Being A Teaching Assistant

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Disclaimer: The following tips and thoughts are only what I believe, and they are mostly based on the limited experience I have. Also, I have almost certainly broken some of my own "rules" in the past.

General Tips

The first thing to realize is that you are now responsible for other people.

This means it is not okay to do a half-assed job; it's not okay to pawn your work off on other TAs; it's not okay to always (or even often) put your own course work before TAing. (There are times when it is okay, but if you do it often, you should ask yourself why you're TAing. If the only answers you can come up with are "money," "recommendations," or any other similar selfish reason, you should probably re-think why you're TAing.) In short, *TAing is a lot of work and responsibility, and taking it lightly is not an acceptable option*.

You are now an authority figure.

This means that you are not only responsible for students, as mentioned above, but you also have "power" over them. This "power" comes in many forms, but the most common one is grades. This topic is expanded upon below in the section on grading, but a general tip is to exercise your "power" as little as possible. Sometimes, it can make an effective joke, but only if executed correctly. I have certainly have had instances when I wish I could have taken back a bad joke along these lines. In short, *you have power; don't abuse it.*

People will rely on you for advice, thoughts, help, and worries.

If you don't know an answer, tell the student. Do not try to fake your way through it. It is painful both for you and the student, and if the student doesn't realize what you've done, you might be harming him/her for months or years by leading him/her down the wrong path. Students recognize that you aren't perfect and will respect you more if you can admit you don't know something. On a similar vein, if you make a mistake in recitation/office hours/grading, and you will, correct it. Students will once again understand that you are human given the occasional mistake. In short, when you make mistakes or don't know an answer, be honest about it.

You are now a liaison between professor(s) and students.

It is a sad truth that professors often have no idea what the students understand or if their styles are not helping the students learn. This is nobody's fault; it's just the way things end up. You should have a significant amount of contact with the students and should have a weekly meeting with the rest of your course staff. Make sure to set aside time in these meetings to talk about how the students are doing. You might even poll the students, either formally or informally, about what is helpful and what isn't. In short, professors and students have little contact; it is part of your job to bridge this gap.

Your attitude is important.

Your attitude as a TA will (1) set the tone of the course for your students, (2) largely influence how much the students respect you, and (3) either help or harm your effectiveness as a TA. Your strongest weapon is **enthusiasm**! This is important enough that I'm going to repeat it. Your strongest weapon is **enthusiasm**! If you care a lot about what you're doing, and you put a lot into your work as a TA, students will have a hard time not responding with respect and smiles. On the flip side, be *very careful* to not come off as arrogant. If you're brilliant, that's great, but it's not your job to convince the students that you're smarter than they are. Be humble. Then, when you interact with the students and say something brilliant, they will think all the more of you.

I'd like to follow this particular piece of advice up with a note: many students will confuse enthusiasm with arrogance, and walking the fine line between the two is incredibly difficult.

I believe that this is one of the more difficult challenges I have come across, and I have yet to figure out exactly where this line sits. My personal instinct is to be defensive when I'm scared that I don't know enough, and this often comes off as arrogance. One way of combating this instinct might be to realize that even if you are not as smart as your students, that doesn't mean that there's nothing you can teach them. Another way is to follow up student questions with a positive comment about how their question is appreciated. There are almost certainly other good ways to deal with this issue, and you might consider brainstorming others if you find this is an issue for you. In short, your attitude matters more than almost anything else. Be enthusiastic and humble.

Recitation

Preparation Of Recitations

- Do not use someone else's slides.
- Do *not* use someone else's notes, without looking them over, modifying them, and re-organizing them beforehand.
- Do not assume "the material is easy."
- Do not "wing it."
- Do get a good night's sleep before giving the recitation.
- Do learn/know the material in more depth than you will be presenting. For instance, if you are presenting AVL Tree rotations, you should know a proof of why they guarantee balance. You never know what an interested student might ask you about, and it's your job to be prepared.
- Do be very comfortable with several "plans" for how the recitation might go. Make sure that if something takes too much or too little time, then you can still cover everything.

Types Of Recitations

Depending on you, a recitation can take on any (or a combination) of multiple forms:

Lecture Re-Hash. It's a sad, but true, fact that many students don't hear/learn/understand the material the first time it is presented in lecture. Sometimes, it can be very beneficial to students for you to repeat the concepts and idea in a condensed form. If at any time, students tell you "we know this already" or "this is boring," then that is a sign that you might not want to do this type of recitation.

