Strategically Recruiting Women into Your Undergraduate Computing Major

**Objectives/Abstract**

This workshop will present research-based methods for successfully attracting women into an undergraduate computing major. Participants will be shown how to develop a comprehensive strategy for increasing the pipeline of high-achieving women in undergraduate computing programs using a “high yield in the short term” approach for recruiting. This approach encompasses strategies to help identify and evaluate a do-able and successful set of internal and external recruiting initiatives.

**The targeted audience and any restrictions on attendance to workshops**

This workshop is intended for computing faculty, department chairs, and academic advisors who want to increase the gender balance and diversity in computing. Graduate and undergraduate students may be interested. No limitations on size.

**The format of the workshop**

The facilitator(s) will describe the components of a comprehensive recruiting plan. Through a combination of brief lectures with slides and hands-on individual and group activities, participants will develop workable plans for identifying target audiences and influencers; developing contact strategies and persuasive messages; and including ongoing tracking of their results.

**An overview of the information to be presented/Introduction**

*Components of a Strategic Recruiting Plan*

Active recruiting of women students works. As we witness tremendous growth in computing occupations’ size and influence over our lives, women continue to be underrepresented in these fields. Faculty have the opportunity to reverse this trend through both active recruitment and courses that engage and prepare women as well as men for computing careers. By reaching out to female students, and their influencers with messages tailored to appeal to them, faculty can attract more and better students to computing majors. Many undergraduate computing departments seek to increase women’s representation among enrolled and graduating students. These departments seek gender parity to access strong students from a large applicant pool; contribute to the profession’s future viability and the improved innovation brought by diverse teams; improve the educational experience for all their students; and to fulfill their ethical commitment to diversity.

Most academic departments have outreach efforts to inform the public and potential students about computing. Most participate in a variety of events and produce materials to communicate with students, teachers, parents, and employers. Often, however, these recruiting efforts are selected in an opportunistic way rather than strategically. Often, little thought is given to the return on investment of this nontrivial use of scarce resources (money, time), the message provided to the particular audience, or to tracking the outcomes. Departments hoping to increase overall enrollments and proportion of women must act deliberately and strategically to get the greatest return on investment in the shortest time. We will overview and provide written resources for developing a set of recruiting initiatives, helping participants to specify several interrelated components for each. We will discuss how to:

- Identify and locate target audiences with aptitude and motivation – and those who influence them. The influencers of students
are an excellent way to accomplish greater return on investment.

- Leverage and manage existing assets to determine how to take advantage of existing programs, better inform those who are already communicating on behalf of the department, and draw on the time and resources of others who can help.
- Align messaging with the present values, beliefs, expectations, or goals of each target audience. Some messages are likely to be needed for all audiences, while some audiences will need additional or less information.
- Reach audiences with people who are believable and media with a high chance of being accessed.
- Track and report results to identify which efforts were worth the scarce resources.

**Systemic Change at the Department Level/Outcomes**

Based on research specific to computing education, research on undergraduate retention in general, research on conceptions and misconceptions of computing careers, and research and practices of communication, Barker and Cohoon developed a systemic change model for increasing participation of women in computing. Our model of systemic reform in undergraduate computing includes a focus on the events and practices women experience directly and those that indirectly affect their outcomes. The components of the model include recruitment, pedagogy, curriculum, institutional policies, evaluation, and student support. Each of these components can affect the others in one way or another and should therefore be assessed when trying to increase women’s representation. For example:

- Recruitment efforts may be a poor investment of scarce resources without simultaneously considering retention.
- Policies that penalize faculty for outreach and diversity efforts must be changed (e.g., counted toward service), or these efforts are likely to be short-lived.

- Making assignments interesting and personally meaningful is necessary, but not sufficient for cementing women’s intention to complete the major. If women have no natural opportunities to develop peer networks or feel a sense of belonging, they are unlikely to stay.
- Evaluation provides the evidence of success that helps with obtaining internal and external support. It also identifies what works, what doesn’t, and what is causing greater harm.
- Recruiting conducted by undergraduates (e.g., in “road shows”) can also serve to retain the students who do it.

When the system is changed, new routine behavior, based in habit and policy, become just “how things are done around here” rather than the hit or miss efforts of an individual faculty member. A systemic approach to reform is mainstreamed, affecting all students, not just those who choose to join a support group, for example. Thus, a systemic view is crucial for successful, sustained organizational change.

**A description of any written materials that will be available**

Participants will receive free, professionally produced materials from the National Center for Women and Information Technology (NCWIT). These resources include a workbook that contains examples, guidance, and templates for developing a strategic recruitment plan; practice sheets that summarize research on active recruiting; Top 10 resources; Programs-in-a-Box; Talking Points; statistics summaries; and more.

**Participation Statement**

All facilitators will attend GHC if selected.

**Bios**

1. BIO 1
2. BIO 2

**References**