Scott Luettgen

My experience as a Learning Assistant has been a gratifying one, filled with opportunities to aid students in the learning of introductory physics through mentoring, office hours, and in-class guidance. These are the responsibilities outlined for an LA and each help in their own particular way to better shape the students' understanding of physics. Furthermore, I will discuss an additional effort I have made over the last year, which is conducting review sessions before the exams and how that has helped improve, in my opinion, the students' performance.

There is no specific time set aside for mentoring, but whenever LA's have the chance to interact with the students outside the classroom, they are making the students feel more welcome into the learning environment. Last semester in Physics I, I was able to visit with the students outside the classroom before class started. I believe it really helped take the edge off, especially in the beginning, when many are nervous about taking a college-level physics course. I would ask how one of them was doing in the class, how they did on the past exam, are they ready for upcoming one, do they understand the material, or if they have any questions on anything particular? It is also important for LA's to try to socialize with the students, that is, talk about something other than physics or school. I became friends with many of the students in the classroom, and as a result they felt more comfortable asking questions. It is always hard to ask a stranger something, but everyone feels comfortable asking a friend.

When inside the classroom, LA's have an opportunity to fill in the blanks of the lecture. In other words, if the student misses something the professor said, the LA can help show him or her what was missed. If there is a question on the material, why a formula was used, how a concept was developed, the LA can help the student in ways like never before. There are so many students who do not feel comfortable raising their hands and asking questions during the lecture. Being able to ask an LA for help not only allows the student to ask a question feely, but also helps keep the lecture running smoothly. Another benefit of classroom attendance is iclicker help. When the professor posts an iclicker question, the LA can induce a group discussion before the answer needs to be submitted. On multiple occasions, I have had the people around me tell me what they think, and often there were conflicting answers. If time permitted I'd ask each to explain why they picked their individual answer and then add my own reasoning to help guide them in the right direction. This helps stimulate discussion on the topic, which helps reinforce understanding.

LA's all have to conduct two hours of online office hours. The office hours take place on Elluminate, a combination of instant messenger and an interactive online whiteboard. There has been a battle over the use of online office hours over regular office hours. The pros are that the students can access it anywhere there is an Internet connection. They do not have to go out of their way or crowd themselves in a small room filled with 10 other students pushing and shoving to ask a question. I have noticed a large decline in attendance of office hours this semester compared to last semester. In physics I, I had about 7-10 students drop in during my office hours each week. This semester no more than two will attend each week. The reasons for which are still unknown to me. Personally though, I believe online office

hours are great. Clearly being face to face has its own advantages, but when there are multiple students with different questions, that advantage diminishes. I even held on ground office hours last semester and only a couple students attended, compared to the 7-10 who were usually attending. To conclude, online office hours offer versatility and organization that on ground office hours cannot provide.

Lastly, I will cover the review sessions I conducted throughout the year. I began the review sessions last semester to provide the students an additional outlet to help improve their grade. I hold my review sessions the night before the exam in a lecture hall and have an average of 50-80 students. I spend about four days in advance going through the book and finding examples within the chapters that I find challenging and conceptually stimulating. I will also use homework problems that the students had asked about during office hours in my material. My review sessions will last two hours and I usually stay an extra 15 minutes to answer personal questions. The review sessions have been a huge hit with the class and have also been a very gratifying experience for me. Last semester I received an email from a student thanking me for the review sessions and that they really helped him pass the course.

An LA has many responsibilities but is a rewarding experience. I had the chance to improve students' understanding of introductory physics through a variety of outlets. I was their helper, and I was their friend. I firmly believe that the LA position benefits the students' ability to learn, and fully comprehend physics.