

WIEP and SWE Working Together

Jane Zimmer Daniels, Ph.D.

Purdue University
West Lafayette, Indiana

Which came first the Women in Engineering Program (WIEP) or the Student Section of the Society of Women Engineers (SWE)? Not exactly the traditional dilemma of the chicken and the egg, but certainly an important consideration when developing a relationship between the activities of these two important efforts on behalf of women in engineering. Although the two groups share some of the same goals, they also each have unique characteristics.

This paper will consider the goals of WIEP and SWE; unique characteristics of the two organizations; tips for working with professional sections; tips for working with student sections; and the advantages and disadvantages of the director of WIEP serving as the advisor of the student section of the SWE.

Goals and Characteristics

Two of the stated goals of the SWE are shared by most WIEP:

- 1) To inform young women, their parents, counselors and the general public of the qualifications and achievements of women engineers and the opportunities open to them. Many WIEP were initiated to provide career information to high school students, their parents, teachers and counselors.
- 2) To encourage women engineers to attain high levels of educational and professional achievement.

Although these shared goals would suggest an unnecessary duplication; the unique characteristics of each organization indicate areas for cooperation rather than duplication.

The first characteristic to be considered is **continuity**. The student sections of SWE can benefit from the continuity offered by the more permanent administrator of a WIEP. Student officers of SWE typically are very actively involved for only one or two of their years as students. The administrator of a

WIEP can be active in the transition from one set of student officers to another. In addition this administrator can serve as a valuable resource to the officers and members as they negotiate the student organization policies of the university. During the occasional years when a group of student SWE leaders are not as strong as they might be, the administrator can also bolster the continuing efforts of the organization. Finally this continuity can be a real asset to industry, alumnae, and university administrators who find it confusing and sometimes difficult to keep up with a constantly changing student leadership.

A second characteristic to think about is **funding**. SWE and WIEP each have their unique strengths in regard to funding. Many recruiters interested in giving donations for women in engineering activities prefer to give them directly to students. However, larger amounts of money coming from companies, or their foundations, are often easier to obtain if the grant can be made directly to the college or university for women in engineering activities.

Status in the university is yet another feature to consider. Status, as used here, relates to authority, capability, and flexibility. For some women in engineering activities, a student organization does not have the authority needed for such things as obtaining mailing lists or labels from the registrar, reserving classrooms at no cost, or scheduling university transportation. In this case management by the WIEP administrator is beneficial. In other situations student organizations have flexibility not available to a university department. For example, students may directly ask their favorite faculty member to do a lab demonstration or facilities tour for a high school program. The WIEP may be required to go through the dean, department head, or whomever to get a recommendation rather than contacting a "favorite" directly. Purchasing refreshments, speaker gifts, etc. is another area in which a university department may be bound by purchase orders, cost estimates, etc. while a student organization can get reimbursement through receipts with little or no turn around time.

History is another characteristic which must be considered in developing a relationship between WIEP and SWE activities. At any individual institution, who was there first, what kind of practices have been in place over the years, and what kind of reputation does either group have among university officials, faculty, and other students. In 90% of the universities the SWE has been in existence long before the school developed a university supported WIEP. In this situation it would be prudent for directors of WIEP to "speak softly and don't carry a stick". Even though the student leadership is completely new every two or three years, there is some organizational history to consider. If an activity has been offered by one group for many years, it seems advisable that the other organization offer assistance or cooperation, but not attempt to take over the activity or duplicate it.

Finally, one must consider **maturity or experience** of leadership. In most cases the maturity or experience of a professional administrator is extremely advantageous to the successful implementation of a women in engineering activity. However, on occasion, the enthusiasm and freshness that comes from student leadership overrides any consideration of experience.

