

“Neither Fish Nor Fowl”: When Are Research Methods Taught in Undergraduate Political Science Programs?

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When are research methods taught in political science? The assumption here is that learning research methods is what distinguishes a student majoring in political science from a scholar learning about political science. The distinction between “a student majoring in” and “a scholar learning about” is crucial. The latter implies the capability to undertake independent research.

Presumably, the sooner students learn what is involved in academic research, the sooner they will make the transformation from student to scholar. And yet, many faculty members may balk at introducing notions about research too soon in a political science curriculum. Most departments offer courses in four separate subfields (American politics, comparative politics, international relations, and political philosophy¹) in which majors must often take one course (at least) in each. Accordingly, there is a mass of information to learn and simply master. Students can be easily overwhelmed if instructors attempt to introduce important names, critical debates (whether past or present), or the means by which theorems or findings were established as well. Not surprisingly, the pedagogical strategy among many departments (whether chosen implicitly or explicitly) appears to be creating “political science majors” first, and worrying about developing “political science scholars” second.

It could be argued, of course, that not every political science major needs to become a political science scholar. Certainly, those who expect their baccalaureate degree to be their terminal degree probably will not care about learning research methods. For those who plan to

¹ The fourth subfield, political philosophy, is anomalous: it is the subfield most closely related to the humanities, and the least related to social science (excluding those departments that place formal modeling and methods along with political philosophy under “political theory,” or the like). See Steven B. Smith, “Political Science and Political Philosophy: An Uneasy Relation,” *PS: Political Science and Politics* 33, no. 2 (2000).

John McCormick recently suggested political scientists weren’t reading the right classic works of political philosophy, the classical turn-of-the-century social scientists. See John McCormick, “Political Science and Political Philosophy: Return to the Classics—No, Not Those!,” *PS: Political Science and Politics* 33, no. 2 (2000). And of course, some departments also offer other subfields, e.g., public policy, environmental politics, legal studies, etc.

continue in postgraduate studies, these skills may or may not be useful; those seeking JDs or MBAs, for example, may find them less important than those desiring MAs or Ph.D.s in Political Science. Moreover, from the perspective of a department, it may not be possible to provide every student with the necessary course(s) to learn research methods, never mind the opportunity to practice them.² Without doubt, among the most labor- and time-intensive aspects of providing an undergraduate education is advising students on individual research projects. A reasonable response to the question above, then, is “*why* should research methods be taught?”

This paper is not a polemic arguing that research methods *ought* to be taught, or that it ought to be taught to *all* political science majors. Instead it begins with a narrowly focused question about political science as an academic discipline: *when* do we teach our students the methods we use (or are supposed to use) in our own scholarship, if at all? This paper is divided into four sections: first, a brief introduction; second, a discussion of our methodology, third, our findings, and lastly, some observations on re-thinking political science curricula.

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A couple words on the otherwise inexplicable title—it refers to a couple notions.

First, the skills and methods required for a successful academic career in political science are not unique to political science; indeed, they are not intrinsically about politics at all. Insofar as political science is a *social science*, political scientists employ tools that are mathematical in origin (e.g., statistics, rational choice), or common to many social science disciplines (e.g., interviews, case studies, etc.). It uses the same categories or interpretive strategies in analyzing problems that other social sciences or humanistic disciplines use (e.g., structural, functional, rational, feminist, critical, etc.). And insofar as political science, as an academic field, is about

² An implied notion is that a scholar *specializes* in a subfield or even a sub-topic. There are good pedagogical and even civic reasons for emphasizing a liberal arts undergraduate education that encompasses breadth over depth.

disseminating information to fellow scholars, it is about adopting a widely accepted method of explaining the research undertaken in the context of work already done (e.g., literature reviews, research design, hypotheses and causal narratives, etc.). Hence, the distinction between being a *student* of political science and being a *scholar* of political science rests on knowing and applying skills and methods that have nothing to do with our actual subject of politics.

