Colatrella; http://www.adept.gatech.edu/download.htm). Individual faculty members use the tool for academic career guidance.

2. Mentoring and career coaching. Faculty members apply and are paired with mentors in their own department. Mentors help new faculty members acclimate. They assist with and advise on decisions about teaching, research, and service roles, and about developing successful networks within the faculty. Faculty members may also participate in voluntary, periodic career coaching with a mentor outside their college. For the coaching sessions, faculty members select from a group of “coaches” who are available for that session.


Tenured and tenure-track faculty are the primary population for this program. All faculty members are eligible to participate in all aspects of the program, with the exception of the career coaching. Only women faculty members are eligible for career coaching sessions.

EVIDENCE OF EFFECTIVENESS

The program has not been assessed yet, although evaluation is fully integrated. The chief criterion of success is “faculty advancement”—an increase in the number of female faculty members who reach senior rank and administrative positions, if desired, at Georgia Tech. An external evaluator will assess the overall Georgia Tech ADVANCE program using a set of indicators for participation and advancement of faculty. Data for specific assessment of user experience with the “Navigating Your Career” web-based instrument is conducted via a short questionnaire built into this mentoring tool. More general assessment data will be collected via a survey of all Georgia Tech faculty members. This survey includes questions for measuring level of awareness of, and participation in, ADVANCE activities and initiatives. Continuing outcome assessments will compare the participation and advancement of faculty who did, and faculty who did not participate in the mentoring (and other) ADVANCE programs.

NCWIT offers practices for increasing and benefiting from gender diversity in IT at the K-12, undergraduate, graduate, and career levels. This case study describes a research-inspired practice that may need further evaluation. Try it, and let us know your results.

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