

## **A CURRICULUM FOR TRAINING MENTORS AND MENTEES**

**Deborah Harkus and Suzanne G. Brainard, Ph.D.**

**Women in Engineering Initiative  
University of Washington, Seattle, Washington**

In 1995, the National Science Foundation and the Fund for the Improvement of Post Secondary Education granted funding to the University of Washington's Women in Engineering Initiative for the creation of mentoring training materials. The goal of the project is to increase retention rates of females pursuing undergraduate and graduate degrees in engineering by improving the current practices of mentoring through training. Building on the past success of the WIE Undergraduate Mentoring Program, the objectives are to:

- Improve the current practices of mentoring programs by designing, implementing, and evaluating a comprehensive, stand-alone Mentoring Training Curriculum for women in science and engineering;
- Test the Curriculum on undergraduate and graduate students, faculty and professional scientists to determine the feasibility of transferring the Curriculum to other institutions;
- Package and disseminate the Curriculum nationally.

For the purposes of the Training Curriculum, mentoring has been defined as a one-on-one relationship that focuses on a student mentee's achievements, success in school and preparation for the workforce. The mentor may be a male or female working professional or faculty member.

This paper describes the need for mentoring training and how the Curriculum for Training Mentors and Mentees meets that need.

### **THE NEED TO TRAIN MENTORS AND MENTEES**

Much of the research on women in science and engineering cites a need for the mentoring of women to be successful in these fields. Though mentoring skills are thought by many to be intrinsic and naturally done, in many cases what passes for mentoring is not

mentoring at all. Until recently, there has been little attempt to assess mentoring processes or their impact on individuals and institutions.

Past research has revealed a lack of and a definitive need for extensive training of mentors, mentees, and administrators of mentoring programs in order to have an effective mentoring program.<sup>1</sup> Simply matching a mentor and mentee is not enough. The mentor and mentee need to know the goals of the relationship, their responsibilities in the relationship, how to measure their success, strategies for handling problems, and examples of activities and discussion topics.

The need for training mentors and mentees has been demonstrated by the Women in Engineering (WIE) Initiative's Mentoring Program at the University of Washington.<sup>2</sup> In response to requests from mentors and mentees in the WIE Mentoring Program, informal training materials for participants were developed. Before initiating training, mentors and mentees only received a handout stating the basic goals of the program and a list of suggested activities. However, evaluations reported that of the 100 participants, only 20% felt sure of the goals of the program, their responsibilities as a mentor or mentee, how to measure the effectiveness of their relationships, the mentoring program as a whole, and how to handle problems. Of the 80% who felt unsure of the program, 30% of the participants felt frustrated and unsatisfied with the program and a few even left the program. Participants noted that, although they were excited about being a mentor or mentee, they did not know what to do when they got into the relationship.

After informally training both mentors and mentees, the Mentoring Program's success increased dramatically. The program expanded from less than 50 matches to 125 matches, and evaluations reported that 91% of the participants were satisfied with the program. Of the 125 mentees, only two of the student mentees changed majors to non-science or non-engineering disciplines and one dropped out of school. The retention rate of the students participating in the Mentoring Program was 97.6%. Once informal training was initiated, program evaluations showed a considerable increase in effective matches, satisfaction with the program, and increased retention rates among the student and industry participants. It was clear that training individuals was vital to the success of the relationship as well as the Mentoring Program.

## **DEVELOPMENT OF THE CURRICULUM**

The project will result in the following products:

- An Administrator's Training Guide
- Mentoring Handbooks for Student Mentee, Industry Mentor, and Faculty Mentor
- A Supplementary Mentoring Video

The development process consists of three phases. Phase 1 began with a thorough review of mentoring literature which resulted in a bibliography indexed by general topic. A Core Curriculum was designed to address basic mentoring concepts. The Complimentary Curriculum addresses non-typical issues that are unique to specific types of relationships. A guide about the logistics for training, a stand-alone evaluation module and a chapter on how to establish a mentoring program were also incorporated into the Administrator's Guide. Handbooks for mentors and mentees were developed to coincide with the Curriculum.