Second, a common pedagogical solution for political science departments nation-wide is to teach these skills and methods late in a political science education, often in the senior year, as a senior seminar devoted to those students writing a senior thesis. Frequently, the seminar is a combination of thesis preparation and research methods. That is, students learn about the components of a research project (e.g., introduction, literature review, research design), the mechanics of research (e.g., using the library, online databases, etc.), as well as the theory and practice of research (e.g., understanding causation, identifying analytical approaches, developing hypotheses, using case studies, etc.). Given the limited time and amount of material to cover, there is almost never a component on quantitative methods or more formal modeling (e.g., rational choice). In examining syllabi available online, it appears many courses end up balancing between two competing demands—learning about research methods (i.e., fish), and concentrating on individual research (i.e., fowl)—and doing neither the justice they deserve. However, for many smaller departments (and even some large departments), this approach often is all that can be done. One problem, of course, is that many students were not exposed to ideas of research earlier, which raises the question of our paper: when are research methods taught?

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Much of the literature examines whether the “standard” political science curriculum needs to be changed: for example, there are debates on the merits of providing a civic or liberal arts

education to undergraduates,³ and what the future of political science as a discipline should be.⁴ These issues stem, in part, from concerns over the 1985 Association of American Colleges and Universities (AACU) report, *Integrity in the College Curriculum*, the 1990 AAC report *Liberal Learning and the Arts and Science Major*, and the 1991 APSA-sponsored study “The Political Science Major in the Liberal Arts Curriculum.”⁵ There have been intriguing studies done on how different curricula has an effect on students’ reasoning,⁶ or whether “we preach what we practice” (to use the title of a recent article).⁷ While we agree with much of the sentiments found in these journals, studies and monographs, we address our issue slightly differently, not by asking “what can we do for our undergraduates to be successful in their chosen careers?” as is more common, but more selfishly, “what can we do for our own discipline?”

We begin with considering what we, as academics in political scientists, want from our curricula and the education we give to our students. It is common enough to find on political science department websites answers to the questions, “what is political science?” and “what can you do with a political science degree?” Thus, we find on Vassar College’s website (for example) the following explanation: “The academic discipline of political science focuses mainly on the politics of states (governments), including their relations with members of society

³ Susan Hunter and Jr. Brisbin, Richard A., "Civic Education and Political Science: A Survey of Practices " *PS: Political Science and Politics* 36, no. 4 (2003).

⁴ See, for example, the collected remarks from a 2001 APSA Annual Meeting roundtable. Kristen Renwick Monroe, "Shaking Things Up? Thoughts About the Future of Political Science: An Introduction," *PS: Political Science and Politics* 35, no. 2 (2002). The complete list of articles is included in the references, below.

⁵ See John C. Wahlke, "Liberal Learning and the Political Science Major: A Report to the Profession," *PS: Political Science and Politics* 24, no. 1 (1991). Two separate responses appeared in the following issue—see Douglas C. Bennett, "Political Science within the Liberal Arts: Towards Renewal of Our Commitment," *PS: Political Science and Politics* 24, no. 2 (1991), Timothy V. Kaufman-Osborn, "From the Science to the Art of Politics," *PS: Political Science and Politics* 24, no. 2 (1991).

⁶ See John Ishiyama and Stephen Hartlaub, "Sequential or Flexible? The Impact of Differently Structured Political Science Majors on the Development of Student Reasoning," *PS: Political Science and Politics* 36, no. 1 (2003).

⁷ See, for example, Andrew Bennett, Aharon Barth, and Kenneth R. Rutherford, "Do We Preach What We Practice? A Survey of Methods in Political Science Journals and Curricula," *PS: Political Science and Politics* 36, no. 3 (2003), Kim Quaille Hill, "The Lamentable State of Science Education in Political Science," *PS: Political Science and Politics* 35, no. 1 (2002).

and with one another.” It goes on further, describing the sorts of issues that interest us, as well as the normative questions that are the foundation of our discipline. Further below, we learn that among the enticement for students is the fact that “Vassar graduates with degrees in Political Science pursue careers in numerous areas, including politics, government, public administration, law, journalism, education, filmmaking, business, and finance. Many work for nongovernmental organizations concerned with particular social, political, and economic issues.”⁸

Similarly, Pepperdine University observes, “Most simply, political science is the study of governments and the governing process,” but reassures us that “a sterile definition such as this misses the importance and excitement of what political science is all about.” The prospective major is told, “The student majoring in political science is challenged to explore broadly, think deeply, analyze critically, and communicate clearly. All these are skills which will stand a student in good stead in later life, whether or not pursuing a career related directly with the political world.” Further on, there is a list of possible jobs (and presented in the order given here): law, government service/political, government service/civil service, secondary education, professional political science, international organizations, interest groups and associations, journalist, business.⁹

