provided by DigitalCommons@CalPoly

Session 0555

# Promoting Excellence in Education with an Outstanding Student Instructor Award Program

## Jennifer Kadlowec, Justin Shriver, Trevor Harding, Charles Choi University of Michigan

### Abstract

The ASEE Student Chapter at the University of Michigan in conjunction with the College of Engineering has developed and organized an annual Outstanding Student Instructor Award in recognition of excellence in engineering education. The award not only acknowledges the outstanding contributions of the individuals selected for the award, but also coincides with the ASEE's goals of promoting excellence in engineering education and attracting new members. The paper outlines the planning procedures developed since the inception of the award in 1994 and provides suggestions and insights for other ASEE Student Chapters to create and organize such an award.

### Background

The Student Chapter of the American Society for Engineering Education at the University of Michigan created the Outstanding Student Instructor (OSI) Award for the purpose of recognizing the outstanding contributions of individuals and promoting excellence in education. Before this award was instituted, there was no mechanism for identifying exceptional student instructors to the larger academic community. Since the award was created, the student chapter, the student instructors, and the College of Engineering have all benefited from this recognition of outstanding teaching.

As an ASEE student chapter, sponsoring this award is a proactive way to support excellence in teaching, but the benefits go beyond this. Holding a public ceremony and advertising the award to the entire College of Engineering increases the visibility of the chapter throughout the college community. The OSI Awards also serve the ASEE student chapter as an outreach event to attract new members who are also interested in engineering education. Organizing this award as well as other events and seminars gives the student members the opportunity to broaden leadership skills, add to the graduate experience and interact with a variety of university students, professors and deans.

The individuals who receive the award benefit in several ways. Beyond the satisfaction of knowing their jobs were well done, they are honored in a public ceremony for their accomplishments and receive a monetary reward. The award provides encouragement to the outstanding student instructors to pursue careers in academia. Furthermore, this honor provides evidence of their impact on education and teaching abilities, which the awardees can add to a teaching portfolio to be used during the academic job search process.

Session 0555

The College of Engineering gains from the award as well. In an environment which is slanted towards research, this award shifts the focus to excellence in teaching. The honor promotes outstanding teaching among the graduate students in a way similar to that of teaching awards given to outstanding faculty. Additionally the award winners are a group of instructors that the college looks to as good teachers who can aid in training and mentoring of other student instructors as well as serve on committees that focus on improving education.

#### Procedures

The procedures that have been developed cover the phases of running an annual award. These include funding, publicity, award criteria, application handling, judging and awards ceremony.

### **Funding**

In creating the OSI Awards, obtaining adequate funding is a necessity. Support from the college of engineering dean and other key administrative officials is crucial in getting future departmental and faculty support as well as obtaining funds to organize and distribute the awards. In addition to the Dean's office, the engineering department chairs should also be contacted for funds as well as general support of the awards. Fund-raisers by the chapter can also contribute to these awards. Funds must also be raised for the monetary award, certificates, programs and refreshments at the awards ceremony. Once these funds are obtained, the awards program can be formally announced to the College of Engineering community.

### **Publicity**

Widespread publicity can attract a greater number of applicants, and in turn improves the attendance at the event, the impact on the college community and the visibility of the chapter. An obvious means to spread information is through department electronic mail (e-mail) lists for undergraduates, graduates and professors and flyers posted around the engineering campus. This process is done once in the fall and once in the winter. Personal contacts, such as meetings with the department chairpersons and deans can provide a more successful avenue for encouraging faculty to nominate their student instructors. Making announcements to undergraduate societies and student governments disseminates the information to students who may wish to nominate their instructor. An additional publicity responsibility is keeping people who have expressed interest in the award up to date. For this purpose, an e-mail list consisting of only applicants and nominators is created in order to provide periodic reminders and updates.