Phase 2 of the project consisted of pilot testing the materials. Dr. Patricia Campbell, an out-side evaluator, conducted an evaluation of the results of the pilot testing. The Supplementary Video was also developed during Phase 2. The Video demonstrates basic mentoring concepts and some complementary issues in a few brief scenes.

Phase 3 will take place during the 1997-1998 academic year. During this phase, all editing will be completed and the Guide and Handbooks will be published after a thorough review by the Advisory Board. Advertising and dissemination of the Administrator's Guide, Handbooks and Video will ensue.

### **THE CORE CURRICULUM**

The Core Curriculum focuses on mentoring basics. Mentoring literature varies on what is considered essential in mentoring but most experienced mentors and mentees agree that a relationship has more potential to be effective if both individuals review and understand the following:

- The goals of mentoring
- The benefits for the mentee *and* mentor
- Both individuals' responsibilities
- Each individual's expectations
- Guidelines to follow for productive interactions
- How to handle potential pitfalls
- Resources for help
- How to assess the relationship

The Core Curriculum also briefly discusses the different types of mentoring relationships such as peer mentoring, group mentoring, professional mentoring and academic mentoring. A brief description of cross-gender and cross-racial mentoring issues are included in case a thorough review of the Complementary Curriculum will not be part of the training.

### **THE COMPLEMENTARY CURRICULUM**

The Complementary Curriculum consists of in-depth reviews of special mentoring challenges and offers strategies for avoiding and reconciling difficult situations. Every

mentoring relationship is unique. In general, mentoring requires attentiveness and concern between partners. However, some relationships have non-typical issues to address.

Cross-gender mentoring refers to an arrangement in which the gender of the mentor is different than the gender of the mentee. Cross-racial mentoring refers to relationships involving a mentor and mentee of different racial backgrounds. Some mentoring relationships may even be both cross-gender and cross-racial.

Another Complementary Curriculum chapter addresses the specific needs of graduate students when they seek mentoring from faculty members. Often faculty mentoring coincides with academic advising. This chapter of the curriculum discusses the differences between advising and mentoring and the role that a faculty mentor holds in a graduate student's life.

A chapter has also been dedicated to discussing Stereotypes, Biases, and Discrimination. Often mentors need to assist mentees that are coping with such issues. This chapter describes the primary concerns of particular minority groups and emphasizes awareness.

The last chapter of the Complementary Curriculum reviews techniques and strategies for better interpersonal communications. This chapter discusses some of the gender and cultural differences that occur in our communications and how these differences can be misinterpreted. The chapter also includes suggestions for managing conflict, crises and special communication formats such as using email in mentoring.

All modules of the curriculum have been designed to be interactive. Each chapter includes suggested group activities or case studies to be used during the training. Though the Administrator's Guide strongly recommends the hiring of a skilled professional to do the training, the curriculum is self contained enough that an administrator would be able to personally facilitate the training. In addition, the Administrator's Guide contains separate chapters on evaluation and how to start a mentoring program. Both of these chapters are stand alone modules that can be utilized beyond the scope of training.

## **PRELIMINARY RESULTS**

The evaluations on the Curriculum have been extremely positive. The pilot test sites were eager to test the materials and enthusiastic about the content. News about the curriculum has spread by word of mouth and numerous institutional queries about the release date have been received. We are confident that the curriculum will fill a gap in the systematic infrastructure. We are also hopeful that through educating more people in academic settings about mentoring, more women and minorities will have the opportunity

to experience a fulfilling mentoring relationship. The Administrator's Guide, Handbooks and Supplementary Video will be available in the fall of 1998.

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## REFERENCES

<sup>1</sup> S.J. Bird, *Mentoring Means Future Scientists: A Guide for Developing Mentoring Programs Based on the AWIS Mentoring Project*, (Washington, D.C.: Associate for Women in Science, 1993)

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L.R. Gaskill, "A Conceptual Framework for the Development, Implementation, and Evaluation of Formal Mentoring Programs," *Journal of Career Development* 20, no. 2 (Winter 1993): 147-160.

<sup>2</sup> Brainard, "Mentoring Female Engineering Students," 129

