Abstract

This paper outlines the steps taken at the University of Texas at Austin (UT) to establish an ASEE student chapter. The most important stages in the development of the UT student chapter are traced chronologically, emphasizing the approach taken in each step and the lessons learned.

The primary steps taken to establish the UT student chapter were: 1) initiating a student chapter and establishing the student core, 2) developing the chapter framework, 3) electing officers and ratifying the constitution, 4) garnering faculty support, and 5) starting up events. These steps have been accomplished in the seven month period between August 1996 and February 1997.

Introduction

Why establish an ASEE student chapter? The significant benefits for students interested in academia, as well as for academic institutions and National ASEE, make it rather easy to understand why a student chapter is desirable. Benefits already enjoyed by students at existing ASEE chapters include: preparation for successfully entering the competitive academic job market, mentoring by genuinely interested faculty, participation in regular seminars, lunches, forums and workshops with interested faculty, access to up-to-date resources such as library files, web resources, and PRISM, and participation and networking opportunities at regional and national conferences. These services are focused on a wide range of academic issues, from effective teaching methods to initiating research programs to obtaining academic positions.

Academic institutions and National ASEE also profit from an ASEE student chapter. In addition to the distinction of producing well-prepared academics, institutions can use an ASEE student chapter as a means to help current faculty develop professionally in engineering education. For example, the chapter creates many more opportunities for faculty to function as ASEE members. Undoubtedly, National ASEE benefits directly by having their mission carried out locally.

Despite these benefits, student chapters are still relatively rare. Prior to 1997, there were only six chapters nationally: Purdue University, North Carolina State University, University of Michigan, University of Washington, Virginia Tech, and University of Wisconsin at Madison. The UT student chapter is the seventh in the nation. We hope to contribute to the establishment of new ASEE student chapters by outlining the steps taken at UT (see Figure 1) and the lessons learned in the process.
Initiating a Student Chapter and Establishing the Student Core

As noted by Magill\(^2\), establishing a student chapter is very feasible with the collaborative efforts of a few motivated graduate students and a faculty advisor. Because a small group of dedicated students is such a crucial component in operating a student chapter, the importance in establishing a student core cannot be underestimated. One of the first steps taken at UT was to arrange a lightly publicized informational meeting in the Fall semester for graduate students interested in academia, entitled, “Is Academia for You?” The goal of the meeting was to gather a small number of graduate students with a genuine interest in academia, out of which a student core of six could be developed. Information from the ASEE Student Chapter Information packet\(^3\) was presented as an introduction to ASEE. The information obtained from National ASEE and existing ASEE student chapters was invaluable during our initial start-up period. Eight students volunteered to participate in the core, together with the faculty advisor. This size core was found to be very appropriate.

---

**Figure 1: Basic Steps in Starting an ASEE Student Chapter**
Developing the Chapter Framework

The first task of the core was to begin exploring key areas for development of the student chapter. Core members volunteered to work in small subcommittees in one of four areas: constitution, budget, membership, and information resources. Two members volunteered for each subcommittee—an advantageous number, as it produced a certain amount of mutual dependence and accountability. These volunteers later became natural candidates for chapter officers, as most areas corresponded with officer positions. Chapter events were handled by the core as a whole. Meetings of the entire core every three weeks allowed sufficient time to report committee progress and decide the overall direction for the student chapter. Subcommittee tasks and progress are briefly outlined in the subsequent paragraphs.

Constitution

The constitution subcommittee undertook the task of developing the constitution and officially establishing the student chapter with the local university administration and National ASEE. A copy of the Purdue student chapter constitution, included in the ASEE Student Chapter Information packet, was used as a convenient starting point.

Defining primary and secondary purposes was the first step in setting up the formal structure of the organization. The five primary purposes of the chapter focus on graduate students in engineering and sciences: 1) to encourage students to consider academic careers; 2) to arrange regular mentoring between students and faculty; 3) to enhance the teaching and presentation skills of prospective educators; 4) to develop the skills to establish and lead a research program; and 5) to assist students in their search for academic positions. Secondary purposes focus on assisting undergraduates in their pursuit of graduate school and are not expected to be addressed until the primary purposes have been adequately achieved.

The second task of the constitution subcommittee was to complete the required forms for establishing the student chapter with the university administration. This was accomplished quickly, as only minimal university requirements exist. It should be noted that some universities such as UT require written authorization from the parent professional society to use the professional society’s name within the student chapter name. Lastly, the constitution subcommittee provided the following three required items to National ASEE for official recognition as an ASEE student chapter: 1) a copy of the student chapter constitution, 2) a letter of support from the engineering dean, and 3) a list of active members.

