

This one-page column will present practical teaching tips in sufficient detail that ChE educators can adopt the tip. The focus should be on the teaching method, not content. With no tables or figures the column should be maximum 450 words. If graphics are included, the length needs to be reduced. Please submit a Word file to Phil Wankat <wankat@ecn.purdue.edu>, subject: CEE Teaching Tip.

*Editor's Note:* This paper is based on a student project in a TA-improvement course. Because the method was effective and can be used by TAs or faculty, I asked the student to submit a Teaching Tip.

## ***Dramatically Improving Student Attendance at Office Hours***

Student attendance at office hours correlates with student learning because the additional instruction increases the likelihood that students will truly understand what they are being taught. My first time as a TA, I had the common experience of seeing very few students during office hours except immediately before tests and when homework was due. Since only a few students came to office hours, the majority of students missed an opportunity to supplement their learning. The experience of the professor teaching the course was similar.

Student needs for additional instruction vary throughout the semester. To improve my effectiveness as a teaching assistant and to increase attendance at office hours, I chose to have flexible office hours that were changed periodically so that they were in proximity to homework due dates and exam dates. For upcoming homework, I would try to shift office hours to the evening before homework was due. For upcoming exams, review sessions were scheduled one or two days before the test. To ensure that the time and date picked were available for most students, at the beginning of every recitation, my students were asked if there was a direct conflict with the plan for office hours. Twice during the semester office hours were moved in order to accommodate students who would be taking tests during the initially planned time. Exam help sessions were publicized through in-class announcements and by email for other students in the course who were not in my recitation sections.

The first week of classes, there was neither homework nor a test and my attendance in office hours, as expected, was zero. Over the next four weeks the difficulty of the homework assignments gradually increased. In my scheduled office hours the day before homework sets were due I had two students come before the first homework, three students before the second, seven students before the third, and an average attendance at my office hours of around 12 to 14 students for all other assignments. At the end of the semester when the homework was the hardest, my peak attendance was 15 of my recitation students. This peak attendance was 35% of the students in my two recitation sections.

To give some context to this, during my previous TA experience when the professor assigned specific, fixed office hours for the entire semester, I had a total of 3 students come to my office hours throughout this period. I felt equally engaged in my recitation sections, but it seemed like no one was interested in coming to office hours.

I also took the initiative to set up an exam review for each of the three tests during the semester. Their attendances were 42, 67, and 53, respectively, which is 33% to 53% of the 126 students in the course. Given the student interest in the review sessions, the professor joined me in conducting the second and third sessions.

Reflecting upon the results, adjusting the time of my office hours to times that the students are interested in receiving help greatly increased student attendance at my office hours.

—FRANK DEVILBISS, TEACHING ASSISTANT, PURDUE UNIVERSITY