

## **The Role of the ASEE Student Chapter in the “Making” of a Professor: A Case Study of UT-Austin**

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### **Introduction**

Future professors are drawn from the rank of current graduate students. An ASEE student chapter can be of great help in catering to the needs of these students. Although ‘engineering teaching’ is a specialized profession with regard to each engineering discipline, there are many similarities in all engineering disciplines in issues such as, in applying for a position, in the teaching process, and life in academia. An ASEE student chapter can organize forums to address these issues for students interested in academic careers. Since there is a lot of interaction between students in a university setting with good e-mail and other communication avenues, the chapter can also reach out to those students who may not have considered academic careers.

### **Survey of Student Chapter Members**

The UT student chapter has been in existence since the 1996-1997 academic year. Since then, it has conducted many programs of interest to academia-bound graduate students. Some of those students have now become faculty members at institutions around the U.S. A small survey was sent out to five of these former students to find out if the ASEE activities helped them in their preparation to become faculty members, if the chapter influenced them to become faculty members, and if the programs conducted were relevant. The survey questions are presented in Table 1. The five former members and their current institutions are as follows:

- Dr. Eric Matsumoto, California State University, Sacramento,
- Dr. Anneta Razatos, Arizona State University,
- Dr. Robert Stone, University of Missouri-Rolla,
- Dr. Norman Grady, West Point Military Academy, and
- Dr. Jeffrey Gray, Johns Hopkins University (currently doing post-doctoral research work at the University of Washington).

Table 1. Survey given to former ASEE student chapter members.

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1. Had you already decided to become a faculty member before becoming involved with the student chapter of the ASEE? If not, in what way did the chapter help?
  2. Were the formal speaker presentations or brown bag luncheons beneficial in your preparation for an academic career?
  3. Did you find the proposal writing workshop by Dr. Spirduso and Dr. Mullins helpful? In what way?
  4. Did you find the academic resume preparation workshop by Dr. Koros helpful? In what way?
  5. Did the “small school” faculty panel discussion give you an accurate perspective or help in getting faculty positions? In what way?
  6. Has the student chapter helped you in learning about life in academia?
  7. Was being active in the student chapter helpful in helping you get a faculty position?
  8. Was attending ASEE conferences/networking helpful? Did it increase your awareness of academic opportunities or of getting jobs?
  9. Did you get any faculty mentoring (part of ASEE student chapter objective)?
  10. Are there any specific issues/activities that you would like us to address/have?
  11. Any final comments or thoughts?
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## Survey Results

All five of these former UT student chapter members responded with interesting and insightful comments. They all indicated that the ASEE student chapter was influential in their preparation to become faculty members and also helped them in their job search. However, all of them replied that they had already decided to become faculty members before joining the ASEE student chapter. The reason for this could be that some of them were responsible for the creation of the UT student chapter and were also its first office-bearers, notably Dr. Matsumoto, Dr. Gray, and Dr. Stone. A future survey of current members who later become faculty members would be useful in determining if the student chapter helped in moving them towards that career. The comments given by the former members about specific ASEE student chapter activities and the influence the activities had on their careers are described in the following sections.

## Workshops

The UT student chapter organizes workshops on academic resume preparation and proposal writing, usually once a year. One of the most popular workshops was the academic resume preparation presented by Dr. William Koros from the Department of Chemical Engineering. Dr.

Gray responded that “This was my road map for my job search...without it, it would have been much harder to make a competitive application.” He found the calendar of ‘when-to-do-what’ and a collection of anonymous, but real, application packets immensely useful for reference. Dr. Razatos said that this session was the most important event for her with respect to preparing for a faculty position. It gave her insight into what search committees were looking for and helped her organize her application packet. Some of the respondents have even used material from this session to help other colleagues in their job search.

The proposal writing workshop, though not of immediate use to graduate students, has been helpful in giving those who attended an ‘edge’ over their competition. Dr. Gray, who is just now starting his teaching career, has kept material from this workshop on file for future use. Dr. Stone, who is more than two years into his teaching career, had not been able to attend this workshop but in retrospect feels that it would have been of great help, a sentiment shared by other respondents who have colleagues searching for funding.

### **Faculty Speakers**

The UT student chapter also conducts formal meetings and informal brown bag luncheons with both older faculty members and faculty members who have just entered the academic world. This helps graduate students learn about life in academia and gives them a feel for what to expect both in the initial years, with the pressures facing new faculty regarding issues such as funding and tenure, and after many years in the profession. Opinions varied regarding these meetings and luncheons. Dr. Razatos found the brown-bag luncheon by Dr. Christine Schmidt, a new faculty member, the most helpful. She gave excellent advice on what to expect and how to negotiate during interviews for faculty positions. It helped her avoid certain mistakes that would have made her first year more difficult.

