How to get your Professors' Attention, or: How to Get the Coaching and Mentorship You Need

A Guide to Learning Things

By Jake Seliger

Introduction

Students regularly say that professors, teachers, coaches, mentors, and others don't care about them or don't offer real help and advice. In a recent discussion on the forum Hacker News, someone wrote, "[…] coaching/mentorship is probably found a lot more in a grad program than undergrad, where it's pretty much nonexistent." That commenter is somewhat right, but the deeper issue is that professors (and others with knowledge and competence) are most inclined to help people who won't waste their time. The challenge for the professor (or other person) is to figure out who is going to waste their time and who isn't. They accomplish this through implicit tests. The challenge for you, the student who wants help, is to demonstrate that you're worth the investment. This is a more complex issue for both professors and students than it may seem. I'm going to describe the incentives acting on both professors (or people with expertise) and students (or people seeking to develop expertise) and explain how to show that you're better than the average student.

"How to get your Professors' Attention" is necessarily biased towards universities because I'm a grad student in one and therefore more attuned to universities and the peculiar people who inhabit them. But this advice can probably be generalized to almost any situation where someone is knowledgeable and someone else is trying to seek knowledge or mentorship.

This essay is also biased toward English, which is my field. But if you're working on something in computer science, for example, you'll probably get more and better help if you walk into a professor's office and say something like, "I'm having a problem with this program, which I suspect is related to X, but I'm not sure. I've tried sources Y and Z, which might be related, but I can't figure out what's going on. Am I missing something?" This will almost always go over better than saying, "Explain binary search trees to me" or "I don't get this class," which will probably get you a pointer to the relevant section of the book, or a

reference to another book, with the instruction that you come back once you've read it and explain more explicitly where you've gotten lost.

Background

I majored in English and went to Clark University, where I think I got a lot of mentorship and connected with my professors. That might be because I took a lot of time to seek them out or because Clark is a small liberal arts school where professors are expected to interact with students. Even there, however, most, though not all, professors offered real mentorship/guidance to the extent the students seek it out. When I was an undergrad, I was doing many of the things described in this essay without realizing what I was doing.

What do you care about?

The idea that professors don't care about their students is a pernicious half-truth. In most cases, it isn't really true: professors *do* care about their students (otherwise they wouldn't be professing), but professors also know that many students don't care about the subject or about learning—they care about grades. Professors don't care about grades, and they often care about their students to the extent that their students care about learning.

If a student really wants to learn, the professor will really help, but most students don't, so the professor builds a wall between herself and her students, and she makes sure that the only students who breach the wall are the ones who do care about learning. Professors do this through the tests described in the next section. Students often perceive this wall as indifference or callousness, when it's really just a practical means of separating out the students whose primary goal is to get an A from the students whose primary goal is to understand why *Ulysses* was a major break from the tradition of the novel and why it became an emblematic text of modernism, which is bound up with history and industrial changes and any number of things, caused by…

And so on. Life is more complex than it looks, and simple questions often have complex answers. Those complex answers are often found in the form of text, since good writing is far more idea-dense than speech can hope to be. This leads directly to my next point.

Books

Now that I'm a grad student at the University of Arizona, I tell my students the same thing: if they want to go beyond whatever is required in class, they should start by showing up in their professors' office hours, ideally with somewhat smart or at least well-considered questions or comments. Most professors respond well to this and will often give recommendations on books to read and/or projects to work on. A few days ago I taught Paul Graham's essay "What You'll Wish You'd Known," and my students glommed onto this paragraph:

> A key ingredient in many projects, almost a project on its own, is to find good books. Most books are bad. Nearly all textbooks are bad. So don't assume a subject is to be learned from whatever book on it happens to be closest. You have to search actively for the tiny number of good books.

Very true: professors are a good place to find good books because they've read so many books. If you read whatever books they recommend and go talk to them about those books afterwards, coaching and mentorship relationships will be much more likely form, even at big state schools. You need to demonstrate interest in their subject if you want their attention. Reading is one way.

Obviously, there are exceptions, but this principle usually works reasonably well. Very few students follow it. If you show up in office hours and say "mentor me!" you're probably not going to get much. But if you show up and ask questions x, y, and z, then read whatever the prof recommends, then come back, you'll probably have a much better shot at their attention.

