3. Recommendations

Women in Computer Science at MIT have spent many years of their academic and professional lives attempting to come to terms with a predominantly male environment. Many have made uncomfortable adjustments in their lives and styles of behavior. We ask that women not be forced to continue to make these adjustments. We hope that everyone in the community accepts the responsibility to work towards change.

Our general recommendation is to think about and discuss how actions and words may be interpreted as a statement of underlying attitudes, especially attitudes toward women. A first step in this direction is to modify outward behavior. Since we cannot expect people to change their attitudes immediately, we look for an initial change in behavior and hope that a change in thinking will follow in time. We ask that you examine your colleagues' behavior, as well as your own; if you witness a situation in which a woman is treated unfairly, say something to the people involved. In the short term, better behavior at least will make daily life easier for women; in the long term, it will improve the behavior of others by setting a good example.

No list of formal recommendations will solve the problems discussed in this report. However, we offer the following recommendations as suggestions for ways to begin improving the environment for women. Most of the recommendations below are excerpted from a report of the Project on the Status and Education of Women, of the Association of American Colleges [3]. We highly recommend this report to all faculty, administrators, and students. The organization of subsections below parallels that of the subsections dealing with Professional Identity in Section 2. Section 3.6 provides additional recommendations to the administration and faculty. We have not made specific recommendations for improving the social environment, because social behavior is a matter of individual taste and values. For some guidance, we suggest that you reflect on the experiences illustrated in Section 2.2, which have led to an uncomfortable social atmosphere for women.

3.1 First a Woman, Then a Professional

- Do not make inappropriate personal remarks to or about women in professional situations.

    - Never make demeaning remarks, such as "...come sit on my lap sometime...", in professional situations.

    - Do not use sexist humor to "spice up a dull subject..." or make disparaging comments about women as a group.

• Do not allow a discussion of a female student's work to be turned into a discussion of her physical attributes or appearance. In general, do not make more references to women's appearances or personal lives than to men's appearances or personal lives.

• Avoid stereotypical assumptions about women's roles and values.

  • Assume that women's reasons for pursuing an education are professional, not personal.

  • In addressing a class, use terminology that includes both men and women in the group and that reinforces an equal view of men's and women's roles and career choices. Avoid using the generic "he" when possible. Experiment with language that reverses expectations based on gender.

  • Group students in a way that implies that women are as competent as men, not according to gender.

• Faculty members should be careful in approaching female students as dates to avoid putting the women in untenable positions. The role as potential date must not supersede the professional and academic roles.

3.2 Invisibility

• In a technical meeting or classroom discussion, if someone has something to say, make sure he or she has a chance to say it without interruption. Some people talk louder and longer than others and may have to be asked to allow others to finish speaking.

• Intervene in communication patterns among men and women that may shut women out. For example, ensure that women are not "squeezed out" from viewing laboratory demonstrations or engaging in group projects.

• Watch for and respond to nonverbal cues that indicate a female colleague's readiness to participate in the discussion. Reflecting back on stereotypes, do not dismiss as incompetent people who are not aggressive in technical discussions.

• Pay particular attention to classroom interaction during the first few weeks of class, and make a special effort to draw women into the discussion during that time. Call upon each woman directly and as often as each man.

• Ask women qualitatively similar questions as men, give them the same amount of time to respond to the question as you would give a man, and respond to men and women in similar ways when they make comparable contributions to class discussions.

• Use student evaluations as a source of feedback on the treatment of men and women in your classrooms.

• If there is a woman working or taking a course in an area of interest to you, seek her out and question her. Such questioning is a good means for initiating technical discussions with women and indicates to them that you take them seriously as professionals.

- Include women in the "informal" interactions that are important in communicating support and acceptance as a colleague.

- Discuss academic and career goals with women, offer to write letters of recommendation for them, and consider women as well as men when making nominations for fellowships, awards, and prizes. Contact both men and women when publication, research, and other professional opportunities arise.

3.3 Patronizing Behavior

- Assume that women are knowledgeable in technical matters; if they do not understand something, they will ask.

- When a woman asks a technical question, answer the question in the same way that you would for a man; do not do her work for her. Avoid seemingly helpful comments that imply that she is not as competent as a man.