Here are some problems and their answers. Sometimes recitations will be a bunch of problems or examples for concepts that the students know. The obvious reason to do this is for the students to both see examples worked out and learn to work them out for themselves. Unfortunately, most of the time, these types of recitations end up being you working out the problem and the students nodding their heads. Try as much as you can to get students to give you steps of the answer, rather than just working out the problem yourself for an audience.

Several issues you will run into include: (a) an "intolerably long" silence, when your students don't want to answer and (b) a small set of students, who already understand the answers, doing all of the difficult steps of the problem. The first is easily fixable by learning to count in your head while you wait; more often than not, someone will eventually take pity on you and answer your question. The second is more difficult. One solution that teachers and TAs sometimes use is rewarding students who answer with something (like candy), but this doesn't really work very well for most students; even when it does, the effect tends to wear off quickly. Another, which I personally disdain, is to "cold-call" on students (that is, choose an arbitrary–or calculated student who doesn't have his/her hand raised and make him answer your question). By implementing this policy, students pay more attention, but the cost is that you are disrespecting them, you are making them fearful (and less receptive to new information), and worst, you are needlessly invoking your "power" as a TA. If students are not required to show up to your recitation, the ones who need help most might be afraid and stop showing up. As the semester progresses, students will start to feel more comfortable and begin to answer your questions, if you provide them with a comfortable environment in which to do so.

Split into small groups, then merge back together. In this type of recitation, you give the students one or two problems/examples to work on, and they work in little groups trying to solve them. This type is nice if you can figure out how to split your time in a good way among the groups. If you do this, make sure that there is enough time to actually go over the answers, because if there isn't, your students haven't gotten very much feedback. Also, a note: if a student wants to work alone...*let him/her work alone.* If you don't, this is once again disrespecting your students and needlessly invoking your power. There is no *good* reason that a student can't work successfully on his own.

Presentation Of Recitations

If you've prepared successfully, there are really only two things that might trip you up in presenting a recitation. The first is that something unexpected happens (your slides don't work, someone asks a question that stumps you, an example is wrong or takes too long, etc.). When this happens, take a deep breath (maybe two), and try to re-orient yourself. You might switch to a different problem, or ask the students what they want to do. If all else fails, you can always fall back on the Socratic Method. The most important thing is to not lose your composure. One silly mistake shouldn't cause your recitation to spiral downwards in quality.

The second thing that might trip you up is presenting to an audience. Public speaking can be really frightening, but the best way to get over it is to practice. If you have trouble with speaking, try it as much as you can in front of audiences. You can always ask your friends to help you out. Some really common mistakes in presenting are (1) speaking too softly and (2) talking to the blackboard instead of your audience. You should try to make sure you are projecting your voice and actively talking *to* your students. Part of presenting is using the blackboard (or slides) in a meaningful way. If throughout the recitation, the things you have been writing on the board end up incomprehensible, then it can be

harder for the students to absorb the information. In addition to practicing public speaking, you might consider practicing writing on the board (or gesturing to your slides) as well.

Office Hours

These depend very much on the class, but more often than not, you will be asked a bunch of questions about the homework. The trick to answering questions is that you want to help the students arrive at the answers themselves. Giving away an answer to a student is counter-productive; the student loses a chance to understand the concept that the question was presenting. This skill takes practice, and nobody gets it right 100% of the time. Try to come up with similar problems (or give hints that will lead the student in the right direction).

Make sure that you're at least relatively familiar with the homework before holding office hours. If you haven't completely solved the assignment yourself, that's fine, but you should make sure you have some sort of intuition on every question.

Student E-mails

Don't ignore them. You will often get tons of e-mails right before an assignment is due. It is up to you how you want to deal with them, but it is perfectly within your right to not answer them immediately. However, you should (generally speaking) give students some sort of response within 24 hours of receiving an e-mail.

Homeworks

Grading

It sucks. If you don't believe me now, you probably will after the semester is over. Grading truly is the worst part of the job, but it is also incredibly important for the students. You will not always completely know what the student's answer means or if it is correct. That's okay, but you might consider checking with a more experienced TA (or professor). Grading is your way of giving the student feedback and giving him or her a better understanding of what he or she doesn't understand; so, grading slowly is really harmful, and the students certainly have a right to complain. This particular tip is in here, because experience has shown me that even when TAs understand this intuitively, they don't take it under consideration enough (myself included). One way to combat the ever-present instinct to procrastinate is to self-impose a strict deadline on yourself at the beginning of the course. This can force you to stay on track and treat grading like any other piece of homework.

Cheating

Just a quick note on cheating: it is not your job to directly deal with cheaters. If you find compelling evidence that a student has cheated, you should let your professor(s) know and you have completed your responsibility as a TA.