AC 2007-1667: THE FUTURE ROLE OF THE ASEE NATIONAL ORGANIZATION IN THE DEVELOPMENT OF ASEE STUDENT CHAPTERS

Elizabeth Van Ruitenbeek, University of Illinois at Urbana-Champaign
Elizabeth Van Ruitenbeek is a graduate student in the Department of Electrical and Computer Engineering at the University of Illinois at Urbana-Champaign. She joined ASEE as an undergraduate student at the University of Texas at Austin.

Marina Miletic, University of Illinois-Urbana Champaign
Marina Miletic has a Ph.D. in Chemical Engineering from the University of Michigan. While there, she was Treasurer for the U of M ASEE student chapter for three years and helped organize numerous events. She has been a lecturer at the University of Illinois Urbana-Champaign for the past three and a half years and is working with Elizabeth Van Ruitenbeek to start a new student ASEE chapter at Illinois.
The Future Role of the ASEE National Organization in the Development of ASEE Student Chapters

Abstract

The American Society for Engineering Education (ASEE) can fulfill an important part of its mission through the arms of its student chapters when those chapters are adequately supported by the national organization. We present here a vision for how the ASEE national organization can best support both the formation of vibrant new student chapters and the growth of established ASEE student chapters.

This paper proposes that the ASEE national organization undertake the following:

- Creating a National Student Chapter Coordinator position to provide a single point person for disseminating information and assisting in the formation of new student chapters.
- Encouraging Campus Representatives to publicize ASEE and its benefits to graduate students and assess campus interest in forming a student chapter. Campus Representatives can also interact with faculty to find a chapter advisor.
- Enhancing the national ASEE website to facilitate communication between student chapters and to provide detailed information on how to start a new chapter and how to utilize resources available to student chapters.
- Facilitating student attendance and interaction at the national conference by subsidizing some travel grants and arranging a student chapter poster session. The student chapter poster session will help students share ideas for events and will assist new chapters in gathering information and advice.
- Presenting an award for best student chapter. To be eligible for this award, a chapter must submit an annual report. These annual reports are made available on the national website to promote sharing ideas between chapters.
- Providing professional quality brochures and posters to assist student chapters with advertising ASEE and engineering pedagogy.

The Purpose of Student Chapters

There are already several excellent papers advising students how to build a successful ASEE student chapter. This paper will not duplicate that information but will instead present our vision of the future role of the ASEE national organization in the development of thriving student chapters.

ASEE student chapters are uniquely positioned to execute the ASEE mission to "encourage youth to pursue studies and careers in engineering and engineering technology." Thriving ASEE student chapters on university campuses promote engineering pedagogy among graduate students, undergraduates, and children at K-12 schools in their communities. Active ASEE student chapters encourage undergraduate students to consider engineering graduate studies and encourage graduate students to consider careers in engineering education. ASEE student chapters are able to prepare graduate students to become effective teaching faculty who will
likely continue as dedicated members of ASEE\textsuperscript{5,6}. Because student chapters can contribute significantly to achieving the mission and goals of ASEE, the national organization should consider more actively supporting and promoting the formation of student chapters.

The Role of the National Organization

One of the main purposes of the national organization is to coordinate the efforts of ASEE member volunteers. For example, ASEE Campus Representatives work to publicize ASEE on their campuses and to recruit faculty members into ASEE. To coordinate their membership recruitment efforts, the national organization includes the National Campus Representative Coordinator as well as Section Campus Representatives\textsuperscript{7}. However, as the needs of an organization evolve, modifications to the organizational structure may better equip the organization to achieve its goals.

As the ASEE membership base begins to include more (graduate) students, the current organizational structure for membership recruitment may not be ideal for promoting the formation of new student chapters. For example, the ASEE organizational structure currently does not include a coordinator focused on student chapter development. As a result, the information related to student chapter development is dispersed, and there is no clear leader to lead the initiative to start new student chapters. In response to these problems, we propose some changes to enable the ASEE national organization to encourage the successful formation of new student chapters as well as the continuation of established chapters.

Supporting the Formation of New Student Chapters

A vibrant ASEE student membership body starts with the formation of new student chapters, and ASEE can do much more to support the creation of student chapters. Although ASEE student chapters have been in existence for over a decade, their existence is still widely unknown, even among some ASEE members. In addition, bits of information and advice about starting a student chapter are dispersed and difficult to find. ASEE can do better than this. Believing that student chapters are an asset to ASEE, we propose that the national organization commit to an initiative to publicize ASEE to potential student members and to facilitate the formation of student chapters. This initiative involves some modifications to the ASEE organizational structure and utilizes the ASEE website to disseminate information.