- As mentioned before, ask women the same kinds of questions as men and use the same tone of voice and attitude in responding as you would with a man.

- Consider women as well as men when choosing classroom, teaching, and research assistants. Give men and women the same responsibilities.

3.4 Qualifications

- Do not associate competence exclusively with some qualities -- especially traditionally male qualities, such as assertiveness -- and not others. There is much variation in the technical expertise, creativity, motivation, and perseverance of individual women and individual men. Some are theoreticians, others are system builders; some are innovative and impulsive, others are methodical. Judge the abilities of every individual objectively and design a research program to suit his or her particular talents.

- Try to consider ways to bring new students "up to speed" when they first enter graduate school. For example, give them research literature to read and then discuss the research with them. Provide small projects for new students and suggest background material that will be useful in their research. Take an interest in their progress and help them build the skills that they need to do research.

- When supervising graduate students and research staff, express confidence in their ability to develop their own research projects and provide help and encouragement along the way. Assume that women are as capable of completing research tasks as men.

3.5 Double Bind

- Try to notice whether a "feminine" or "masculine" style of a student's comment, question, or response affects your own perception of its importance. Some female students tend to state their comments hesitantly or in an "overly polite" fashion; do not assume because of this that they are uncertain about what they want to say or that they are not saying much that is worthwhile.

- Do not assume that women who do not work in a "masculine" style are not competent. At the same time, do not ridicule women who choose a masculine style for doing so.

3.6 Additional Recommendations to Administration and Faculty

The following recommendations were composed by the authors of this report.

- Promote open discussion between men and women about problems that have been encountered in the Area. In particular, the faculty and administration should

   - Sponsor regular faculty discussions of this topic.

   - Sponsor additional meetings open to all members of the laboratories to air these issues.

   - Distribute this report to all new members of the laboratories to ensure their awareness of the problems.

- Demonstrate a formal commitment to providing a positive educational environment for women. In particular, the administration should

   - Publish a formal policy statement articulating this commitment.

   - Establish a formal grievance procedure that addresses both overt discrimination and the subtle inequities that contribute to a woman's discomfort with the environment.

- Establish a committee responsible for improving the environment for women. In particular, the committee should

   - Oversee implementation of the recommendations contained in this report and seek additional solutions.

   - Provide advice to men and women on the issues discussed in this report.

   - Take an active role in the solution of problems that require outside intervention.

- Make Area-wide and Departmental commitments to increasing the number of women faculty, staff, and students. In particular, the faculty and administration should

   - Lobby for Institute-wide support of this commitment.

•Actively recruit female faculty, staff, and graduate students.

•Encourage female undergraduates to consider graduate training and challenging research careers.

•Include student representatives on Area-wide and Departmental committees, such as the graduate admissions committee, and on faculty search committees. In the area of graduate admissions, female graduate students could provide valuable input into the evaluation of women's applications.

•Maintain records on students that leave the Area before fulfilling their original goals, in an attempt to assess whether changes in the educational or administrative policies of the Department might help to decrease the loss of good female students from Computer Science.

• Improve the advising and professional training of both graduate and undergraduate women. In particular, the faculty and administration should

•Encourage the visibility of female members of the research groups at conferences, and promote contacts with researchers outside MIT. This exposure contributes to the placement of women in good positions in academics and industry.

•Provide regular feedback on students' progress as suggested in [1].

•Provide and promote formal as well as informal training in the critical presentation of technical material, both in written and verbal form. For example, offer a seminar on how to give a presentation.

•Promote good undergraduate preparation of women at MIT by encouraging them to undertake UROP (Undergraduate Research Opportunities Program) projects; undertake substantial B.S. theses; present their work in group seminars; talk to professors, research staff, and graduate students in their area of interest; and read relevant literature.

•Improve the communication between undergraduate and graduate students: establish a system of graduate students serving as co-advisors to undergraduate students; establish a formal means of communication between female graduate and undergraduate students (such as monthly lunches); organize a meeting of undergraduates interested in applying to graduate school in which they have an opportunity to speak to graduate students in their areas of interest.