Not surprisingly, the lists are relatively similar, naming the typical occupations we would expect, and indeed, that many of our undergraduates have chosen. To the extent that prospective majors (and their parents) worry about career opportunities, rightly or wrongly, political science is easier to sell than say, classics, if not as easy as commerce. Political science majors can be assured of doing something with what they learn about politics. Both schools, to their credit, also mention the profession of education, with Pepperdine explicitly mentioning political

⁸ See <http://politicalscience.vassar.edu/overview.html>; accessed January 5th, 2007.

⁹ See <http://seaver.pepperdine.edu/socialscience/academics/poscmaj.htm>; accessed January 5th, 2007.

science: what we do is a job our students can do, too, should we be able to instill in them a desire for being academics as well. And while we may be successful in transmitting the importance and excitement we see in politics, do we also successfully transmit the skills and methods by which we actually *study* politics?

As noted earlier, this is not a polemic bemoaning the state of our discipline. Given the number of Ph.D.s produced annually (far more than the number of academic jobs available), we seem to do quite well in ensuring a healthy replacement rate. Those who complete graduate degrees presumably have learned something about the academic lifestyle (perhaps including some teaching experience, a sense of the administrative and advisory duties involved, as well as research and possibly even publication). Those who go on the academic job market likewise presumably want a similar lifestyle. We are not, in other words, a discipline in crisis, at least in replicating ourselves.

Nonetheless, worth noting is that the two descriptions emphasize the subject matter, not the method (Pepperdine's explanation, the "study of governments," is not particularly illuminating), and other departmental websites we have checked have not been that much different. But this sort of presentation is perfectly understandable. After all, there is an important distinction between "politics" and "political science," and as the list of possible careers indicates, many of our majors are interested in politics, not political science. They may seek a future political or legal career, expect to have some advocacy position (in non-profits or interest groups), work in policy analysis, and so forth. It is the *politics* and the *political process* that is of interest, not the means we political scientists use to uncover these.¹⁰ And yet, the manner by which political

¹⁰ To be fair, as Bob Jervis points out, it's very likely many of us became interested in political science because of the politics as well, not the science. See Jervis, "Politics, Political Science, and Specialization," 187. See also the article by Sheilah Mann, "What the Survey of American College Freshmen Tells Us About Their Interest in Politics and Political Science," *PS: Political Science and Politics* 32, no. 2 (1999).

science departments emphasize the methods we use also conveys the importance we place on them. Is the “science” aspect—by which we mean the systematic accumulation, analysis, and dissemination of data, favoring neither qualitative nor quantitative approaches here—emphasized as much as the “politics”? To what extent do we teach our students that the scientific study of politics places as much value on the method we use as the subject matter we analyze?

Method:

We used the current (2007) *U.S. News & World Report* rankings to select schools, as a simple way of gathering a representative sample across the United States, and examined the program descriptions from department websites.¹¹ Clearly, a more in-depth, rigorous method of building a sample pool can be done; for example, by using resources and classifications from the Carnegie Foundation for the Advancement of Teaching. But for the purposes of our preliminary research, we believe the sample set of 236 schools (not all have departments of political science, however) gives a good overview of the field.

We acknowledge that these rankings are subjective, and that they do not necessarily represent the “best” departments for an undergraduate education in Political Science (if an objective judgment could even be made about such a subjective concept). However, would-be applicants will most likely not understand or care about such nuances, and would look at the more general measures: faculty-to-class ratio, percentage of faculty with terminal degrees, etc.¹²

Very likely, high school students seeking a political science education would naturally look to

¹¹ Peregrine Schwartz-Shea likewise used the *U.S. News and World Report* rankings, as well as other methods of ranking for a similar study of methods and doctoral requirements. What we attempt here is very similar to her study. See Peregrine Schwartz-Shea, "Is This the Curriculum We Want? Doctoral Requirements and Offerings in Methods and Methodology," *PS: Political Science and Politics* 36, no. 3 (2003).