Dr. Grady and Dr. Stone found the formal speaker presentations the most useful since there was an organized ‘transfer of technology’. Ideas and experiences that these speakers had gained over decades of teaching were presented in condensed form for the benefit of budding teachers. Dr. Gray commented that the speakers gave him “the chance to see leading professors who valued teaching as part of the profession”. Notable speakers for the student chapter have included Dr. Wallace Fowler, the current president of ASEE, Dr. Jim Stice, Dr. William T. Guy and Dr. Desmond Lawler who are members of the Academy of Distinguished Teachers, Dr. Ben Streetman, Dean of the College of Engineering, and renowned teachers such as Dr. Billy Koen and Dr. Philip Schmidt among many others.

## Conferences

Another benefit of ASEE student membership is the opportunity for networking by attending conferences and seminars. The exposure, both to ideas and top people in the field, is invaluable. This aspect of ASEE membership had the greatest impact on Dr. Matsumoto, because the conferences provided an opportunity for “meeting great people and getting accurate information about what academia is really like from many perspectives (balancing teaching and research, as well as job responsibilities and family).” He was also impressed about the dedication of many institutions to serious teaching and found out what the hot topics were. Dr. Gray was able to attend some “great talks” and learn new teaching techniques, which he was able to apply to the class for which he was the teaching assistant. Dr. Grady said the conferences “opened my eyes to issues of teaching” and was able to meet faculty members from the institution that hired him.

Since the University of Texas is a large, primarily research-oriented institution, the UT ASEE student chapter also organizes panel discussions with nearby smaller schools in order to obtain their perspective. This helps graduate students decide which type of institution would be more suitable for them. Dr. Matsumoto said this panel “helped in considering the pros and cons” of a faculty position at a smaller school. The panel also helped Dr. Gray and Dr. Razatos decide to look for a job in a larger research-type institution. One of the students did get an interview call by attending the panel session and meeting with one of the speakers afterward.

## Other Activities

Although the student chapter is primarily involved with programs geared toward helping academia-bound graduate students, it is also a great resource for academically inclined undergraduate students. Once a year, there is a graduate student panel discussion for the benefit of undergraduate students who are deciding to go to graduate school. They are able to ask graduate students in a candid atmosphere what graduate school is really like and get honest, unbiased answers. Some of the survey respondents have served on the graduate panel in the past.

The same types of programs organized by the student chapter when the survey respondents were members are in use by the chapter today. Over the past semester the student chapter has had many interesting programs. The semester began with a talk by Dr. Desmond Lawler entitled ‘Teaching Engineers – Thoughts and Techniques.’ He had many valuable insights about teaching techniques and dealing with students. There was also a department chair panel in which three department chairs participated: Dr. Dolling of Aerospace Engineering and Engineering Mechanics, Dr. Ekerdt, of Chemical Engineering, and Dr. Lamb of Mechanical Engineering, talked about ‘Interviewing for Faculty Positions’. There has also been an informal brown bag luncheon with Dr. Jirsa, Chair, department of Civil Engineering, who talked about faculty

membership/involvement in technical and professional societies. Details about our chapter activities can be obtained from our annual report, which is on our website at <http://uts.cc.utexas.edu/~asee/>.

## **Conclusion**

All the respondents felt that their involvement with the ASEE student chapter was immensely helpful in their academic career preparation. It exposed them to new ideas and teaching concepts even before they got started. Moreover, ASEE involvement was a bonus on their resumes and helped substantiate statements about a sincere interest in academia. Dr. Gray found that ASEE involvement was very useful during interviews:

“....., I was able to discuss concepts like active and cooperative learning or various issues of diversity in engineering...having ASEE on my resume let schools know that I am serious about education, academia, teaching. This was important to most of the schools where I interviewed. In fact, when discussion came around to ASEE and teaching issues, I could immediately judge the department’s philosophy on teaching, and whether that was a place I wanted to end up (at).”

Dr. Gray was later told by the institution where he was hired that they admired his enthusiasm and idealism about the profession, and it was one of the reasons that he was hired. Dr. Grady had an offer of a teaching position before he joined graduate school, but even he felt that membership in the ASEE student chapter enabled him to demonstrate a greater interest in the profession.

The responses given by the former UT ASEE Student Chapter members clearly indicate that the activities sponsored by the chapter have been immensely helpful in the “making” of these five professors. Nietzsche once said, “To educate educators. But the first ones must educate themselves. And for these I write.” Fortunately, an ASEE student chapter can fill that role to a large extent. As Dr. Gray stated, “...the organization is very valuable for its members. Keep discussing teaching issues and keep helping people think about and obtain jobs in academia, and I think the chapter will continue to shine.”