Another person on the Hacker News discussion said, "I get the impression that some undergraduates at some colleges do get good coaching and mentorship, and I would like to hear from other HN participants if they know of examples of that." They're right: some undergraduates *do* get good coaching and mentorship, but I suspect that depends less on the college or university and more on the undergraduate—and the undergraduate realizing how things work from her professors' perspectives.

Reading

Professors tell you to read more or read particular books / essays for two reasons. The primary one is that reading is simply more information dense than talking, as mentioned earlier. Try this sometime: copy a half hour of TV news verbatim. You'll find that it comes to maybe a page of text. To have a reasonable conversation, it often makes sense to read something related to the topic first, then talk about where to go from there. To learn more, read more. To learn faster, read more.

Secondarily, your professor will often recommend reading to test your seriousness. If she says, "Go read X and Y," and you do, you've demonstrated that you're not wasting the professor's time and are genuinely interested in the topic. If you go away and *don't* come back, you've demonstrated that you would've wasted her time had she spent an extra hour talking to you outside of class and office hours.

Finally, at least in English and related fields, a deep interest in reading is a pre-condition to doing other interesting things, like knowing about the world. It's necessary but not sufficient. You don't need to have read obsessively since you were 12 to catch my attention—but it does help if you say something like, "Oh, yeah, I read *Heart of Darkness* last summer and noticed the narrative structure, with Marlow telling the story to a random guy on the deck of the boat…" If you tell your computer science professors, "I'm working on a system to save and organize the comments I leave on blogs and read about this association algorithm…" they're probably going to be more impressed than if you say that you're ranked on the *StarCraft II* Battle.net ladder.

There are a handful of people who for whatever reason can't get around to reading. But those people are few, and all of us make time for what's important to us. If you can't make time to read whatever your professor suggests, that indicates the topic isn't of great importance to you—and therefore your professor shouldn't waste time doing something that's not important.

To summarize: reading teaches you faster than talking can, and it efficiently sorts people who are willing to put in some time investment from those who aren't. It's necessary if you're going to do interesting work.

Doing

People know I'm a wannabe "novelist" (as Curtis Sittenfeld said of her success with *Prep* in "The Perils of Literary Success," "I was excited by the thought of no longer having to use air quotes when referring to myself as a 'writer' working on a 'novel' ") with many rejection letters and near acceptances to prove how much of a wannabe I am. Sometimes friends and others say things like, "*I* want to be a novelist," or "*I* want to write a novel." I usually say, "Okay: start today." Then I tell them: write Chapter One by date X (usually two or three days out) and send it to me. Novels are a handy example because all you need is a computer, which most people at universities have or have access to, and some text editing program, which come pre-installed with any modern operating system. You don't need an instrument or lab chemicals or whatever. I've probably made this offer to between one and two dozen people over the last couple years. One person has taken me up; she sent me Chapter One, I sent her some comments, and I didn't hear back (we're still friends; she says she's writing other things). Sometimes when people say they want to be better writers, I tell them to go read James Wood's *How Fiction Works* and Francine Prose's *Reading Like a Writer*. Again: almost none do. The ones who do, I know are serious.

By now, I've been trained by experience to assume that most people who say things like "I want to write a novel" a) have no idea how hard it is to write a novel, b) how much harder it is to write a novel someone else might actually want to read, and c) the fact that, based on experience, most people who say, "I want to write a novel" are full of shit. Almost everyone in the United States who wants a computer has one; almost anyone who wants one can get one. If you have a working computer and two or three hours a day, you can write a novel. Nothing is stopping you: you don't need a $10,000 piano. You don't need a mass spectrometer.[1] You don't need permission. You don't need to pass a test. You don't need to be told you're special.

All you need to do is sit down and write every day for a couple of hours. Eventually, you'll have a novel, or at least a very large pile of words. Very few people really want to.[2]

[1] But really, who doesn't want one?
[2] Maybe they are afraid of ending up with that very large pile of words.

Most people who say they do, don't, just like most people who say they want to lose weight don't read Michael Pollan's *In Defense of Food* and then stop eating simple carbohydrates and highly processes meats. They say they want to lose weight and keep buying Coke. In both cases, comparing their statements to their actions reduces to, "I want to write a novel / lose weight, but not as much as I want to watch TV / drink soda."

