

AC 2008-314: ADVISING STUDENT ORGANIZATIONS: THE CHALLENGES (AND REWARDS?) FOR NEW ENGINEERING FACULTY

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Advising Student Organizations: The Challenges (and rewards?) for New Engineering Faculty

Introduction

It is not uncommon that a new engineering faculty member, amid a myriad of rationalizations, is often assigned the advising role for a student organization. This was true for both of the authors, as we were assigned this role even before all the boxes were unpacked. Some of these rationalizations include: you're close to the students' age, it will be good for your service profile, we need to relieve senior professor so-and-so of this duty, or you have so much in common with the organization. Unfortunately, most of the time the simple truth is that no one else on the faculty wants to do it and you are at the bottom of the food chain. In this paper some of the challenges associated with advising student organizations are examined and, based on 30+ years of student group advising, approaches to address these challenges are discussed. Some of these challenges include establishing a strong officer group, soliciting resources, and interacting with alumni. The rewards associated with this activity are also reviewed, including better student relations and research program student recruitment. We believe that student organizations provide students with extraordinary learning experiences associated with teaming, communication, networking, and leadership. Good, strong conscientious advising of these groups can make a significant contribution to the well being of an academic department and its educational mission.

This paper continues with a brief background on the nature of engineering student organizations and the stated roles of the faculty advisor. Previous literature on advising student organizations is reviewed. The nuts and bolts of good advising are then provided. This is followed by presenting a number of the challenges faced in advising student organizations and approaches to these challenges are suggested. The paper concludes by assessing the value of student organizations to the students, advisors, and program.

Background

Engineering student organizations fall into one of four categories. First, there are the student sections of professional organizations, such as the American Society of Mechanical Engineers (ASME), American Society of Civil Engineering (ASCE), American Institute of Chemical Engineers (AIChE), and the Institute of Electrical and Electronics Engineers (IEEE). The purpose of these students sections are to introduce engineering students to a discipline specific engineering profession. This includes professional practice, ethics, and general information about the discipline. Second, are the honor societies, examples which include Tau Beta Pi (overall engineering), Pi Tau Sigma (mechanical engineering), Chi Epsilon (civil engineering) and Eta Kappa Nu (electrical engineering). Third, there are the diversity organizations such as the Society of Women Engineers (SWE), National Society of Black Engineers (NSBE), and American Indian Science & Engineering Society (AISES). Finally there are the organizations that focus on build projects that include concrete canoe, steel bridge, formula SAE, SAE Baja and challenge X competition teams. Many of the aforementioned organizations can fall into this final category, making advising two-fold: focusing on the tenets of the organization as well as an involved design and build. All of

these organizations have an advisor or counselor, though in recent years there has been a move away from “faculty” advisors. ASME now calls their advisors “student section advisors” and allow for ASME professional members to serve in that capacity without a faculty requirement.

Many parent organizations of student organizations have useful advisor manuals. Two good examples are the SWE Faculty Advisor Brochure [1] and the ASME Student Section Operations Manual [2]. Also, most universities provide some guidance to faculty advisors through their student services office. Common themes emerge from these guides about the faculty advisor’s role. We represent these themes as follows:

- Serve as the link between the student organization and the university
- Guide the organization in its efforts to achieve its goals and mission
- Enthusiastically support the organization’s activities
- By example set a standard of professional behavior for the student members

