

## **Student Organization Awards**

*Mary R. Anderson-Rowland, Annmarie Connor  
Arizona State University, United Space Alliance*

### **Abstract**

Research has shown that student organizations in engineering and computer science are helpful for students to demonstrate teamwork, to develop leadership, and to increase retention through providing a feeling of belonging to its participants. In order to increase organizational activity and to have student organizations strive to meet a high standard of operation, awards may be given to the student groups that excel in their activities. Examples of this are the student section awards given out each year by the parent Society of Women in Engineers (SWE) organization at their annual National Conference. When section winners are announced the section and their region cheer loudly. The awards seem to be an appropriate reward for the work done during the preceding academic year. Another example organization is the Institute for Industrial Engineers (IIE) that similarly awards student chapters at their annual conference.

This paper explores the question: “What type of awards would be the most motivating to SWE collegiate sections? And “What type of awards would best lead to excellence in the SWE collegiate sections?” In order to qualify for a “best” type of award, we will assume that the award needs to be appropriate, fair, consistent, unbiased, measurable, and induce a high participation by the student groups. In addition, the collegiate sections should be able to know if they have reached a particular level of excellence. The paper will explore the present SWE collegiate section award system to understand its operation. We will also explore the award system currently used by IIE for its student chapters.

The authors will then confirm that the present award system is adequate or suggest that there is a better system that should be introduced.

### **Introduction**

The Society of Women Engineers (SWE) has an Awards Program for individuals, companies, and sections. The individual and section awards are made for both student and professional sections. According to the SWE website (SWE 2008): “Each year SWE celebrates the accomplishments of women in engineering—those who have made great strides in technology and in life. SWE also celebrates those just beginning to lead and those who have had a direct impact on our mission. Through the Awards Program, SWE brings awareness to the many contributions of women engineers, and the individuals and companies that champion diversity.” The purpose of the SWE awards is to celebrate.

In this paper we will focus only on the SWE “Outstanding Collegiate Section” (OCS) awards program. The purpose of these awards is to congratulate and to celebrate collegiate sections that did outstanding work for the previous academic year. Awards are presented annually at the Celebrate SWE! Banquet at the SWE National Conference. Awards are given in three categories: small section (less than 35 members), medium section (35-100 members), and large section (over 100 members). Collegiate sections wishing to compete submit a report supporting their nomination as the best collegiate section.

Thus, on Celebrate SWE! night, a first place, second place, and third place “winner” is announced for each of the three membership sizes: small, medium, and large. In this system a total of nine (9) sections celebrate that they were outstanding sections in the previous academic year. This is a great experience for the sections that win.

The theory is that sections that achieve in this competition will remember the joy of celebrating their accomplishments and will continue to strive to do excellent work so they can win again. This theory also expects that sections, who do not win an award, will want to win one the next year and so they will work harder than before on their programming to try to succeed. Motivating and encouraging student sections to work harder on their programming is an advantage for not only the collegiate section and the Society, but for all women engineers as outreach, personal and career development, diversity, and other events are carried out in their program. These are all the right behaviors the student sections should be striving toward.

Even though this program recognizes the top student sections, it has allowed many of the same sections, especially in the large category, to win for several times in a row. There is still competition among the top three large winners each year, but this does cause havoc for many other large schools who feel they cannot compete against the winners due to their section size. Many of the winning large sections have 300 or more student members. This fact alone contributes to many large sections that are just over the 100-member mark to not even apply, and it also prevents many medium sections that are very competitive in the OCS competition to not become large sections for the fear of not ever being a top recipient again.

The question is: Is SWE meeting its goal with the current “Outstanding Collegiate Section” competition?

### **Purpose of the SWE Awards: Motivation and Celebration**

The purpose of the OCS competition is to motivate and to celebrate. Let us first consider motivation. How can we best use an award to motivate women engineering students who are members of their college or university section?

As a motivational concept (Wikipedia, 2008) “a reward, tangible or intangible, is presented after the occurrence of an action (i.e. behavior) with the intent to cause the behavior to occur again. This is done by associating positive meaning to the behavior. Studies have shown that if the person receives the reward immediately, the effect would be greater, and decreases as duration lengthens. Repetitive action-reward combination can cause the action to become habit.”

