

References

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Making the World Safe for Methods

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Who could pass up an opportunity to teach methods? I certainly couldn't when the chance arose last year. I'd completed my degree, and was looking for ways to make ends meet and spiff up my CV. The department that granted me my degree, I learned, was looking for someone to teach "the undergraduate methods course." Sounded perfect, I thought. I made plans to teach the class, and borrowed syllabi from previous instructors. Funny, they don't look much alike, I thought (the syllabi, not the instructors). It was then that I learned that my department in fact offered two undergraduate methods courses—one intensive in probability theory and statistical inference (the one I'd hoped to teach) and one more geared towards applications (the one I was scheduled to teach). Seven years at that department, and this was still news to me.

While there are many excuses I could give for not realizing just how many methodological opportunities our department offered its undergraduates, the best one is probably the simplest one. It's a rare department that could offer two undergraduate methods classes, both of which were pretty heavy-duty by the standards of the profession, and expect to see them filled.

Why would undergraduates be so reluctant to take such a class? Probably because they've never had the case put to them as to how valuable a background in methods can be. Robert Heinlein once wrote that in the modern world, a person who did not know mathematics was at best a domestic animal trained to wear shoes, bathe, and not make messes around the house. While not endorsing quite so extreme a position about methods, I do

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believe that a citizen lacking any exposure to basic political methodology—including research design, basic probability, and theories of inference—is missing a critically important tool, one without which it is impossible to be a fully informed participant in democratic politics. An undergraduate methods course gives an instructor a chance to get this point across to students, to make it something more than a class for which one memorizes now and forgets later. If the course is done right, even statistics may cease to be scary and start to look important, maybe even vital to politically concerned students. The world becomes a bit safer for methods, and the democracy is stronger for it.

I believe that the undergraduate methods instructor should always approach the course with this fundamental question in mind—how can I convince students that methods *matters*? The quest to answer this question successfully has many implications for how to approach a course like this. For one thing, it makes tests less important than practical applications. Graduate students may need to have the definitions of every statistical concept drilled into their heads; undergraduates need to know the general logic underlying their use more than anything else, and the best way to do this is to focus students on actual research. At the same time, instructors should remember that they do not have a crop of budding econometricians in front of them every day in class. Most students will not pursue graduate work involving methods, and no teacher should pretend they are. If the research that students conduct is to help them, it must leave them able to make intelligent and critical use of statistical materials prepared by others, not prepare them for the long road to a research-based career.²

This, in turn, has implications for such decisions as the choice of software used in class. If students are to perform any data analysis worth talking about, they cannot avoid using some statistical package. But at the same time, students not aiming for research careers do not need to spend valuable course time learning a complex package like SAS or even STATA. An instructor could easily wind up spending just as much time teaching such a program as teaching data analysis. If students really want to learn computer programming, they have better forums available to them to do so. I recommend a program like Microcase³; it's simple to the point of being idiot-proof, and it comes with numerous datasets (containing information on Congressional roll call votes, demographics for both

²Among education researchers, Roger Schank does an especially good job of stressing the need for social science instructors to avoid such mistakes. See, for example, the interview with Schank in the August 16, 1999 edition of the online journal Edge (<http://www.edge.org/documents/archive/edge59.html>).

³I am indebted to Mitch Sanders for introducing me to Microcase, as well as other materials used in my course. Overall, these materials fit very well with my teaching philosophy for methods.

U.S. states and foreign countries, and two different public opinion polls).⁴ Students can design their own projects using these datasets while still carrying out all the steps of data analysis except the collection process itself. The program also allows students to enter datasets (with a maximum of 100 observations) of their own, should the instructor so desire.

Classroom presentation can also make plain the relevance of statistical analysis to everyday political concerns. Some instructors have their laptops present at all times in class in order to display statistical results of note. I do not see the need to be this focused on the computer; it can turn the course into a computer course, which is not what students need. However, the workshops I have held using Microcase did a good job of piquing student interest in various kinds of research questions. The only embarrassing part of the whole affair was the physical set-up of the presentation, which involved installing Microcase and then arranging for overhead display from my comically antique laptop. To the extent students have been privy to my tribulations at preparing for the workshops, they must have seen me as less of a methodological whiz and more of a classic absent-minded professor in action.

Computer presentations, however, are just one way to introduce examples to class. And examples make all the difference in the world. Graduate-level methods classes tend to focus on the statistical tools involved in data analysis, and the students who self-select into such courses tend to enjoy the techniques for their own sake, at least to some extent. As a result, it's once again easy to forget that students will not necessarily find the tools either fascinating in their own right or useful for any practical purpose. Every methodological concern should have an example attached, whether it be delivered via computer screen or blackboard.

Not every student will learn to enjoy methods, and only a handful will go on to conduct research on a regular basis. However, every student might reasonably learn how useful it is to be able to examine data with an informed mind. A methods instructor should approach each undergraduate class with this goal in mind. Only in that way can there be any hope that every department might someday offer two undergraduate methods courses, and see students ready and willing to take advantage of them.

Teaching Undergraduate Methods for the First Time

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I am preparing to teach an undergraduate research methods for the first time. I was told that that the methods class is not required of Political Science majors; however, it is one of several courses that can fulfill their required credit hours in theory and methods. In addition, I discovered that two separate courses, one on research design and another on primarily quantitative methods, were combined into one undergraduate research methods course. As a result, the methods class is now expected to cover research design as well as basic research methods in Political Science.

Armed with this information, syllabi for a variety of undergraduate methods courses, and the notes and books I have collected from undergraduate and graduate methods courses I had taken or observed, I sat down to write the syllabus and begin developing the course. I soon discovered that unlike other courses that I have prepared to teach, I wasn't sure about what the objectives of a research methods course should be or what material to include and what to exclude or what type of projects to assign students. I decided to back up a step and concentrate on identifying and answering basic questions that we implicitly ask and answer whenever we create or redesign a course. First, who are the likely students in the course? Second, how does the course fit in with the overall program of study for undergraduate Political Science majors? Third, what facilities are available for teaching the methods course or for students' use throughout the course?

While the answers to these questions undoubtedly differ across institutions and departments, the process of asking and answering them may be useful for those preparing to teach methods for the first time as well as those who have already taught undergraduate methods. These questions focus our attention on the connections between the structure and content of our courses and the needs for our students, their programs of study, and the available resources for teaching research methods. By consciously designing our courses to strengthen these connections, we not only help our students better understand research methods but also enable them to relate methods to their political science coursework and the discipline as a whole.

⁴Specifically, I used Michael Corbett, *Research Methods in Political Science: An Introduction using Microcase*®, 4th Edition (Belmont, CA: Wadsworth/Thomson Learning, 2001).