Currently, the ASEE Campus Representative Operating Manual\textsuperscript{8} asks Campus Representatives to assess the interest in a student chapter at their school, but this is only one suggestion among many about how to recruit members. If interest in forming a student chapter exists, the Campus Representative is directed to contact the ASEE Membership Department for further information. The Campus Representative is given no guidance about how to identify potential student members, approach them, and assess their interest. Furthermore, Campus Representatives may be unaware of the typical activities of student chapters and the benefits of student membership and, therefore, are unable to convey such information to potential student members. Before we can reasonably ask Campus Representatives to promote the formation of new ASEE student chapters, these volunteers must be equipped with the appropriate information and resources. We
propose that the ASEE national organization have one central contact person who gathers and disseminates this information and actively promotes the formation of new student chapters.

To head the new student chapter initiative, we propose a new position for a “National Student Chapter Coordinator” who works closely with the National Campus Representative Coordinator and the Section Campus Representatives. The National Student Chapter Coordinator also works closely with the ASEE Membership Department, particularly the staff member already involved with student membership and Campus Representatives.

The Purpose of the National Student Chapter Coordinator

The main duty of the National Student Chapter Coordinator is to work with Campus Representatives to promote student chapter formation. The Coordinator attends meetings of the Campus Representatives and supplies information about student chapters. The Coordinator also serves as a centralized national contact for questions and concerns related to organizing student chapters. Specifically, the National Student Chapter Coordinator is asked to identify potential universities that are ideal candidates for new student sections. Some research has already attempted to assess the viability of new student chapters at selected universities\(^9\),\(^10\). Working in conjunction with the local Campus Representatives, the National Student Chapter Coordinator strives to see at least two new student chapters form each year. At the start, a single National Student Chapter Coordinator can provide a central point of contact for all student chapters, but when the number of student chapters becomes so large as to be unmanageable by one person, a Section Student Chapter Coordinator position can be added for each ASEE geographic section.

The Role of Campus Representatives

Since the Campus Representative already serves as a liaison between the ASEE national organization and the faculty and students at his or her campus, the Campus Representative will continue to play a vital role in the formation of new student chapters\(^11\). With the assistance of the National Student Chapter Coordinator, the Campus Representative is asked to publicize ASEE student membership and assess student interest in a new student chapter. If interest exists, the Campus Representative is asked to assist the student chapter leaders in finding a faculty advisor. The remainder of responsibility for student chapter creation lies with the student leaders and their faculty advisor who are assisted by the National Student Chapter Coordinator as needed. Along with the existing ASEE recognition for membership recruitment and retention, Campus Representatives should be recognized at the annual conference for assisting in successful student chapter formation.

The Role of the National ASEE Website

In addition to modifying the organizational structure to accommodate the new National Student Chapter Coordinator, the new student chapter initiative should utilize the ASEE website to disseminate information. The current ASEE website does have a section for student chapters\(^12\), but it contains a limited amount of information. We would like to see the student chapter portion of the ASEE website include a comprehensive information repository for new student chapter leaders. New student chapter leaders could view a list of steps for starting a new chapter.
could also find a sample student chapter constitution and links to published papers of advice from other student section leaders. The website would continue to link to the webpages of active student chapters and would include contact information for each chapter. Using the ASEE website as a central repository makes key information easily available to students who are considering starting their own student chapter. An organized and informative website also demonstrates the commitment of ASEE to helping student chapters succeed.

Supporting Established Student Chapters

Although the ASEE national organization—specifically the National Student Chapter Coordinator—will work more closely with student chapters as they are first forming, the established student chapters can also benefit from national level support. Established student chapters should be largely self-sufficient in day-to-day operations, but the ASEE national organization can help sustain student chapters by facilitating communication between chapters and providing resources on engineering education.

Because student chapters are typically isolated geographically, the ASEE annual conference is an ideal place for student chapter leaders to meet and exchange ideas about planning chapter activities and events. Thus, the national ASEE organization can best support established student chapters by facilitating student participation and interaction at the annual conference. The ASEE national organization already helps student members attend this important annual conference by not charging them a conference registration fee. This assistance is much appreciated and should be continued. However, recognizing that the national conference is such a valuable part of the interaction between student chapters and that travel costs can be prohibitively expensive, the national organization should also consider sponsoring travel grants so that at least one person from each student chapter can represent the chapter at the conference.

After student chapter leaders arrive at the ASEE annual conference, conference events should be scheduled to best facilitate communication among student chapter leaders and student members at large. In the past, a conference session has been designated for a meeting of ASEE student chapter members, and this should continue. In addition, participants at the student chapter session last year (2006) suggested adding a separate student chapter poster session at the annual conference so that each chapter could highlight its successful events. Leaders of other student chapters can benefit from seeing what is popular at other universities and talking with the people who planned and implemented those events. The motivational value of this interaction between student chapter leaders at the ASEE annual conference should not be underestimated.