¹² Or more likely, students would consider the frequency of social activities, the national ranking of collegiate athletics, the existence or absence of fraternities and sororities, equipment in the fitness center, the urban, suburban, or rural setting, and so on, as reasons for and against attending a college. The prestige of a particular academic department would probably rank lower than we might like to think in an undergraduate education.

these rankings to see what colleges they should attend. Accordingly, the rankings are suitable for looking at what is done (and gauging “best practices”) in institutions commonly mentioned as noteworthy.

We focused only on departments of “political science” (including departments of “politics” and “government”), ignoring separate or affiliated departments of “international relations,” “public policy,” “legal studies,” and so forth. The goal was to uncover how these schools treated students choosing a “generic” program that covered all aspects of a political science education.

The five measures we examined, and how we derived them, are described below.

Faculty

The figure provided indicates the number of tenure-track faculty listed on department websites. It excludes, then, professors emeriti, research-only faculty (including research fellows), cross-listed associated faculty (whether in related disciplines or by special appointment), adjuncts, visiting professors, instructors (admittedly, some of these may be transitional, tenure-track ABDs), post-docs, and graduate students, all who, it must be acknowledged, contribute to educating undergraduates in meaningful ways. It includes faculty who are listed as temporarily on leave (e.g., sabbaticals) or with other administrative duties. Presumably, these faculty are temporarily replaced by adjuncts (or professors emeriti), even though there also may be permanent adjuncts (and emeriti) who teach year after year. But with no ready way of knowing whether an adjunct is a temporary replacement or a long-term instructor, ignoring them collectively in favor of tenure-track faculty at least provides a semi-stable figure. Furthermore, given that there is no ready way of knowing whether long-term adjuncts and emeriti only teach courses on a part-time basis, or also have advisory/mentoring roles, focusing only on tenure-

track faculty establishes a base-line figure of those who could reasonably be expected to mentor a student through his or her undergraduate career. Overall, we grant that this approach likely undercounts faculty resources, and that some departments with rigorous or ambitious requirements very likely rely heavily on such second-tier support to accommodate the demand for undergraduate research. But with no way of conclusively determining how specific programs accomplish their goals without undertaking further in-depth research, we have chosen a more conservative estimate of available faculty. In all, the methodological choices made here should produce conservative estimates of faculty resources available for educating and mentoring political science students and scholars at a given higher education institution.

Credit Hours/Courses Required

Of all our variables, these were the most objective data we collected. Simply, we looked at the major or concentration requirements needed to earn a generic political science baccalaureate degree (BA or BS). We ignored specialized majors, concentrations, or programs, and instead determined what departments regarded as the minimum amount of work needed for someone ideally exposed to all facets of political science (as opposed to a student concentrating in, for example, international relations, American politics, public policy, and so on).

Remarkably, this data turned out to be less commensurable than anticipated. The authors separately assumed focusing on credit hours or courses would present a comparable measure, but were quickly disabused of that notion. Dell's "a credit is a credit" and Nakazato's "a course is a course" assumptions fell quickly when faced with comparing Willamette University's 10 credit (one credit per course) major with MIT's 132 credit hour (11 course) major, or Sarah Lawrence College's three course (each ten credits) major with Drexel University's approximately 19-21

course (70 credits) major.¹³ Nonetheless, we initially coded our datasets with the figures the departments used themselves, and tried to indicate, where possible, course or credit hour equivalents to give some comparable sense to the various ways of counting requirements.¹⁴ The figures themselves are not significant, apart from seeing how departments have solved the problems of sequencing and subfields, and how they placed “research methods” in this mix.

Research Methods (Y/YR/YRT/N)

Here, we were very liberal in accepting courses as counting for “research methods.” Courses in formal modeling (e.g., rational choice) or statistics counted, as did senior thesis-preparation seminars, as well as those explicitly designated as “research” oriented. But courses that hinted at elements of research were accepted as well. Included here, for example, were imaginative courses like Marquette University’s “The Logic of Social Inquiry: The Kennedy Assassination,” or Skidmore College’s subfield-specific “American Political Research.” What counted was the opportunity for undergraduate students to learn some of the methods that political scientists employ in their scholarly capacity. Notably, not all these courses were offered on a regular basis. For those departments that provided course listings over several years, we examined the frequency of offerings, although this did not make a huge difference in how we tabulated the department (at most, a parenthetical remark in our dataset). In short, we gave departments the benefit of doubt throughout this process, in whether they provided some form of instruction in research methods. Our willingness to accept a wide variety of courses as providing some form

¹³ Moreover, a number of the liberal arts schools had unorthodox or no traditional majors structure—laudable enough, in creating well-rounded students, and simultaneously exposing (by ignoring) the prickly nature of academe and its desire for clearly defined demarcations. Our project is built on the assumption that we, as political scientists, want to replicate our own kind, something these schools explicitly reject out of hand.