The awards for the OCS Competition are presented approximately 3 months after the previous fiscal year has ended, but some 6 months after the academic year has ended. Thus, some of the students primarily responsible for the excellent section work may already have graduated and are unable to come to the celebration. However, the new students now taking

leadership in the section usually realize that it is now up to them to carry on the good tradition. So although there is some delay in the SWE collegiate awards (in October or November)) from when the reports were written (in May), this is unavoidable and does help in involving the next year's leaders.

Rewards can be intrinsic (internal to the person as satisfaction or accomplishment) or extrinsic (external to the person such as praise or money). SWE awards are then the extrinsic reward to add to the SWE collegiate section's own satisfaction with the projects and events in which they are engaged. Although there is no universal theory to explain what drives intrinsic motivation, it is thought that students are more likely to be intrinsically motivated if they (Wikipedia, 2008):

- Attribute their educational results to internal factors that they can control (e.g. the amount of effort they put in),
- Believe they can be effective agents in reaching desired goals (i.e. the results are not determined by dumb luck),
- Are interested in mastering a topic, rather than just rote learning to achieve good grades.

If we translate these factors to the SWE OCS competition, it would seem that the SWE women are more likely to be motivated and to work hard in their sections for an award if:

- They knew how much effort is required to earn an award.
- They knew that they would be rewarded if they did the amount of work required.
- They knew the top award was attainable

A self-determination theory, which focuses on the importance of intrinsic motivation in driving human behavior, may also be relevant here. Deci and Ryan (1985) developed a self-determination theory that does not include any "autopilot" for achievement, but instead requires active encouragement from the environment. In our case, this active encouragement from the environment can be the award given at Celebrate SWE! for the OCS Competition.

Competition can be a great motivator. One purpose of the SWE OCS Competition is to have the collegiate sections compete to see which one is the best. Numerous studies have shown that women engineering students find the engineering environment as hostile and competitive. Seymour and Hewett (1997) found that competing for grades is an aspect of the male testing process. They found that how easily the women who enter SME majors could adapt will depend on the degree to which they have already accepted competition as a way of relating to others in high school, sports, and games. Not only women engineering students, but women in general prefer working for a goal rather than "beating" someone. Grioffin-Piersohn (1990) talks about two types of competitiveness. One is an Interpersonal Competitiveness that is about the desire to do better than others, the desire to "win", and the enjoyment of such competition. A second type of competitiveness is about striving for a goal. There is not an emphasis of achieving the goal at the expense of others. Research has shown that men score higher than women in Interpersonal Competitiveness and women are more likely to express competitiveness in terms of Goal Competitiveness. Pollak and Gilligan (1982) suggested that women do not like competitiveness,

but are not afraid to embrace success. Their research suggested that women see Interpersonal Competitiveness as hurting human relationships in the process and women care about human relationships more than men do, in general.

“What motivates most young women is neither the desire to win, not the fear of failure in a competition with men, but the desire to receive praise.” (Bernstein, 2008 review of Seymour and Hewett, 1997) Women in general do not feel comfortable in a competitive environment. Girls are taught at an early age to be compliant and to work well with others. Critics of competition as opposed to [excellence](#) as a motivating factor in education systems, such as [Alfie Kohn](#), assert that competition actually has a net negative influence on the achievement levels of students and that it “turns all of us into losers.” (Kohn 1986)

It would seem that excellence is a good motivator for women engineering students. Women engineering students have chosen perhaps the hardest major in college. They know that the discipline is demanding. Engineers are responsible for decisions that can have large effects on people. The women engineering students know that they have to do well in their studies if they are to receive scholarships and be able to go on to graduate school. Excellence is a concept well-known to women engineering students. Brian Harbour addresses success in *Rising Above the Crowd*: “Success means being the best. Excellence means being your best. Success, to many, means being better than everyone else. Excellence means being better tomorrow than you were yesterday. Success means exceeding the achievements of other people. Excellence means matching your practice with your potential.” (Borthwick, 1989). Excellence means doing your best.

