

Textbook Methodology: Undergraduate Research Methods as Depicted in Textbooks

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As participants in the Teaching and Learning Conference in past years have become aware, there is no single unified approach to teaching the subject of research methods at the undergraduate level—or even to the more basic question of whether or not such a course should be required of students. This heterogeneity appears to be at odds with the fairly homogeneous approaches used in the instruction of other introductory courses in the discipline, where relatively little variation in the content of textbooks or syllabi is seen despite a great variety of available books. Nonetheless we can roughly categorize research methods courses into three broad categories:

Orientations to the discipline or “scope and methods” courses tend to carry labels such as “introduction to political science” or “scope and methods.” These courses tend to be aimed at the beginning political science major and serve as an orientation regarding various “big questions” in the discipline and how the various fields deal with these questions. To the extent they cover research methods at all, the coverage is primarily *descriptive*—they describe what political scientists do, and perhaps discuss the available approaches, but do not impart knowledge to students on *how* to do it themselves.

“Big tent” methods courses tend to carry labels such as “research methods” or “methods in political science.” These courses typically focus on the nature of social scientific inquiry and present various approaches to social inquiry, usually in terms of quantitative and qualitative approaches (interpretive approaches may also be presented in some departments). The “big tent” course typically does not pursue any particular approach “in depth,” or expect students to conduct their own research using these techniques, but rather focuses on making students better equipped to consume and produce research in subsequent courses.

“Statistical” methods courses may also carry labels such as “research methods” but might also be called “quantitative methodology.” While these courses may also include an orientation to the social sciences, their focus is primarily quantitative and/or statistical. Courses in this format typically require students to analyze data using statistical software and interpret the results. At the undergraduate level, these courses typically include modules on univariate and bivariate analysis of categorical and interval data, with some instructors also covering multivariate analysis (multiple regression and logistic regression). The courses may also include discussion of tabular and graphical summarization of data.

In addition to these three broad approaches, there has been increasing interest in promoting **integrated methods** courses that include an orientation to a major approach (quantitative, qualitative, or interpretive) with the study of a substantive area of political science; this approach may be particularly desirable in departments where there is no consensus on requiring a unified methods course or as an optional second course in departments where the methods course is in the “big tent” mold. For example, the author is currently teaching a course in public opinion and voting behavior that includes a module on basic data analysis, and students are expected to write a research paper

using data analysis over the course of the semester. The primary drawbacks of this approach are that methods that are not used in this application domain will not be covered, and the “substantive” focus of the course means that there is little opportunity for in-depth study of more advanced methods that might nonetheless be useful for some students.

My hopes for this paper are twofold: first, to better identify what publishers and textbook authors believe are the dominant approaches and areas that are covered, and second, to provide some guidance to instructors regarding the coverage of popular (and not-so-popular) texts.

Findings of Previous Research

At the 2006 APSA Teaching and Learning Conference, Cameron Thies, Charles Turner, and Robert Hogan presented preliminary results (based on the first 100 responses) from a mail survey of several hundred undergraduate research methods instructors in the United States. Thies found that while the instructors who responded to the survey used over 70 unique books between them, only nine textbooks were used in three or more courses (specific editions were not identified):

Textbook	Courses
Johnson, Janet Buttolph, H.T. Reynolds, and Jason D. Mycoff. <i>Political Science Research Methods</i> , CQ Press.	27
Pollock, Philip H. III. <i>The Essentials of Political Analysis</i> , CQ Press.	18
LeRoy, Michael K. and Michael Corbett. <i>Research Methods in Political Science: An Introduction Using MicroCase Explorit</i> , Wadsworth.	12
Babbie, Earl. <i>The Practice of Social Research</i> , Wadsworth. ¹	9
Carlson, James M. and Mark S. Hyde. <i>Doing Empirical Political Research</i> , Houghton Mifflin.	8
Shively, W. Phillips. <i>The Craft of Political Research</i> , Prentice-Hall.	8
King, Gary, Robert Keohane, and Sidney Verba. <i>Designing Social Inquiry</i> , Princeton.	3
Hoover, Kenneth R. and Todd Donovan. <i>Elements of Social Scientific Thinking</i> , Wadsworth.	3
Neuman, W. Lawrence. <i>Basics of Social Research: Qualitative and Quantitative Approaches</i> , Allyn & Bacon.	3

Readers should note that the Neuman and Babbie texts are not specifically oriented towards political science students.

