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Resource: The Torch or the Firehose  
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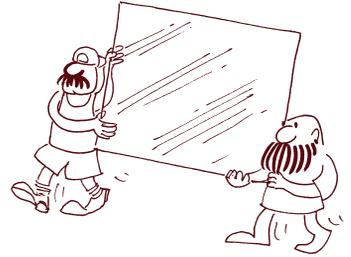
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## The Glass Wall: Encouraging Interaction

The number one problem in teaching recitations is the “glass wall”—the teacher on one side doing a passable job of explaining, talking, and writing, but rarely interacting with the student on the other side. Listen to an undergraduate describe it:

**We're usually all there when he walks in. He looks sort of embarrassed, stares down at the desk and asks if we have any questions. There's an awkward silence, like at a party where nobody can think of anything to say. Then he starts to work a problem from the homework. He talks to the blackboard in a steady, even way. You can hear, but you can't tell what's important and what isn't. I can't follow one of the steps, but I'm afraid to say anything. Every now and then he says, "Okay?"; but it doesn't mean anything and he doesn't stop. After a while you don't really understand much and wonder why you're there. I copy the stuff into my notebook—I'll probably be able to figure it out at home—but if it wasn't for the exam I know I'd never look at it.**



**I guess I keep going because I know that otherwise I'd just waste the hour some other way. He knows his stuff all right, but it's as if he's up front and we're back there, and there's a glass wall between us.**

A recitation without interaction—what problem could be more basic? Without the ease of communication that's supposed to be fostered by small groups, why have recitations at all? An extra lecture or two each week devoted to problem-solving would do just as well and save many teacher-hours.

The lack of interaction is bad for you: it makes it hard for you to know the difficulties your students are having. You can't tell if your explanation is opening the door, or whether you need to try another key in the lock. How can you grow as a teacher if you don't get feedback from your students?

It's bad for your students who already have sat through many lectures and don't really want another one from you. They need a chance to talk and express themselves, to clarify their own thinking, to share their difficulties with each other, to experience the feeling of a group working together on mutual problems. This is what recitations are about, and getting it to happen in yours ought to be your number one priority.



## Breaking down the glass wall



Achieving real communication with your students isn't always easy. Think of all the situations in ordinary life where two people find communication difficult; add to them the extra complications that arise when one of them is an authority figure, and the other must talk with an audience of peers listening. You're going to need some tact and skill; here are some suggestions.

### Get Them Thinking

Your students have just arrived and are sitting there thinking about life's problems, about the class they just came from, or most likely about nothing at all.

"Any questions?"

Questions? They can't even remember what the current topic is. They thumb through their notebooks, but it's hard to start out cold.

Your first task is to get their mental sap flowing. Remind them first of any formulas they will need, then ask some easy review questions (very easy, if you suspect they are far behind). If you are handing back a problem set, give them a typical mistake and ask what the error is. You could give them a few minutes to work by themselves or in small groups on two problems you give out, while you walk around the room seeing where they are and giving individual help. When most students have finished the first one, ask for the solution and act as a scribe at the blackboard. A class comes to life when everyone has just thought about the same problem -- in fact, seatwork (alone or in groups) is so effective that many teachers use it several times in every class meeting.

Problems and questions get thinking going. But since so many teachers experience difficulties asking and answering questions and doing it well is so important to the success of your recitation, we will devote the next chapter to this. For now, let's go on to consider some things that can hinder interaction in your class.

### Peer-group Pressure

If things seem sticky—you are asking good questions, but get only nervous looks in return—you're students may be afraid of saying something that will make them look foolish in front of the others. Sometimes you will see students silently mouthing an answer they don't dare to say out loud. Perhaps you have felt this way yourself in advanced courses or seminars. If so,

you will appreciate that it is a difficult problem to deal with. The ultimate solution has to be for them to feel comfortable with each other, but this won't happen right away. Meanwhile you can help a lot by being supportive of wrong answers and non-responses:



"That's not exactly correct, Jennifer, but you're on the right track."

"That's a mistake everyone makes. I'm actually glad you made it because it gives me a chance to clear up a common confusion."

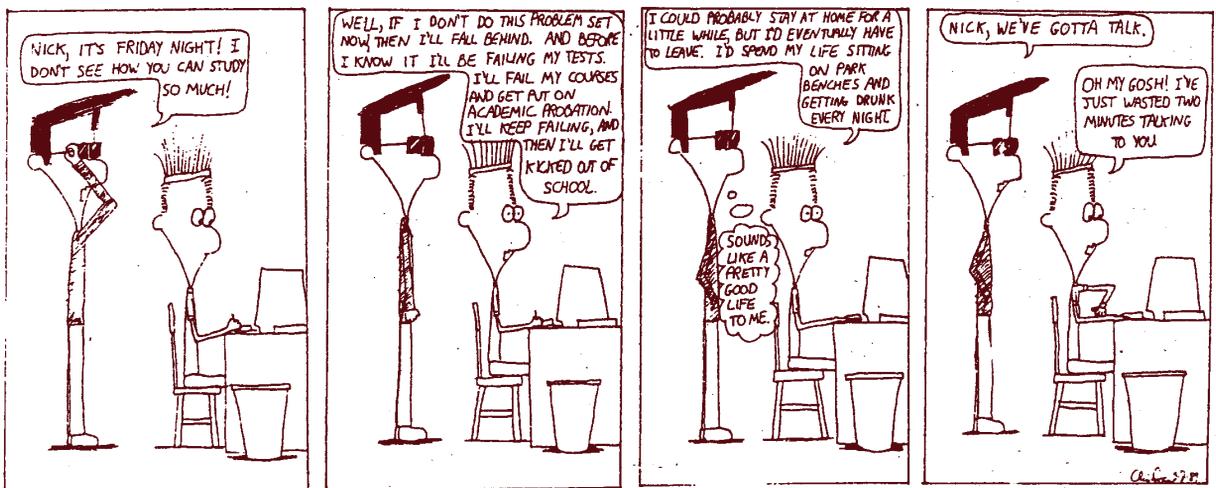
"Don't worry, Bill, I know it's hard to get in gear."