The funny thing is that both novel writing and losing weight are actually fields where relatively minor changes, accumulated over time, can lead to relatively large changes: try writing for one hour a day. Then two. Then three (maybe only on the weekends). Try to drink nothing but water (most drinks are just easily removed empty calories). Take most forms of bread out of your diet; eat fruit instead of candy. Go for a walk at the end of the day. You'll eventually have a largish pile of words or drop some pounds. A large enough number of people do both to prove they're possible—if you want them.

Your professors are asking themselves: "Does this student want it? Really want it?" The value of "it" varies by discipline, but the idea remains the same.

A lot of students say or imply they're not ready or incapable to do a real project, or that they don't have the time to do so. The former excuses about readiness might be true, but students should still start doing something. I wasn't capable of writing a novel anyone wanted to read when I was 19—or even *finishing* one. It took me three tries to get a coherent, complete narrative together, which was still unpublishable. But I wouldn't have the skills I have now if I hadn't started trying then. Here's Curtis Sittenfeld again, this time in an interview with *The Atlantic*: "I don't think that you can learn to write a book except by writing a book." She's right—and this isn't true solely of books, either. I didn't start or stop my work based on what classes I was in or whether I was somehow authorized or trained to do what I was doing. In effect, I mostly trained myself, which I wouldn't have done without all those early hours writing unpublishable crap. Most novelists tell the same story: lots of early crap and rejection that they ultimately overcome.

If you have a choice between building or making something and not building or making something, always choose "building or making something," which will be more impressive than not trying even if you fail. Plus, if you look for it, you'll see people in almost every field

saying the same thing: the only way to learn is via the work itself. Here's Patrick Allitt in *I'm the Teacher, You're the Student*:

> [. . .] but the way to improve as a teacher is by actually teaching; hypothetical situations or abstract discussions are too different from the real thing. The best you can hope for, short of actually getting down to the job, is to learn a handful of principles, on the one hand, and a handful of useful techniques, on the other.

A lot of students will say, "But I'm just a student, and the president of club X, and I have homework to do, and I want to have sex with my boyfriend / girlfriend / neighbor / person-at-a-party-whose-name-I-forgot, and my parents are breathing down my neck…" That might all be true. But you'll only have more work over time, and the work done in college is nothing compared to the real work people do to support themselves. From what friends have told me, it's nothing like the work of having a baby and being responsible for feeding and keeping alive a small, helpless, somewhat boring human. So in your professors' minds, saying that you have so many responsibilities often reduces to an excuse not to start now. And the best time to start anything is now. Today.

People who really want to do something… do it. Or they make changes so they can. But most people say they want to do something and then they don't (I've repeated this a couple of times in the hopes that it sticks). Over time, others notice this (like me), and they start to assume that most people who say they want to do or know something are full of shit, in part because experts can't distinguish at first glance who's full of shit and who is genuine and thus worth investing in. So experts assume that someone is full of shit until they prove otherwise. In the case of someone who wants to write a novel, I assume they're no longer full of shit if they've written a complete first novel and started on a second one (the first one is almost certainly no good, although there might be useful lessons to draw from it. That was certainly true for me). In the case of someone who wants to lose weight, I assume they're full of shit until they start carrying around a Nalgene bottle and a bag of peanuts instead of a Coke and a Snickers. Your professors will start to think you're not full of shit when you read the books they recommend, ask for more recommendations, read those, and come back for more.

Caveats

This basic advice won't always work: some professors won't pay any attention to you no matter what you do. They might be more interested in their own research than teaching, or they might be having personal problems, or they might be off in their own world, or they might be burned out. Some professors will go out of their way to try and inflict mentoring on students who don't particularly want it, although I don't think there are very many of these professors, especially in big public schools; most professors who try this approach will also probably encounter enough apathy to scale it back once they're rebuffed enough times.

There are probably also variations by field: enough people have reported that professors in technical fields are less inclined to work with undergrads to make me wonder if there is some truth to this stereotype. I suspect that science professors just have a different mode of mentoring, which goes something like: "Come to the lab, we'll see if you can do anything there."[3] Most professors, however, will fall somewhere in the middle of this spectrum, and those are the professors who can most be reached via this guide. It would be very unusual to find a school where following the basic outline presented here will result in nothing.

