**Advice For A Career In Economics**

This week I was on a panel for an audience of undergraduate and graduate econ students discussing advice for a career in economics. Since I think a lot of readers of econ blogs are students that are in similar positions, I thought it might be useful to put some of those thoughts here. These are only my perceptions, so I think it might be useful for other bloggers with careers in and around economics to weigh in a well. There are three big themes: programming, communicating, and conscientiousness.

First some background so you know where I’m coming from. I am not a professor and have never been more than a TA or tutor. I’ve worked in the private sector for my relatively short career. So my only direct experience in what gets taught is what I was taught. However, I have worked with a lot of interns from a wide variety of schools, from top 10 ranked programs to the bottom 200. My comments below draw somewhat on my own education, but also from what I saw from the dozens of interns and intro level employees I’ve worked with and trained over the years.

One theme that was reflected in every panelists’ comments was the importance of learning how to program. Statistical packages are one particular kind of programming language, and it’s important to learn more than one of these. Among these my personal preference is Stata, but I’ve also learned R and Fortran in the past, and have dabbled in others. But you never know which you’ll have to use at your first job. So more important than learning any particular language is learning how to learn one. Your first programming language will be hard. Your second one will be easier. By your third you’ll be learning how to learn and it will be much easier.

I don’t know about academics, but in consulting and litigation work it’s been extremely important to know excel well. Knowing how to do macros and take shortcuts can save you a lot of time. If you have a chance learning GIS can be a big advantage too. In a similar vein, taking a machine learning class will really open your eyes to techniques for working with Big Data that are becoming increasingly important but almost always neglected in econometrics classes.

I want to go into a little more detail about what it means to learn how to do statistical programming. I don’t mean take the dataset your professor gave with all the variables organized neatly, run some regressions, and then interpret the coefficients. In the classroom this is often the approach, but in the real world finding, assembling, and manipulating the data will be a big part of the work you do. Today many researchers provide code on their websites so you can go from the raw data to the results in their papers. You will learn a lot by trying to recreate the results of a paper you enjoy without the code, and then reading their code and seeing how they did it. Take your time with this. Start by trying to do the whole thing from scratch, and if your answer is wrong (it will be), steal their first few lines of code and then try again to do it on your own from that point. Who knows, you may even find an error in a superstar researcher’s paper and then get famous.

In my personal experience, it also helps you really learn econometrics to program estimators from scratch. And by scratch I mean without even using pre-packaged matrix multiplication. Maybe this is just my own learning deficit, but I didn’t really understand method of moments estiamtion until I had to program it.

The next big category is communication. If you are an econ major, you almost certainly cannot write. Even if you think you are a great writer, chances are you can’t write. Maybe you think I’m still a bad writer so you can’t trust me, but I certainly used to be much worse (in fairness, I barely edit what I write for this blog). The single biggest thing I did to improve my writing was read Strunk and White’s [Element of Style](http://www.amazon.com/The-Elements-Style-Fourth-Edition/dp/020530902X), and ready it very, very closely. It’s true if you follow all their rules your writing will be very boring, but the [style](http://www.forbes.com/forbeslife/style/) you learn from this makes for very a good building block. Learn to write simply first.

Communication also means learning how to work collaboratively with coworkers and bosses. You can usually be a blowhard and jerk in a classroom and still get an A if you do well on the tests and homework, but the same is not true in the workplace. I’m not sure I have any advice about how to practice this, just try to be aware of it.

Finally, the number one thing that causes interns to do poorly and leave with a bad reputation is not lack of smarts or skills, but poor conscientiousness. Under this umbrella I put a lof of related characteristics. Be a hard worker, be self-motivated, and be organized. If find yourself with down time on the job, go find some work to do. Do every task as if it is really important. Some students will lack patience to do boring work well, and will only try hard at stuff that interests them. This often comes as a result of an attitude of entitlement and I saw it more often in Ivy students than state school students, and more often in men than women.

Organization is also really important. Again many students can cruise through college with zero organization and still get straight A’s due to their brain power. This will be much harder to pull off in the workplace. Bosses and coworkers will be far more harsh about sloppy work than a professors. In many instances I would rather someone bring me the wrong answer with the work shown clearly so that I can find the mistake than the right answer with a hard to follow paper trail. In other instances you will be organizing your own work and your bosses, and need to make up for their sloppiness. Bright students may be tempted to think their big brains will allow them to suddently become organized when they need to, but it really is something you need to practice. I was a sloppy student and I’m still trying to learn how to be organized.

The need to practice is true of all the qualities that I put under conscientiousness. It’s really less of a skill you are learning and more a way of being that you are adapting. So start now, the harder this seems, the more you probably need it.

One final thing I will add is that it’s really important to work at something you enjoy. This is of course a well-worn trope, but here is why it is truer than you think: enjoying what you do matters not just as a path to happiness, but because it is hard to compete against someone for whom their career is a passion. Someone who loves what they do is working on it all the time. They’re thinking about it in their downtime, their reading books about it for fun, they’re talking about it with their friends. It’s hard to be better than that if you’re only involved in it from 9-to-5.

The last thing I will add is that if Tyler Cowen is right in his book Average Is Over, then all of the big areas I address here (programming, communicating, conscientiousness) will only increase in importance.

Those, I think, are the most underestimated important lessons. Students should feel free to ask follow-up questions in the comments or on twitter. Do other bloggers have advice?