Celebrations are an important part of our culture. All women engineering students are to be celebrated. They are a minority in a tough educational field. The time and effort that women engineering students put into their SWE section is time and effort that they are not spending on their academics. The participation in an organization such as SWE has its own rewards: resources, opportunities to develop leadership skills, involvement with professional societies, local plant tours, new friends at school and other schools, upperclassmen and professionals to ask for advice, technical competitions, scholarships, internships, and maybe the lead to a job after graduation. (Donaldson, 2005) Most women engineering students enjoy participating in events such as working with fourth grade Girl Scouts. To have the prospect of an award and a celebration for these efforts certainly can be a good motivator.

We suggest that the excellence motivator is stronger for women engineering students than competition. A strong motivator would be a standard of excellence such that the section can know for certain when they have reached this goal and that this accomplishment will be recognized in a celebration. The more women engineering students we can have celebrating, without losing the standard of excellence expected, the better for the SWE organization. The standard of excellence is not reduced in this celebration. The celebration is for excellence having been met at a predetermined Gold, Silver, or Bronze level.

### **A Comparison: Present System versus New System**

In order to qualify for a “best” type of award, we will assume that the award needs to be appropriate, fair, consistent, unbiased, measurable, and induce a high participation by the student

groups. To the SWE collegiate sections, their application for “outstanding section” goes into a “black box”. It is impossible for them to tell if they did enough to “win”.

All of us would agree that the award should be fair and consistent. However, those that know the current system know that this is impossible. The judges change from year to year. There is more than one judge within each section size category. If one judge happens to grade more harshly than the other, the sections that she grades will most likely have no chance to win an award. This is not to complain about the volunteers who do the judging. We believe that they are doing the best they can each year in being consistent and unbiased. However, the present system does not allow them to do this. Judges, themselves, have admitted that it is an imperfect system that puts stress on the judges because the standard for excellence is not clear.

After several members of one SWE section attended Celebrate SWE! and learned about the celebration of winning an “Outstanding Section” award, they became very motivated to be the outstanding section, and they were. This made the motivation of their section very high. The collegiate section worked even harder the next year, adding successful events, increasing attendance at events, and so on. They applied again and this year: nothing, not even third. They felt they had done so much better than the year before, but apparently the judges were not impressed with what they saw. There was not enough explanation to let them know what went wrong. Their desire to work for an award disappeared. They continue as a good SWE section, but the motivation to push to excel and to “do their best” is gone.

Although the present system has points given with each event or task, the students have no idea when enough is enough to make it to the top as the “outstanding” section. Also, the awarding of full points for a section is arbitrary. Students tend to give up after working very hard, having the application judged with different criteria, and not being mentioned at the Celebrate SWE! It is also demoralizing to see the same section win year after year. Soon this other section becomes “the enemy” or “the one to beat”. This is not a healthy condition for SWE collegiate sections.

A factor to be considered in a competition where there is only one winner is that some sections have experienced paid staff to help them with all of their paperwork and applications. The difficult part of competing for the SWE Awards is not only holding the event, but keeping good accounts of the event, attendance, date, description and then writing up these efforts in a year-end report. In most collegiate sections, a different group of students do the documentation and application each year. It is hard for students to compete against sections who have an experienced staff member to help with the documentation.

A new system of excellence is proposed. In this system, there is no competition between sections, only competition to meet a standard of excellence. Appropriate standards would be set for a Gold, Silver, and Bronze award. All of the sections that applied for and met the standard of the Gold award would get a gold award. All sections that applied for and met the standard of the Silver award would get a silver award. The bronze award would be given in a similar fashion.

The system is really similar to the “Danish system” that some of us grew up with in 4-H. When we brought our chocolate chip cookies, muffins, and bread to the fair, we knew that if we had done an excellent job with the products, we would get a blue ribbon. If we were not quite up to the right standard we would receive a red ribbon. A lesser qualified product would get a white ribbon. This system was quite fair, and although we were never quite sure what the “blue ribbon”

standard was, we had a pretty good idea and we knew that we did not have to beat out someone else to get the blue ribbon.

In order to have an award system that is unbiased and fair (and a lot easier for judges) the system would have to have precise standards and points for each award. Basic requirements and minimum points would be given for each award with a list of optional activities that a section could do, each with a point value. In this way if a section was working for a particular award, they would be able to add extra activities in order to assure that they had enough “points” to earn the award to compensate for some possible different interpretations of their application. A section could know when they had “done enough”. New sections could be encouraged to go for a Bronze Award and after they had achieved that, they could work for a Silver Award. The award and celebration would be strong incentives to “do it again next year.”

