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Resource: The Torch or the Firehose

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In The Classroom

In you go armed with mind-boggling stuff and determined that, prodded by your skillful questioning, your class will have an intense intellectual experience and reveal a brilliance they didn't know they had in them.

"Could you go over problem 3 on page 112, I didn't get the answer in the back of the book." (General nodding agreement.)

It's a boring, stupid problem, one you hadn't planned to do. Grrr...!

The best laid plans of mice and recitation instructors go oft awry. Relax: you're a tour guide who has been asked to make a side trip. If the group is interested, maybe that side trip will turn out to be more interesting than you thought. But keep your original plans in mind because your section needs a sense of purpose. Firm, yet flexible. Remember what was said before about the myth of "covering" the material—just because you don't do something doesn't mean it's lost forever. Of course, it will help if you've allowed some time in the preparation—topics or problems to take up that you won't be too unhappy about abandoning if necessary.



Your personal schedule for the classroom

Come early. It says you're interested and available, and gives you a good chance to chat informally with a few students, find out what's going on, and get to know some of them.

Start on time. Assume those who come in later were coping with some crisis, but don't review for them.

End on time. Nothing was ever learned after the bell. If you've got two more lines to write that are the keystone of the whole hour's work, beg them abjectly to stay for one more minute and swear you'll make it up to them somehow. But don't think they'll actually be paying any attention—it's just for your own sake you're doing this.

End ahead of time if there aren't enough minutes left to start something new, and the class has run out of steam. In particular, don't start something new, don't preview the next lecture unless the lecturer approves of this, don't start pumping them for questions to fill up the last few minutes. Let them be first on the lunch line instead.

Stay Late, until the stragglers leave—they might want to ask about something they didn't dare ask in front of the others.

Flub-up time

- You made a mistake at the board somewhere, but you can't find it.
- You can't answer someone's question.
- You get stuck working out problem 3 on page 112.

These things happen to everyone, but they are hardest on newer teachers who often feel insecure at the beginning. The main thing is not to become defensive or hostile, and above all, don't fake an answer or b------ around. Even the poorest students in your section won't be fooled, and you will lose everyone's respect. Ask for help instead, hope you get it, and listen to the students who are trying to give it---some of them might be right. Or promise you'll have the answer for the next class. It's all right to make mistakes and you don't have to know it all, but you do have to be honest.



I asked a teacher a question and the answer was something like, "I'm not really sure, but I don't think it will be on the test." I'd prefer and respect an answer on the order of "I'm not really sure, but I'll get back to you on it if you'd like."

- **Q** The students hissed at me yesterday, and I was shocked. Don't you think this is incredibly rude?
- **A** It's not hissing, just letting out steam. It is triggered automatically by either of the following:
 - Announcement of a problem set due the day after vacation.
 - Referring in class to any course other than the one you are teaching (double hissing for referring to any topic that you expect them to have learned in said course; redouble if you say the topic will be included in the next exam).

Ask Peggy



Q My students all sit in the back row.

A This is a common problem. Some are hoping to be inconspicuous so you won't call on them. Others are using well-known body language to tell you that they are really just uncommitted observers of the proceeding. (I am assuming, of course, that you have not been eating onions.) Possible solutions are to:



Adapt: Use a megaphone and write big.

Fight back: Mumble, write small, and call only on people in the back row.

Ally yourself with The Force: By habit, students sit all term long where they sit the first day. Come early and rope off the back three rows with a sign, "Reserved for Listeners."

Offer positive reinforcement: Ask them as an experiment to sit up front and that day give your most scintillating class.

Q Should I be informal or formal in my approach to the class?

A There are a lot of ways to teach—energetic or relaxed, in tweeds or jeans, the Olympian authority or the humble just-another-student. If you're not relaxed about your attitude, your students will be uncomfortable too. Just be yourself. However, if you feel you can manage it, being informal in a small section is usually more fun. It encourages interaction, and it's a bit more comfortable when error time comes around—the higher up you set yourself, the further you fall.

The Professor knows everything—even his mistakes are correct.

The TA specialized in proof by intimidation and proof by superior credentials.

Some roles teachers play (and mostly shouldn't) We cast you a little while ago as the tour leader for your recitation. Other roles that teachers play reflect how they feel about the course and their own place in it, and some have unfortunate consequences.



The union organizer. It's tempting to ingratiate yourself with your section by telling them that it's not their fault they are having difficulties—they are victims of the System. You run down the book, the lecturer, the course in general. Of course any book or lecturer will occasionally be obscure, and it's all right to remark on it. But don't overdo this, because it can demoralize some of your students: why bother struggling if the cards are stacked against you?

The lifeboat captain. Do you give your section the feeling of being tossed helplessly about on the seas of your subject by Angry Implacable Lecturer-Administrator Gods? That's the effect of habitually using "they":

"I heard they are going to make the next problem set really tough."

"They are leaving infinite series out this year."

"I don't know if they will give you a thermo problem on the exam."

If this is they way you really feel, then there is too much of a gap between you and the lecturer for the good of the course and your students. There should be more staff meetings and you should have more input on the problem sets and exams. In the meantime, at least compromise by staying on neutral ground verbally: "This was a difficult problem set" rather than "They made the problem set too difficult."



The wearer of white-kid-gloves.

"The rest of this problem is just the usual algebraic garbage which I certainly don't intend to go through."

"That's just a standard F = ma problem—doesn't anyone have something more interesting they want to ask about?"

Such remarks convey to your students that routine things are beneath you. Many of them will imitate your attitude, with disastrous results later on. The most common complaints from upperclassmen teachers are things like, "They can't even integrate dx/x," "Doesn't anyone teach them the periodic table anymore?"

So let students know by your attitude that you consider such things important and that everyone must learn them well. Brief quizzes will reinforce this. Poorer students should concentrate particularly on this type of material; finding they know something well may encourage them to go further.

The undergraduate chemistry majors we get from you are really brilliant. Now if they only knew what pH was.

—Graduate Chemistry professor

Here's a role for you that your class will appreciate.

Leader of the expedition. Every course has its winter of discontent—those times when most students are just struggling along, not really seeing where things are headed, and feeling they will never get any mastery. It's up to you to cheer them on, to reassure them that others have made it, and they can too. Point out some of the natural wonders in the distance and the pitfalls you're leading them past. Teach them survival skills. Hold up to them visions of the delights that await them on the summit.

OK, block that metaphor. All the same, a little of your energy and enthusiasm supplied at the right moment can give them the lift that will take them the rest of the way.