¹⁴ For departments that used courses as a measure for degree requirements, we converted these with a generic “three credits per course” equivalence to derive credit hours.

of research methods also stems from our belief that there is no one particular “scientific” way to study politics, or that the desire for methodological rigor necessarily forecloses alternative ways of analyzing an issue.¹⁵

We examined the curricula of our departments and indicated the availability of “research methods” courses with four codes:

Y (“yes”) – this indicates at least *one* course in research methods is available, in principle, and that students may take it but are not obliged to do so. In some cases, the course may be offered through another department (e.g., mathematics, economics, sociology, psychology, etc.), but is explicitly listed under the acceptable courses for completing a political science major or concentration. Some departments observed the acquisition of languages was a valuable skill in research, and even gave major or concentration credit for these, but given that languages are more than instrumental means to scholarly ends, and that the methodical acquisition of a language is not equivalent to learning the methods of research in the social sciences, we did not regard these as fulfilling our otherwise broad acceptance of “research” oriented courses.

YR (“yes, required”) – this indicates that at least one course in research methods is required for all political science majors, whether writing a thesis or not. As above, in some cases, the required course may be fulfilled through another department, and again, with the exception of languages (when these were required).

YRT (“yes, required for thesis”) – this indicates that a research methods course is required for the thesis. It implies that not all majors need to take it. It may or may not be possible for non-thesis writers to take this course. In such circumstances, a *Y/YRT* designation would mean

¹⁵ We thus agree with calls for greater acceptance of multiple methodologies. See, for example, Rudolph, "In Defense of Diverse Forms of Knowledge," and Smiley, "A Plea for Academic Pluralism (and a Little More Intellectual Humility).

that a research methods course is available, but those writing a thesis *must* take that course or a separate seminar course for theses.

N (“no”) – this indicates that no course is available, as far as we can tell, that fits our rather wide umbrella of “research methods.” Departments with an “N” here, but also offering a thesis, usually provide one-on-one instruction between the adviser and advisee, where presumably some discussion of the necessary skills and methods are discussed, such that the student can complete the thesis. In reviewing the programs included in this study, it was evident that preparation of this nature will often happen during a “pre-thesis” semester, in which students work with faculty members in developing a proposal for the subsequent thesis semester (as is the case at Boston College and Guilford College). Nonetheless, we have tabulated these with an “N.”

Thesis (Y/YR/N)

If we were fairly liberal in accepting courses for “research methods,” we were more stringent in defining departmental curricula as including a thesis. Obviously acceptable were curricula that explicitly expected or provided opportunities for “senior theses” or “honors theses.” Somewhat marginal but accepted on a case-by-case basis were programs that offered “independent major research papers” that were, in our judgment, essentially senior theses in fact if not name. Not accepted, however, were generic “independent readings and research” courses and related student-initiated studies with little or no description of what they entailed. Also generally not accepted were “intensive writing” requirements, topic-specific senior seminars, and capstone courses, whether with a research component or not. This stems from our belief that senior theses ideally encompass more than reading, synthesizing, and writing about important works (as is common in “independent reading” courses); that they require greater independence in finding

and analyzing relevant literature outside a classroom setting (as might be found in a capstone course with an established set of readings); and otherwise involve formulating hypotheses or creating extended arguments in a manner consistent with generally accepted academic practice. In the absence of such explicit descriptions, we assumed the possibility of doing less precluded describing such options as thesis equivalents. Again, as with estimating faculty resources, the bias here excludes borderline cases in which clear evidence of a thesis was not evident.