#### Award Criteria

Several factors must be considered in advance such as the selection procedure, the contents of nomination packet and timing. After these issues have been determined, the specific criteria for the OSI Awards can be as general as necessary. This is desirable since this allows for an open nomination process. Student instructors range from teaching, recitation and lab instructors, and all can be nominated and recognized for their unique contributions toward the quality of engineering education.

At the University of Michigan, the following guidelines have been established for OSI Award eligibility.

- 1. Nominees must be a graduate or undergraduate during the current academic year.
- 2. Nominees must have been a student instructor for either a graduate or undergraduate engineering or engineering-related course during the current academic school year .
- 3. The nomination packet must include at least one, and not more than three, letters of recommendation from faculty members. Preferably the nominating faculty member will be the course instructor.
- 4. The nomination packet must include letters of recommendation from students who were enrolled in one of the classes taught by the nominee during the current academic year. Up to a maximum of 10 such letters will be accepted.
- 5. Each letter of recommendation from a student or faculty member must include:
  - A. Name of nominee
  - B. Course name, number and section
  - C. Semester in which the course was taught
  - D. A brief essay (one page maximum) that explains the reason for the nomination University administered student feedback forms are not accepted as recommendations.
- 6. The completed nomination packet must be turned in prior to the deadline, which is two to three weeks before the Awards Ceremony, by either the student instructor, faculty instructor or nominating students.

### **Application Handling**

Due to the significance of the OSI Awards and the amount of time required to organize and distribute these awards, the ASEE Student Chapter at the University of Michigan has created an officer position solely devoted to the administration of the OSI Awards. The Awards Officer is responsible for contacting the Dean's office, department chairs, faculty, student instructors and students about the OSI Awards and encouraging members in the College of Engineering to nominate outstanding student instructors for this prestigious award. Applications are compiled by the Awards Officer after the deadline and the anonymity of the nominating individuals is protected as much as possible by removing names from applications. These anonymous nomination packets are then forwarded to the Award Selection Committee.

#### **Judging**

To keep a balance, the Award Selection Committee consists of two undergraduates, one graduate and three professors. The ASEE Student Chapter officers are not eligible to be on this committee. Asking individuals in person is a more effective way to get judges rather than general e-mail. However, the mass e-mail has been continued since it is important not to bias the award with judges chosen by the chapter officers. Once the Selection Committee is formed under the Award Officer's direction, they are given the applications and asked to rank them. A meeting date is decided upon for the judges to make their final selection of the winners.

An important decision each chapter must make is if the judges will be presented with guidelines for making their decisions. From the award criteria above, it is clear that the specific qualities of an outstanding student instructor are not listed as specific eligibility requirements for

the award. At The University of Michigan, the decision of what constitutes an outstanding student instructor is given to the Award Selection Committee.

### Ceremony

There are several tasks that must be completed in preparation for the awards ceremony. One of the first tasks should be reserving an appropriate room, since good rooms are often reserved early in the year. Again, publicity is important to ensure a large turnout of people throughout the college community. Special invitations are extended to the nominees, the nominating professors and students, and deans. Two additional administrative tasks are procuring the actual award materials, which include a certificate, ASEE national membership, and cash award, and also arranging for refreshments at the ceremony.

#### **Recommendations and Considerations**

Part of the intent of the authors is to promote the initiation of similar student instructor awards at other chapters throughout the country. In light of this, a discussion of the difficulties in organizing an awards program and advise based upon the experiences of the authors is helpful. In

addition a timeline for planning an annual awards program is provided in Figure 1.