Although all student members are currently invited to participate in the student chapter meeting at the ASEE annual conference, this may not always be the ideal arrangement. When the number of student chapters becomes large, ASEE should consider electing a dozen regional student representatives to meet and discuss improving ASEE student chapters and using student chapters to achieve the mission of ASEE.

In addition to providing financial assistance for student chapter conference representatives and scheduling a student chapter meeting session and a poster session, ASEE can further use the annual conference to facilitate information flow between student chapters by distributing awards.
to student chapters. We propose asking each student chapter to submit voluntarily an annual report describing the activities of the student chapter during the past year. Since annual reports are not required, the awards would help motivate the completion of the reports. ASEE could post the annual reports on the ASEE website for other student chapter leaders to access. The annual reports serve as permanent documentation of successful ASEE events.

In contrast to the annual conference, which occurs only during a few days each year, the ASEE website is available year-round. Therefore, the ASEE website should be more fully utilized as an information repository and a link between established student chapters. Currently, the ASEE national website links to the student chapter websites, and this should continue. However, the student chapter websites are most beneficial when they are maintained and kept up-to-date. This upkeep can be encouraged with a student chapter website award presented at the annual conference. As mentioned earlier, the ASEE website should serve as a repository for annual reports documenting student chapter activities. The ASEE website should also link to published papers with advice on improving student chapters. Incorporating these features with the resources targeted toward new student chapters, we envision the student chapter portion of the ASEE website as a rich information source for both new and established student chapters.

In addition to facilitating communication, the national ASEE organization can also help equip student chapters to promote engineering education by providing strategic resources. One example of this is the existing visiting lecturer program. ASEE maintains a list of speakers who can present at student chapter events, and ASEE also provides partial subsidies to help student chapters pay for these speakers. Given the potential value of this resource, ASEE should better publicize the visiting lecturer program to student chapter leaders. ASEE can also support student chapter activities by providing brochures that promote engineering education and provide information about careers in engineering education. The national organization should also consider providing student chapters with professional quality brochures and posters promoting ASEE. Posted in high-traffic areas on campus, these posters would promote awareness of and interest in not only ASEE student chapters but also the organization as a whole.

Conclusion

The current organizational structure of ASEE contains no central coordinator to lead the initiative to start new student chapters. Therefore, we propose a new position for a National Student Chapter Coordinator. This coordinator will work closely with Campus Representatives to promote and assist with new student chapter formation. The National Student Chapter Coordinator will also organize the voluntary annual reports documenting the activities of established student chapters and oversee the student chapter awards process based on these annual reports. The Coordinator can help promote ASEE on campuses by providing student chapters with professional quality brochures and posters.

Campus Representatives can facilitate the formation of new student chapters by raising awareness of ASEE membership benefits to graduate students. Campus Representatives should assess student interest in forming a new chapter and should assist the new chapter in finding a faculty advisor.
The ASEE national organization can further support student chapters by providing more opportunities for student leaders to network and share ideas at the annual conference. The existing student chapter meeting session is beneficial, but the students have expressed a desire for an additional poster session to display successful chapter events. Additionally, travel grants to the national conference should be subsidized.

ASEE can better support both new and established student chapters through an enhanced student chapter section of the ASEE national website. The improvements to the website would consolidate all the information vital to new student chapter leaders and would more fully explain the function and typical activities of student chapters within ASEE. The improved website would also contain a repository of information useful for established student chapters including documentation of successful student chapter activities.

ASEE student chapters are an excellent outreach to the next generation of engineering educators. The ASEE national organization would benefit from taking the initiative to promote new student chapters and to support established student chapters.

References

1. Arthur, Lia F.; Barr, Ronald; Gray, Jeff; Jaramillo, Nelson; Matsumoto, Eric; Serpas, Frank; Tumer, Irem Y.; Vogler, Tracy. How to Start an ASEE Student Chapter. Proceedings of the 1997 ASEE Annual Conference & Exposition.
5. DeGoede, Kurt; Harding, Trevor; Kadlowec, Jennifer; Lorenz, Chris. ASEE Student Chapters: From Student Members to Faculty. Proceedings of the 2001 ASEE Annual Conference & Exposition.
6. Barr, Dr. Ronald E.; Finley, Cynthia; Mahadevan, Jagannathan; Philip, Zeno; Rijken, Peggy; Tsurikov, Michael; Ulloa, Fernando. The Role of the ASEE Student Chapter in the Making of a Professor: A Case Study of UT-Austin. Proceedings of the 2001 ASEE Annual Conference & Exposition.
13. ASEE Student Chapter Meeting at the 2006 ASEE Annual Conference & Exposition. Minutes taken by Renata Engel.