As before, we examined the curricula of our departments and indicated the availability of theses with three codes:

Y (“yes”) – this indicates that the opportunity to write a senior thesis exists, but that students are not obligated to so do. It includes “honors theses,” whether provided by the department or in conjunction with an external honors program (which obviously restricts such opportunities to a smaller set of seniors than the maximally possible number). We were not concerned with how, when, or by whom “honors” designations were made—the “Y” simply indicates the opportunity exists, not that any and all students may take advantage of it.

YR (“yes, required”) – this indicates that a senior thesis is required for completing major or concentration requirements. It does not include curricula where some major senior project is required, but alternatives to a thesis exist (these cases were coded as “Y”—the thesis is not required, technically speaking, if someone can do something instead). The “YR” code required departments to state explicitly that a “senior thesis” (or equivalent phrasing of a project involving independent major research and writing) was expected of *all* their majors or concentrators.

N (“no”) – this indicates that no department-instituted opportunity exists, as far as we can tell, for an undergraduate to initiate, conduct, and complete research that could be reasonably described as a thesis. While a self-motivated undergraduate might be able to undertake such an

enterprise on his or her own initiative, it would necessarily be on an *ad hoc* basis, and thereby not equivalent to a department-recognized process and opportunity.

Methods Sequencing (E/M/PT)

One of the key variables that we wished to capture in collecting data for this study was the timing of the research methods course in a curriculum of study. Presumably, the positioning of this course within the curriculum could reveal a good deal about the purpose of the course in establishing, supporting, complimenting or culminating the political science major. In collecting this data set, it was necessary to establish a clear sequence for the curriculum of a given program. While some programs established clear rules for when a methods course, if required, was to be taken (e.g. “must be completed by the end of sophomore year”), often programs would simply have much more general advice for when a major should complete the course (e.g. students are “strongly encouraged” to complete methods before their senior project). The differing levels of direction and stringency of the rules from one program to the next presented simply too unreliable a source of information to be reliable. Wherever possible, the primary determinant for the data set was the course number itself, but in cases where the course number had little or no apparent correlation to the sequencing of the curriculum, we used our best judgment.

Three codes were possible for establishing the methods sequencing.

E (“early”) –this indicates that the methods course either possessed a course number that placed it within the first quarter of the curriculum (e.g. a 100-level course, where the senior seminar is a 400-level course) and/or there was an explicit rule on the departmental webpage requiring the course to be completed within the sequence of introductory courses.

M (“middle”) –this indicates that the methods course either possessed a course number that placed it within the middle two quarters of the curriculum (e.g. 200- or 300-level course, where the senior seminar is a 400-level course) and/or there was an explicit rule on the departmental webpage requiring the course to be completed after the introductory courses, but no indication that this was to be sequenced with the senior seminar or capstone course.

PT (“pre-thesis”) –this indicates that the methods course either possessed a course number that placed it close to the final year of the curriculum. Frequently, this course would be required in the semester before a thesis would be undertaken and would presumably offer preparation for the senior thesis experience, such as developing a proper proposal that contains the necessary elements (an original question, justification, literature review, relevance, methods, etc.).

In some cases, hybrid scores (e.g. EM, MPT) were given for programs that had incomplete data on their websites, when instructions for students and advisors allowed a fair amount of interpretation and leeway, or the precise sequencing of methods in the major was unclear.

Creating Scholars (CS)

Finally, each of these three variables were set to a binomial scale in order to develop and measure the degree to which each program, as well as the national university and liberal arts college populations, could be said to produce scholars. This index attempts to measure the degree to which each program fulfills this particular method of producing political science scholars. The label of this index is, by no means, to suggest that this is the only curricular model for producing political science scholars. In fact, after collecting the data necessary for this study, we were in fact impressed with the wide variety of innovative ways in which departments across the country approached the goal of undergraduate research and scholarly growth. Instead, this

index merely measures one possible model, albeit a rather conventional one, for producing political science scholars. Table 1 lists the numeric scales used for each variable.