Thies, Turner, and Hogan also identified the areas of emphasis in the courses surveyed, which are presented in the table with the notation “Tx,” where x denotes the number of courses the topic was covered in.

Recommendations of the Teaching Research Methods Track in 2005, 2006, and 2007

In prior years, the Teaching Research Methods track has made various recommendations about the content of the undergraduate research methods experience, according to the summary articles that appeared in various editions of *PS: Political Science and Politics*. In the table, these recommendations

1 A briefer paperback edition, *The Basics of Social Research*, is also available covering most of the topics noted.

are noted by the notation “R” followed by the year (or years) the recommendation was made, although very few concrete recommendations about the *content* of the methods course were made in most years (perhaps reflecting the heterogeneity of approaches noted above); instead, the recommendations typically focused on the placement of the course in departmental requirements and recommendations for presentations in future iterations of the Teaching Research Methods track.

Additional Topics

I also note in the table for the convenience of instructors what statistical software package(s), if any, are covered by the text in question. The following packages are indicated in the table: Excel², MicroCase, SPSS, and Stata.

Topic Coverage in Popular Textbooks

The following additional books, beyond those identified by Thies, Turner, and Hogan, were included in the analysis, due to the author's personal experience with those books or awareness of their popularity in other professors' courses:

Schacht, Steven P. and Jeffrey E. Aspelmeier. <i>Social and Behavioral Statistics: A User-Friendly Approach</i> , Westview.
Manheim, Jarol B. et al. <i>Empirical Political Analysis: Research Methods in Political Science</i> , Longman.
Scott, Gregory M. and Stephen M. Garrison. <i>The Political Science Student Writer's Manual</i> , Prentice-Hall.
Miller, Jane. <i>The Chicago Guide to Writing about Multivariate Analysis</i> , Chicago. ³

The Schacht and Miller texts are not specifically designed for political science students. Several of the textbooks also provide an ancillary “companion” workbook associated with the main text;⁴ if a topic is covered in the workbook but *not* in the main text, I note this information in the table with “W.” The topic coverage was determined by examining the table of contents provided by the textbook publisher on their website or (if unavailable there) via Amazon.com. The most recent edition available for adoption was used. Textbooks are identified in the table by the last name of their first author, for brevity.

Results and Conclusions

Despite the degree of heterogeneity in courses noted above, it is noteworthy that most of the popular texts appear to focus primarily on quantitative methods. While this may simply be an artifact of either

2 While Excel is not itself a statistical package, it does have statistical functionality and its ubiquity among college students may be an asset in methods courses. I do not indicate coverage of other free alternatives (OpenOffice.org Calc, R/R Commander, etc.) as there do not appear to be any political science texts that include instruction in this software.

3 Another edition of this book focusing on bivariate analysis, *The Chicago Guide to Writing about Numbers*, is also available and similar in content.

4 I did not take note of workbooks recommended by the publisher which were not tied to the textbook in question; most large publishers offer at least one SPSS workbook aimed at a variety of undergraduate courses, often bundled with the rather limited SPSS Student Version.

Thies' sample or his respondents, it would appear that there is more consensus on the content of the methods course than one might have initially expected. One direction for a future iteration of this research would be to include additional topics (such as the statistical techniques that are covered) to better distinguish among the quantitatively-oriented books used in this course.