A story…

I had a student who I'll call "Joe." He habitually wanted to hang out and chat after class. This is good: at first I interpreted it as meaning that he was intellectually curious and driven.

But as the semester went on, I got progressively more annoyed because he'd ask questions that simply didn't have short answers and couldn't be reduced to sound bites. I kept telling him to drop by office hours if he wanted to really talk—but he never showed up. I'd sometimes tell him to read X, and when I asked him about it a week later, he'd say he'd been busy. Somehow, though, he was never too busy to waste ten or fifteen minutes of my time in class. We were reading Jane Austen's *Pride and Prejudice*, and Joe said something about her place in literary history that was… unlikely, let us say, so I told him to read a few of the essays in the back of the Norton critical edition. I don't think he did.

[3] They want to know: Are you competent? Can you do math? Will you break the $10,000 PCR machine? Okay, go play with chemicals, read this paper, get back to me in a week.

Before their first papers are due, I usually meet with my freshmen individually to go over their work. I close read, edit, talk to them about ideas, catch disastrously bad papers so they can be rewritten, and so on. Joe didn't show up to his conference; he didn't come to my office hours; and when I finally did read his paper, it had incredible howlers in terms of both fact and interpretation, my favorite being his assertion that the Toyota Prius is in some way like a perpetual motion machine, which demonstrated that he didn't know anything about physics or perpetual motion machines or even general knowledge.

Joe got back a paper that was charitably graded, given its quality, and he dropped the class. Joe is an extreme example of a time waster: I think he would've been more than happy to chat for an hour after class each day, shooting the breeze while I had places to be and other pressing concerns. But I get at least one Joe every year. I separate Joe from students who want to learn by a) telling them to read something and b) seeing if they do it. The ones who do, I spend as much time talking to outside of class as they want—because I know they're not wasting my time.

Criticism

Most of us don't like being criticized: we'd prefer to imagine that we're good at everything, that we don't need the help of others, and that whatever we're working on is perfect—we shouldn't change a thing. We get prickly when people try to help us and often denigrate the person giving us advice, assuming that person doesn't understand our genius or is too hard a grader or has malice in their heart.

Grades are a form of criticism and a form of ranking you against other people: they're a direct statement from your professor to you about how well the professor thinks you've mastered the material. Even in an era of rampant grade inflation, grades can still sting, and very few students achieve a 4.0. A small but noisy minority of students will come back after every semester to fight about their grades, which is one of the least pleasant aspects of teaching.

Professors know that most people who are looking for help mostly want to have their current ideas or beliefs gratified and validated. If professors offer real, constructive criticism, it's often viewed as a personal attack by the person on the receiving end, who will

then be hostile to the critic; that hostility will turn into negative responses on the end-of-semester evaluations, awkward moments when the professor and student run into each other on campus or at a bar, and so on.

Still, some fields are culturally disposed towards rapid, yes/no assessment. One friend who read this essay mention that his vector calculus professor often says things like, "No, you're doing it wrong—here's how it should be done." My friend said it took him aback at first, and he realized that the professor's honesty could be mistaken for cruelty and indifference. But it's actually about efficiency: the math professor wants his students to get the right answer as fast as possible. Most of us, however, aren't used to being told we're wrong on a regular basis, so we interpret this as hostility when it's not.

We've all heard the phrase, "Don't shoot the messenger," which is a cliché precisely because very few people are capable of listening dispassionately to criticism, evaluating it, and ignoring it if they think it invalid and accepting it if they think it's valid. Most of us suffer from some level of confirmation bias, which is a term psychologists use to describe what Wikipedia calls "a tendency for people to favor information that confirms their preconceptions or hypotheses regardless of whether the information is true."[4] We all want to believe we are smart and capable. But we often aren't, and we don't like to accept it when people tell us this or imply it. When students do attempt something, fail, and accept credit, it's almost as impressive as if they get it on the first try.