Table 1 Coding for Variables

	Methods requirement variable	Thesis requirement variable		Methods sequencing variable
Yes, required (YR)	1.00	1.00	Early sequencing	1.00
Yes, required only for thesis (YRT)	0.75	NA	Early/Mid sequencing	0.75
Yes, optional elective (Y)	0.50	0.50	Mid sequencing	0.50
No, not available (N)	0.00	0.00	Mid/Pre-Thesis sequencing	0.25
			Pre-Thesis sequencing	0.00

The scales for each of these variable sets produced a Creating Scholars (CS) score that could range from zero to three. Again, the assigning of the numeric values here represents, to some degree, a preference on the part of the authors to measure programs against a conventional curriculum in which students are required to complete a methods course (preferably early in the program) as well as a senior thesis. Such a program would produce a score of three, based on scoring one for each of the variables (methods, thesis and methods sequencing).

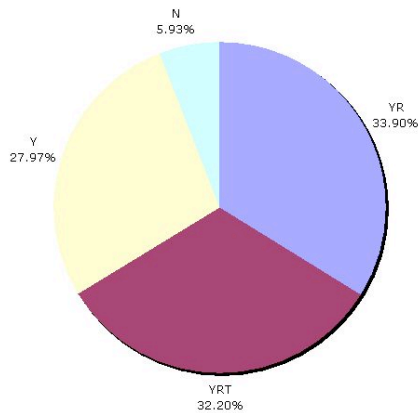
Results

As discussed earlier, the data set for this study was taken from the 236 national universities and liberal arts colleges listed in the 2007 version of “America’s Best Colleges” produced by *U.S. News & World Report*. This report lists 126 institutions in the top ranking of national universities and 110 institutions in the top ranking of liberal arts colleges. Twelve institutions (six from each cohort) were excluded from this study for one or more of the following reasons: a

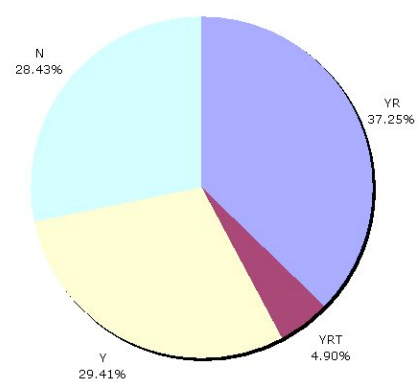
lack of a traditional majors and disciplinary departments reflecting larger curricular choices at particular institutions (e.g. Thomas Aquinas College, Bennington College, Hampshire College), lack of a separate political science major available for undergraduates (Virginia Military Institute, SUNY College of Environmental Science and Forestry), or there simply was no information available on the political science program on the Internet. From this population of 224 departments, two larger trends among the two cohorts are worth noting here. First, as expected, the average number of tenure-track faculty in political science departments is much higher among the national universities (24.90) than within the liberal arts college group (9.04). Second, the number of equivalent credit hours required to complete a degree in political science is higher on average at national universities (35.6) than at liberal arts colleges (30.2), but this difference is much less dramatic given the faculty numbers involved.

1. *Methods requirements are more common in national university programs.* The likelihood that methods will be required is much higher among the national universities in this study than the liberal arts colleges included here. Using the scale developed for this purpose and described above, the national university cohort averaged a 0.70 score while the liberal arts colleges averaged 0.56. These scores are largely a result of high numbers of political science programs at national universities requiring methods courses in their curriculums, while liberal arts college are less likely to do this. Over 65% of programs at national universities require methods for all students (YR) or require it for those undertaking a thesis (YRT), almost 57% of liberal arts college programs either have an optional methods course (Y) or no methods course available (N).

**Chart 1
Methods Taught at National University Programs**



**Chart 2
Methods Taught at Liberal Arts**



It is significant to note the effect of schools not offering any methods course for their students on both cohorts in this study (N). While liberal arts programs are less likely to teach methods, the single largest grouping of liberal arts colleges requires a methods course (YR) and represent 36.5% of programs examined. The scoring for the cohort is skewed, however, by the fact that 36 programs (34.6%) gave no indications that methods courses were offered to their majors (N). This compares starkly with the fact that only 9 (7.5%) programs at national universities were without a methods option. A final notable finding here was that four programs (1.79% of both cohorts) actually require *two* methods courses in the major requirements: Carleton College, Drexel University, Massachusetts Institute of Technology, and University of Richmond.