It is telling that no one textbook covers all of the recommendations of the methods track or the topics Thies, Turner, and Hogan identified in the field. Student expenses could potentially be significantly reduced if a single textbook were developed covering most or all of these topics, although that might be "overkill" for many courses. Faculty might also choose to lecture on omitted topics; this comports with my approach in the course, which couples the Pollock textbook with lectures based on Shively's material on writing research papers, accuracy, and precision. Another potential approach is to migrate much of this material online, as the Political Methodology section has proposed, allowing for professors to assign texts more focused on non-statistical material.

One other factor of note was the distinct lack of useful information regarding the coverage of textbooks given by many publishers' websites—even the approaches taken by the authors were often ambiguous. Faculty considering textbooks for adoption—even for the purpose of soliciting review copies—may find this lack of information frustrating, particularly when considering the possibility of teaching a course that falls into the "big tent" category. It may be telling that the two most popular textbooks are both products of CQ Press (a publisher who focuses primarily on political science and related fields) and the CQ website provides more detailed tables of contents than those of many other publishers.

Table 3: Topic Coverage in Political Science Methods Textbooks

Topic	Source	Johnson	Pollock	LeRoy	Babbie	Carlson	Shively	King	Hoover	Neuman	Schacht	Manheim	Scott	Miller
History of Political Thought	T6												X	
Political Ideology	T4													
Subfields of Political Science	T33												X	
History/ Development of the Discipline	T37	X											X	
Nature of Social Science	T80	X	X	X	X	X	X	X		X		X	X	
Logic of Scientific Reasoning ("scientific literacy")	T96, R2005	X	X	X	X	X	X	X	X	X		X	X	
Causality	T96	X	X	X	X	X	X	X	X			X		
Knowledge of multiple modes of inquiry	R2005	X												
Elements of Research Design	T97	X	X	X	X	X	X	X		X		X		
Measurement (Reliability & Validity)	T100, R2006	X	X	X	X	X	X	X		X	X	X		
Sampling	T96	X	X	X	X	X	X			X		X		
Experiments	T85	X	X	X	X	X	X			X		X	X	
Quasi-experiments	T75						X							
Survey Research	T100	X	X		X	X	X			X		X	X	
Ethnographic/Field Research	T38				X			X		X		X		
Interview Techniques	T59									X		X	X	
Archival Research/ Content Analysis	T42	X			X?					X		X	X	
Case Studies	T57					X	X	X					X	
Comparative Method	T45							X		X		X		
Existing Data Sets	T83		W	X	X	X						X		
Formal or Mathematical Models	T19	X												
Policy/Program Evaluation	T16				X									
Components of a Research Paper	T85, R2006	X	W		X					X		X	X	X
Research Ethics	T67, R2007	X			X	X	X			X				
Qualitative Data Analysis	T37				X			X	X	X		X		

Topic	Source	Johnson	Pollock	LeRoy	Babbie	Carlson	Shively	King	Hoover	Neuman	Schacht	Manheim	Scott	Miller
Quantitative Data Analysis	T93	X	X	X	X	X	X		X	X	X	X		X
Finding and Assessing Quality of Academic Literature and Data	R2006	X			X	X							X	
Use of Appropriate Statistical Measures	R2006	X	X	X		X					X			X
Data Presentation Skills	R2006	X				X						X	X	X
Understanding Key P.S. Indicators	R2006													
Excel	Stats													X
Microcase	Stats			X										
SPSS	Stats		W											
Stata	Stats		W											

References

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Brandon, Amy, Mitchell Brown, Christopher Lawrence, and Jennifer Van Heerde. 2006. "Teaching Research Methods Track Summary." *PS: Political Science and Politics* 39(3): 535.

Brown, Mitchell, Leland Coxe, and David Richards. 2007. "2007 APSA Teaching and Learning Conference Track Summaries: Track One: Teaching Research Methods." *PS: Political Science and Politics* 40(3): 576-77.

Thies, Cameron, Charles Turner, and Robert Hogan. 2006. "What We Mean by Scope and Methods: A Survey of Undergraduate Scope and Methods Courses." Presented at the 2006 APSA Conference on Teaching and Learning, Washington, D.C.