From the professor's perspective, it's easier to avoid giving the real criticism necessary for improvement. If you're a student who wants to learn, you'll need to demonstrate that you're capable of taking criticism, that your ego is not overly inflated, and that you're willing to accept that you don't know everything and that you could be wrong. Some people never learn how to do this. Others do only after a great struggle. Professors will assume that you can't take criticism until you show you can. This problem inhibits your professors from forming real bonds and sharing real knowledge with you, especially if that knowledge contradicts what you already believe to be true. If a professor gives you real commentary,

[4] Learning about confirmation bias is one of the first steps toward combating it, which Steve Joordens discusses in his lecture "You Can Lead Students to Knowledge, But How Do You Make Them Think?" The lecture is about critical thinking, but it's really about how to think and why.

use it to improve. That doesn't mean you have to believe your professor or take all the advice anyone gives you, but you should at least not be hostile to it. If the professor is right, modify your behavior; if the professor is wrong, pity them for their ignorance or incorrect interpretation. But don't get angry because someone is trying to help you, however imperfectly.

Professors, and most people who do good or interesting work, need to have a peculiar temperament: they need an open mind (Paul Graham in "What You Can't Say:" "To do good work you need a brain that can go anywhere") but also the rigor not to become too infatuated with or attached to particular ideas. Few people achieve this balance, and very few people have the kind of openness that I associate with great intelligence, which manifests itself in a willingness to take in new ideas and be wrong when necessary. When I see these kinds of traits in anyone, they arrest my attention. This is doubly true for students, because so few students have or manifest them.

Real education

In "Who Are You and What Are You Doing Here?", Mark Edmundson writes:

> If you want to get a real education in America you're going to have to fight—and I don't mean just fight against the drugs and the violence and against the slime-based culture that is still going to surround you. I mean something a little more disturbing. To get an education, you're probably going to have to fight against the institution that you find yourself in—no matter how prestigious it may be. (In fact, the more prestigious the school, the more you'll probably have to push.) You can get a terrific education in America now—there are astonishing opportunities at almost every college—but the education will not be presented to you wrapped and bowed. To get it, you'll need to struggle and strive, to be strong, and occasionally even to piss off some admirable people.

This guide is basically teaching you how "to fight," because the regular education that you get solely from sitting in classes won't be real impressive. You won't learn as much from formal, explicit education as you will from informal, tacit education. Both have their place, but you have to go beyond the given to get the tacit education. That's where the "struggle

and strive" come from. If you're perceptive and attending a big American school, you've probably noticed that you're not getting much out of a 500- or 1,000-person lecture class.

Of course you aren't—those classes are designed to balance the university's budget, since they cost only marginally more to run than ten-person seminars, yet the university charges you, the student, the same amount per credit hour as it does to the ten seminarians. If you're not perceptive or you just want to party and get laid, it probably doesn't matter. But if you are that student who really wants to get something more than a particular kind of fun from the college experience, you need to know how to "get a terrific education," which "will not be presented to you wrapped and bowed." You have to take it for yourself—you have to prove yourself. In movies about sports, you may notice that the team or individual doesn't get to the championship match or fight the first time it hits the field or enters the ring.

You won't either. You have to prove to your professors and to others that you have what it takes. That you have tenacity, grit, strength. That you want the education, not merely the piece of paper at the end that says you've sat through four years of stultifying classes and managed not to fail out. Depending on your major, it's shockingly hard to fail, as Richard Arum and Josipa Roksa show in *Academically Adrift: Limited Learning on College Campuses*. Many majors appear to teach students very little of real value, which may say more about the students than the major, but considering how much time and effort you're investing in college, you may want to think about whether you'll actually gain substantial knowledge via your major or via the work and projects you do outside class.

Conclusion

Many professors *will* help you, but you need to know how to make them *want* to help you. You need to learn how to signal a willingness to learn, which you can do mostly by formulating good questions and doing the reading or projects your professor suggests. As stated earlier, some professors won't help you no matter what. They're not very common, since if they didn't have a strong desire to teach, they'd have gone into a more lucrative field, since there are few fields less lucrative than teaching at the university level (adjusted for education and opportunity costs). Many, however, will have been burned by students who are dilettantes and time wasters. You need to prove you're not one of them and learn

how to breach their defenses. This is a guide to doing so, but reading the guide is the easy part. The hard part is doing the reading and finishing the projects. That is up to you.

You can also find a copy of this and other essays at http://jseliger.com. Thanks to Bess Stillman, Derek Huang, and Andrew Melton for reading this essay.