Responses like these will go a long way toward convincing them that it's all right to hazard an answer.

Of course, you need to be supportive of their questions as well, but we'll talk about this in the next chapter.

### Student Time-Delay

It's one of the greatest stumbling blocks to interaction: students always seem to be behind. If there's a weekly problem set, many will not start studying for it until the night before it is due; before that they will understand very little of what's been said in lecture during the week. No wonder they are silent.



You can deal with the problem in three ways: ignore it, accept it, or fight it.

If you ignore it by pretending they are up-to-date, you'll find yourself doing most of the problem-choosing and talking, with class participation limited to just the few students who are prepared.

If you accept the situation, you'll probably feel it is your duty to teach them what they haven't yet studied. It's a bad habit to get into, but if you do this, at least avoid straight lecturing—try to teach interactively, with questions and work they can do either together as a class, or individually or in small groups, with you walking around and helping.

It's best of all to get your students to prepare for the recitation: best for the class as a whole and best for them as individuals. Some instructors give a very simple short weekly quiz that anyone can do after having looked at the week's readings. Students can grade each other's papers and gain additional insight that way, since you will be discussing common mistakes. Other teachers announce at the previous recitation a few problems that will be gone over at the next meeting. Often just a clear statement of what you expect from your students and what your plans are for the next section meeting can work wonders in encouraging them to prepare for class. Try it.

What else stifles interaction?

### **The Steamroller**

It's common to see recitation teachers carefully prepare a lot of problems and a lecture review for the hour, then realize it's a bit too much. So they shift into high gear and deliver it all as a fast lecture.

### **Could you explain that last step?**

**If you're going to interrupt me with questions we'll never be able to cover the material.**

—math lecture

**The TA goes through blackboards like a baby does diapers.**

Such tactics "cover" the material, but your students will quickly give up trying to participate (though you'll be so busy you probably won't even notice). Instead, relax and don't worry if you don't cover everything you've prepared; it's better to have a less tense atmosphere. The best way to prepare is to decide on your priorities—what you want to be sure to do, and what you can let go if there isn't time.



Actually, there's another reason why instructors turn into steamrollers—they feel ill-at-ease, and giving a fast lecture is the easiest way to cover this up. If this is you, the best ice-breaker is question-and-answer dialogue: prepare it just the way you prepare the too-much-material. See the next chapter.

### **Communication 101: look, listen, say, write**

If you think you're doing everything right, and yet the class just sits there, maybe there's something amiss in your basic communication skills. Student can be driven into permanent silence by any of these things:

- a teacher who never looks at them;
- a teacher who doesn't listen, often giving elaborate answers to questions that weren't the ones actually asked ;
- a teacher whose voice makes concentration difficult—soft, sing-song, monotone, depressed-sounding, unintelligibly accented—or one who talks only to the front row;
- sarcasm and put-downs;

- a teacher who talks over their heads (or under their feet), addressing imaginary students several years older or younger than the ones actually sitting there;
- a teacher who never writes anything down, or does it so chaotically or incoherently that they can't follow;

To correct problems like this, it usually takes someone else to point them out, but alas, even your best friend won't tell you. Two later chapters will be devoted to the diagnosis and treatment of these communication difficulties. We're signaling them early on because they are such frequent causes for a silent class.

**Listening to the instructor was like listening to the hum of bees buzzing in a meadow out in Missouri.**

**Feedback Time**

If despite your best efforts interaction is still sluggish, try taking ten minutes off at the end of a period, putting your feet up, and asking the students in a general way what they think of the recitation. A good discussion can help a lot in clearing the air and pointing to the difficulties. Maybe there's something you didn't know.

If they seem reluctant to talk, ask them to write down their thoughts anonymously, and the next time you meet report back to them what the sentiments were.

**Knowing Your Students**

Sometimes you'll be lucky—your recitation will have a few students who seem to spark everybody. But more typically, your class will just sit there in the beginning and won't seem too keen on talking. Don't worry about it. Communication is easier with people we know better. As the students get to know each other's quirks and yours too, and as you start recognizing them in the halls, you'll find yourself relaxing and interaction will improve.



The chapter of this booklet entitled "Off to a Good Start" has some suggestions on how to get to know your students and make them comfortable with each other. The important thing is to be patient and keep trying—they will respect your efforts and sooner or later will start responding.