•	Meet with Dean of Engineering to discuss funding/support issues	May-June
•	Confirm transfer of funds from Dean's office	Late July
•	Solidify guidelines for nominations and submissions	Mid August
•	Establish date, time and place of awards ceremony	Late August
•	Send first fall term award announcement to faculty/students	Mid September
•	Meet with all departmental Chairs to promote award	Sept Nov.
•	Send final fall term award announcement to faculty/students	Late November
•	Recruit students/faculty selection committee members	January
•	Send first winter term award announcement to faculty/students	Mid January
•	Order awards certificates, books, memberships, etc.	Early March
•	Organize press coverage for event	Mid March
•	Send final winter term award announcement to faculty/students	Mid March
•	Deadline for accepting nominations	1st week of April
•	Selection committee meeting	2nd week of April
•	Organize final preparations for ceremony	2nd week of April
•	Send invitations to nominees, faculty instructors, advisors,	3rd week of April
chairs and students of nominee		
•	Awards ceremony	4th week of April
•	Write letters of congratulations to awards for inclusion in a	May
teaching portfolio		
•	Write letters to department chairs and dean acknowledging	May
	their support	

Session 0555

Figure 1: A proposed timeline for an annual student instructor teaching excellence award presented in April at the end of the second semester

A critical consideration is timing. While defining an outline as shown in Figure 1, is critical to the success of the program, determining the timing in reference to the academic calendar is also of great importance. For instance, holding an awards ceremony at the end of each semester could ensure that nominators receive equal time to prepare their nominations packets. The difficulty is that such a system would be unwieldy and overly time consuming.

Difficulty in determining a date for the ceremony arises by having an annual awards program. The ceremony must be early enough to ensure that the nominees and other attendees will still be available, and late enough that nominees from the second semester will have developed a sufficient teaching record for evaluation. One possible alternative is to hold the awards ceremony for a given academic year during the following fall term. This would give the winter term nominators plenty of time to fully prepare their nominations packets and reduce the time crunch experienced in April. The difficulty with this alternative approach is that some nominees and their students may have graduated or left campus for the summer and will be unable to attend the ceremony. Furthermore, there will be a lag over the summer during which the interest and excitement for the awards may be lost.

A frequently debated issue amongst organizers is the inherent inequities in the selection process. Despite their intended objectivity, the judges may give preference to instructors teaching large classes or in certain departments. A set of guidelines for the selection process is necessary to ensure some degree of consistency from year to year and an accordance with the intentions of the organizing chapter. However, an overly explicit set of guidelines hampers the freedom of the selection committee and should be avoided. The process can also be made more objective by requiring a more complex nominations packet which might include items such as numerical teaching evaluations, in-class observations, interviews and/or written teaching philosophies. The difficulty here is that the added time and effort required to complete a nomination packet would likely reduce the number of nominees. This would defeat the purpose of much of the work put into organizing the award and of the award itself.

One final idea is possibly instituting an excellence in teaching award for young faculty, with eligibility limited to untenured assistant professors in the first three years of their appointment. Similar awards are given out by the college and some departments, but none of these focus on new, untenured faculty. The award process would be quite similar to the award for student instructors.

#### Conclusion

The ASEE Student Chapter at the University of Michigan has developed an Outstanding Student Instructor Awards program to recognize excellence in engineering education. The steps in creating and organizing such an event have been outlined in this paper to encourage other student chapters to establish similar programs. The mutual benefits and rewards gained by the student instructors, the ASEE Student Chapter, and the engineering community have been listed.

Finally, the OSI Award can be an initial step for refocusing many research-centered institutions towards recognizing excellence in engineering education at these levels.

### Acknowledgments

The authors wish to thank advisor Susan Montgomery and board members Anil Subramani and Ksenia Kozak for their help and input on this as well as other events.

#### Reference

1. University of Michigan Student Chapter of the American Society for Engineering Education Constitution, 1994.

#### **Author Biographies**

JENNIFER KADLOWEC is a solid mechanics doctoral candidate in Mechanical Engineering and Applied Mechanics. She is working on an accurate, reduced-order model for coupling effects in elastomeric bushings.

JUSTIN SHRIVER is a systems doctoral student in Mechanical Engineering and Applied Mechanics. His research is intelligent control of resistance spot welding.

TREVOR HARDING is a doctoral candidate in Materials Science and Engineering working on the fatigue response of gamma titanium aluminide alloys to impact damage.

CHARLES CHOI is a doctoral student in Biomedical Engineering. His research interests are in intravascular ultrasound and elasticity imaging.