Tips for Working with Professional Sections of SWE

Any successful cooperative working relationship takes time to achieve. Members and leaders of the groups involved in such a relationship must get to know one another in more than a superficial way. The leadership of each group needs to understand the abilities and limitations of the other. Members of professional SWE sections are first and foremost practicing engineers, typically with heavy work responsibilities. Although interest and personal commitment to women in engineering activities may be quite high, it is possible that involvement in these activities create very stressful time conflicts at work and/or home for individual SWE members. Women in engineering activities may have a fairly low priority for their employers or family.

Two important considerations, then, are how can administrators of WIEP be helpful to the activities of professional SWE sections and, in turn, how can SWE members and their organization be utilized most effectively and efficiently. Help might be offered in the form of publicity, mailing lists, university facilitates, university students' participation, etc. To ensure efficiency when requesting the participation of SWE members, events should be planned at a convenient time and in a convenient location to working engineers. If SWE members are traveling some distance, perhaps they could also speak to groups of engineering students from their discipline, or meet with university faculty in related research areas. Preparation for speakers should be offered by the WIEP; an outstanding woman engineer is not always prepared to speak at an appropriate level for 6th graders. Again, if the speaker is coming some distance, handouts could be duplicated on campus and equipment or materials for hands-on activities could be provided on campus. Generous offers of assistance prior to participation and sincere expressions of appreciation following a presentation will most likely result in continued cooperation.

Finally, the issue of overusing a particular SWE member should be considered. As more and more young women enter the engineering profession, it is possible to "spread the work around". Even though a particular woman may be an outstanding speaker or mentor, it is important to remember that she is probably not being rewarded professionally for her involvement in women in engineering activities.

Tips for Working with Student Sections of SWE

In addition to the issues already discussed in regard to professional sections of SWE, there are some other topics which need to be considered when working with student sections. First would be to understand the history of that organization on your campus and the reputation it has established. Consider such questions as how long has the organization existed; is the leadership well established with strong processes for succession or is it dependent on individual personalities year to year; which of their activities have become traditional; and what is their image among engineering administration, faculty, and students, particularly women engineering students and other engineering organizations? If the organization is thoroughly understood, the probability of successful working relationships is greatly enhanced.

Another important factor in working with a student section of SWE is acknowledging other pressures on the students' lives. Just as the practicing woman engineer may feel pressure from work or family responsibilities, students are often overwhelmed with commitments to their academics, financial responsibilities, friends, and other activities. It is also likely that the women students are dealing with negative opinions of some male students in their classes. With all of this in mind, it is remarkable that SWE student sections and their members carry out so many successful activities.

With both professional and student sections of SWE, WIEP administrators can achieve successful working relationships through a philosophy of interest in facilitating the goals and activities of the SWE organization. Such an attitude can result in a synergism which benefits both groups.

Becoming SWE Advisor - Pros and Cons

The administrator of a Women in Engineering Program is often faced with the decision whether or not to become advisor to the student section of SWE on campus. Such a decision can only be made through personal reflection on the following questions:

Who is the current advisor for the SWE section and what would your relationship be with that person? Is the current advisor looking for a reason to step aside? Do your personalities suggest the possibility of successful co-advisors? Do the students feel strongly about choosing their own advisor or is the person usually assigned to the role.

Who is the current counselor for the SWE section? What is her relationship to the current advisor? How might you work together in providing advice to the SWE section?

What is the reputation of the SWE section on your campus? Would your association with the group add to or detract from the activities of the Women in Engineering Program? Does the dean or other administrator have expectations about the role you should play with SWE?

Do you have time? What expectations does the SWE section have of their advisor? Would you be given release time for your responsibilities as advisor? When and where does the organization and its officers usually meet? This consideration is no small thing. Students typically schedule such meetings at times and places that are not particularly convenient to adults with different types of responsibilities and priorities.

Conclusion

A viable working relationship between WIEP and the SWE has the potential for achieving great things. Coordinated and cooperative activities should result in broader more effective results impacting a larger number of young women. Because of this potential, the time and effort required to establish a strong relationship is very worthwhile.