Nuts and Bolts of Advising

The evidence of good advising is in the achievements of the student organization. This depends heavily on the nature of the students involved in the organization. Perhaps one of the most critical roles the faculty advisor is assuring strong student membership, a quality officer group, and continuity of officers. With a good group of officers, advising is easy. Then the key is to develop and maintain a good officer set. It has been our experience that good academic students make good officers. In addition to their inherent intelligence, strong academic students, in general, possess outstanding organizational skills, good communication skills, and (with the emphasis on teaming in most engineering programs) good teaming and leadership skills. We suggest employing the following tactics to rebuild an officer group. First, obtain the names and emails for the 20 top GPA students in the freshman, sophomore, and junior classes in the appropriate major(s). Email these students, inform them about the organization and the opportunities available to serve as officers, and ask them to attend an organizational meeting or come to your office individually to discuss the possibilities. An important aspect of this recruitment is convincing these students that there is value added in the activity. Though each organization is somewhat different, the main value added deals with the development and demonstration of attributes that are not technical in nature (people skills, organization skills, etc.), but highly prized by industry. This argument can be further demonstrated through testimonials of former officers now working in industry. Given that the selected pool is the upper echelon of the academic profile of a department, it is always helpful to point out the obvious benefit of rounding out the students resume and networking opportunities.

Once a strong officer core is established, it can nearly be self-perpetuating. Current officers will be the best recruiters of new officers. However, it is key to this self-perpetuation that the officer group includes a mix of all levels, so that graduation will not create a 100% turnover. Also, duties need to be found for any student that wishes to participate in the officer group. We have often advised our existing officer groups to create assistant officer positions for this purpose.

Monetary resources are required for student organization operation. Some organizations, especially the honorary societies rely almost exclusively on member or initiation fees. However, the project oriented organizations need significant resources to complete their builds. This leads to the student members doing considerable fund raising and often the organization dedicates an officer position to this activity. For these organizations the faculty advisor needs to maintain contact with the funders and ensure that they are thanked and recognized. Many student organizations have financial needs that fall somewhere between the needs of the honoraries and the project teams. An excellent solution to this issue is to arrange that part of a company's annual giving to the university designates fund for the student organization. This will require arrangements with department chairperson, dean, and the development office. However, once such funds are designated, they are nearly guaranteed on an annual basis. For most public universities, the worse source of funding is the academic department. Resources the academic department contributes are typically things such as computers and office space. A further aspect of advising an organization that spearheads a large time consuming task such as a build is advising the student leaders on time management. The build may be overwhelming at times, and the authors have observed in the past students suffering the consequences in their scholastic endeavors. This can be further intensified by the college or departments desire to place well in competition to justify the expenditure to the donors. It is a delicate balance, and the advisor may need to step in to reassess priorities for the students, reminding them that they are primarily students. As a faculty advisor, it is important to remember that one must act as an advocate for the students' best interest.

A key aspect in being a successful advisor is to establish a good, strong report with the group. A few suggestions:

- Attend officer meetings
- Attend program meetings, project competitions, and/or initiations
- Attend social events

Value of Advising

At most research intensive universities advising is neither rewarded in the faculty merit pay process or is it a meaningful consideration in the promotion process. On the student side it has great value. The authors have observed many students grow into productive engineers due to their involvement in student organizations. We have also observed the importance that ABET program evaluators seem to place on the activity level of the program's student organizations. Most departments need student involvement for several activities during the academic year, such as freshmen orientation programs, open house, and industrial advisory board meeting, and they rely heavily on the student organizations for participation. Honoraries are key recruiting grounds for graduate programs. The accomplishments of student organizations can greatly enhance the visibility and reputation of departments.

The experience can be very rewarding to a faculty advisor by building a strong bond with the participating students. Mentoring is a natural consequence of this relationship that

will continue beyond the student's time in school and may even expand into continued association through the professional organization. Unfortunately, these are not tangible benefits that contribute to the reward structure for faculty members in promotion or advancement.

Clearly, there is a disconnect between the value that student organizations bring to a department and the value that department's place on the contributions of faculty advisors. This disconnect is not lost on new engineering educators and it is our observation that fewer and fewer of them are taking on the advising challenge, given the choice. At our institution it has become very difficult to identify faculty advisors. Until the disconnect is fixed, we fear that more and more of the advising role will be taken on by professionals outside the university, which may lead to a new disconnect between the educational aspects of student organizations and the practical aspects.

References

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