Budget

Locating funds to cover expenses has been a particularly challenging task. The budget subcommittee contacted other student chapters for their experience and ideas. The most rewarding avenue thus far has been through the college as well as individual departments. Department chairs and college deans usually agree that the increased visibility and recognition that an ASEE student chapter brings to a college merits support. Corporate sponsorship will also be pursued. Fundraising by selling items for profit is considered a last resort because of its time-consuming nature. University funds may also be sought; however, some of these funds come with restrictions as to how the moneys will be spent. For example, UT offers funds for student events, including expenses associated with hosting speakers, provided that the moneys are not used to purchase food.
Membership

To begin building a base of members, graduate students were invited to the first general meeting of the new club. This meeting began with a presentation similar to the first informational meeting, with the goal of building interest among the student community and having new members join. In addition, these students witnessed the ratification of the club constitution and officer elections. This meeting was advertised by sending an e-mail announcement to engineering graduate students, speaking individually with fellow students using a promotional flyer, and posting flyers around the engineering campus. Eight additional graduate students joined the student chapter at the conclusion of the first meeting.

Informational Resources

The informational resources (IR) subcommittee established the initial structure for distribution of student chapter information and resources to members and other interested students. Two avenues were chosen to accomplish this: a World Wide Web homepage and an information library. The IR subcommittee initiated a student organization web site with the university administration and designed a simple homepage. After the student chapter registration was complete, this site was activated. The homepage initially included basic student chapter information such as chapter member contacts and the constitution, as well as links to National ASEE and other ASEE student chapter homepages. Review of the Purdue student chapter homepage is a must for any chapter developing a homepage.

The IR subcommittee also initiated development of an information library that will provide up-to-date resources through Internet hypertext link sites. The student chapter files will also include PRISM, the Journal of Engineering Education, and articles on issues such as the academic career, job hunting, engineering education, and graduate fellowships.

Garnering Faculty Support

Faculty support is obviously essential to an ASEE student chapter. All of the primary objectives of the UT student chapter involve either direct contact with faculty or the dissemination of information and experience that only they are qualified to share. The first event as an official chapter was a luncheon with interested faculty to introduce the club, outline its goals, describe the various short and long term activities, and explain how faculty could participate with a minimal time commitment. The chapter faculty advisor and students personally invited engineering and science faculty with interests in the educational field. Nine faculty members attended the meeting, provided ideas for faculty participation and financial support, and indicated their level of interest in participating in the various chapter activities on a sign-up sheet.

Starting up Events

Starting up events was the culmination of five months of preparation. To allow adequate planning time, events for the first semester had to be decided upon by the core before the club was official or even had officers. Ideas for events focused on the chapter's primary objectives. Four main events were chosen for the first semester, in addition to regular chapter meetings. The first event was a luncheon with faculty interested in assisting the student chapter, as previously mentioned. The second event was a panel discussion entitled "The Life of an Engineering
Professor given by three faculty at different stages in their careers. This larger event attracted graduate engineering students interested in academia as well as other faculty interested in our chapter. The third event will be a brown-bag lunch with several faculty members, who will discuss issues of academia in a small group environment. The final event will be the regional ASEE meeting where student members can participate in ASEE activities on a broader scale. This scope of events for the first semester is expected to lay a proper foundation for the future development of the student chapter.

Figure 1: First Faculty/Graduate Student Forum: “My Life as an Engineering Professor”

Conclusion

The ASEE student chapter at UT is now officially operating as the seventh chapter in the nation. We believe that this organization will greatly benefit graduate students interested in becoming academics, current faculty, and the engineering and science community as a whole. This paper has traced our steps in establishing this organization and has focused on our approach and what we have learned. Although these steps will be different in some respects for every new ASEE student chapter, we hope that sharing our experience will help future ASEE chapters successfully pass through the initial stages.

Bibliography


3) ASEE, ASEE Student Chapter Information Packet, 1995.

Biographical Information

RONALD BARR is Professor of Mechanical Engineering at The University of Texas at Austin. He also serves as ASEE Campus Representative as well as Faculty Advisor for the local student chapter.
ERIC MATSUMOTO is a doctoral student in Civil Engineering at The University of Texas at Austin. His research involves precast concrete bridge substructures.

LIA ARTHUR is a doctoral student in Chemical Engineering at The University of Texas at Austin. Her research involves developing silicate absorbents for acid gas cleaning.

IREM TUMER is a doctoral student in Mechanical Engineering at The University of Texas at Austin. Her research involves developing mathematical tools to detect and diagnose faults in manufacturing machines.