With this new system all excellent sections, sections that had set a goal and achieved it, can be awarded and celebrate their work. This system is not a competition, but a system of excellence. The more sections that receive awards each year, the stronger SWE will become as more and more SWE students will actually be celebrating at Celebrate SWE!

## **Results**

How are we doing on participation? In fall 2007, only 28% of the collegiate sections submitted materials for any award: 87 out of the total 310 SWE collegiate sections in the nation. Only 39 (13%) sections submitted materials for the outstanding section award! This should not be surprising when we realize that only three collegiate sections a year really get to celebrate as “number one”.

Collegiate sections tend to give up after working very hard and receiving no recognition. Seeing the same section win year after year makes for a low morale in spite of the excitement of the regional competition at Celebrate SWE!

The Institute of Industrial Engineers (IIE) has used the proposed new system successfully for several years. The IIE chapters have a set standard of excellence to work for. Surprisingly, only a few chapters actually accomplish the Gold award each year. The standard of excellence is high, but it is doable. This society has about 124 University chapters in the U.S. and another 30-35 in the rest of the world. In this country about 60% of the IIE chapters participate in the current awards program each year. Interestingly enough, because only a few chapters accomplish the Gold Award each year, the value of the award has not been diminished.

It is expected that if a similar award system with standards appropriate for SWE sections were initiated, that the energy would be reignited in many SWE sections and many more sections would go for at least one of the three awards. In this way we may also be able to increase student attendance at the national SWE conference.

## **Considerations and Conclusion**

It is never easy to change systems. However, it is hoped that the arguments and discussion of this paper make it clear that a new system for the outstanding SWE collegiate section award is needed. Fortunately, SWE does not have to reinvent the wheel or to start from scratch in order to initiate a new system. Using the current standards set by SWE and using IIE’s standards as an

example, it should be a reasonable task to make a new award system for SWE outstanding collegiate sections.

During the writing of this paper, SWE has been in the process of changing to a new system for the OCS awards. In the new system the awards are not separated by section size. In the first year of the new system, however, section size will be scaled in the judging. The new system will soon be posted on the SWE website.

We believe that this new award system for SWE outstanding collegiate section awards will be a great incentive for collegiate sections to hold more events and to increase participation. In turn this will mean there will be more SWE collegiate sections celebrating at the Celebrate SWE! Banquet at the SWE National Conference. What is there to lose?

## References

- Bernstein, D.R. Review of *Talking About Leaving*,  
<http://www.kean.edu/~dbernste/sumseym.html>. Accessed 1/22/2008.
- Borthwick, P. *Leading the Way*. Navpress, 1989, p. 64.
- Deci, E.L., and Ryan, R.M. 1985. *Intrinsic motivation and self-determination in human behavior*. New York: Plenum. ISBN 0-30-642022-8.
- Donaldson, K. 2005. *The Engineering Student Survival Guide*, Third Edition, McGraw-Hill.
- Griffin-Pierson, S. 1990. The competitiveness questionnaire: a measure of two components of competitiveness. *Measurement & Evaluation in Counseling & Development*, Vol. 23 Issue 3, p108, 8p, 2 charts.
- Kohn, A. 1986. *No Contest—The Case Against Competition*. Boston New York London: Houghton Mifflin Co. ISBN 0-395-63125-4.
- Pollak, S., and Giligan, C. 1982. Images of violence in thematic apperception test stories. *Journal of Personality and Social Psychology*, 42, 159-167.
- Seymour, E. and Hewett, N. 1997 *Talking About Leaving*, Westview.
- SWE Website 2008  
[http://www.swe.org/stellent/idcplg?IdcService=SS\\_GET\\_PAGE&nodeId=88&ssSourceNodeId=84](http://www.swe.org/stellent/idcplg?IdcService=SS_GET_PAGE&nodeId=88&ssSourceNodeId=84) Accessed 1/20/2008.
- Wikipedia, 2008. <http://en.wikipedia.org/wiki/Motivation>

## Author Contact Information

Mary R. Anderson-Rowland, [mary.anderson@asu.edu](mailto:mary.anderson@asu.edu)