2. *Methods courses at national universities are more likely to be taught later in a sequence of classes than at liberal arts colleges.* Using the scale developed and described earlier, the national universities program on average teach methods courses slightly after the midpoint of their programs (0.40), while liberal arts college programs on average were more likely to teach their methods courses earlier in the sequenced courses (0.67). The biggest difference in comparing the cohorts here could be found in the number of methods courses that were taught

early (E) in a sequenced major: only five programs at national universities (4.17%) did this, while 36 programs at liberal arts colleges (34.62%) had such a sequence. The number of programs that taught a methods course just before a thesis (PT) were similarly small (14.17% for national university programs, 13.46% for liberal arts programs). While we have no evidence of causes behind such a different timing of the methods courses between national university and liberal arts programs, we can suggest a number of possible factors to consider.

First, smaller programs at liberal arts colleges may teach methods earlier in the program sequence of courses because smaller faculties may be more likely to realize the benefits from teaching students methods earlier in the program. In other words, in a smaller program it is more likely that faculty will be able to take advantage of a student's knowledge and skills related to an earlier methods course than in larger programs where it is less likely that any one professor will have any one student in an upper-level course. A second and related influence on these results may be that smaller numbers of faculty in liberal arts programs are more likely to agree on the content and purpose of a methods course in relation to both their particular subfield and the major program in general than the larger numbers of faculty at national universities. Such agreement and consensus on the purpose, content and approach to teaching a methods course at liberal arts institutions would allow such a course to be more generalized in nature and approach and thus more easily fit with fundamental or introductory courses in the major program. Finally, it would also be worth additional research to establish whether smaller faculties at liberal arts college have a single professor responsible for teaching a methods course. Instead, given smaller faculty numbers, liberal arts programs may rotate the responsibility of teaching methods among faculty, thus making it more likely to be more generalized and fundamental in nature and

approach and less likely to be a highly specialized skill of a faculty member well-trained in methodologically sophisticated research.

3. *Senior theses are more likely to be required by liberal arts programs.* Our findings related to the availability, requirements and timing of a methods course contrast with findings related to the availability and requirements of a senior thesis by political science programs at the nations top universities and liberal arts colleges. Only 7 programs (5.83%) at the ranked national universities included in this study require a senior thesis by undergraduate majors. This compares sharply with the 19 programs (18.27%) at liberal arts colleges that require a senior thesis. Although large differences between the cohorts exist at this level (YR = yes, required thesis), when additional schools that have a thesis option available to students is included (Y = yes, thesis optional), the differences tend to disappear. 76.67% of programs at national universities and 72.12% of programs at liberal arts colleges either require a thesis (YR) or have one that is optional but available for the motivated and capable student (Y). The comparison between the two cohorts on this point, however, is complicated by the degree to which these optional thesis elements (Y) are limited to honors students. A thesis is much more likely to be restricted to honors students at national university programs (42%) than at liberal arts college programs (9%). Finally, similar numbers of programs in both the national (25) and liberal arts (27) categories provide no indication that a thesis program is available (N).

Chart 3
Senior Thesis at National University Programs

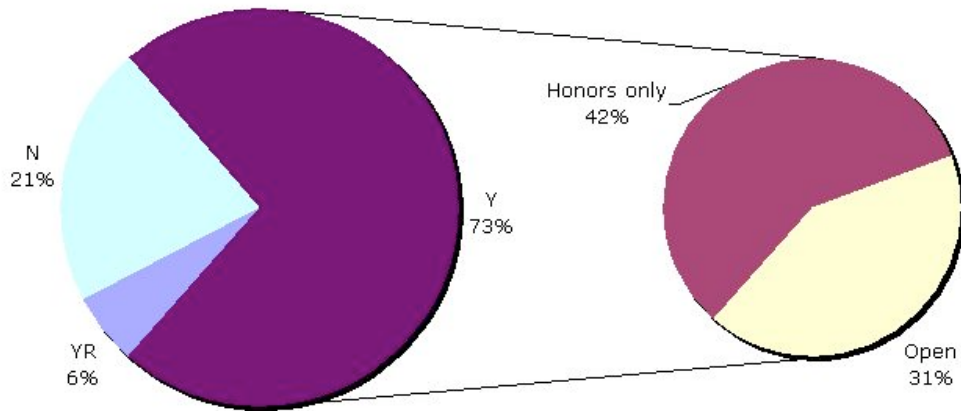
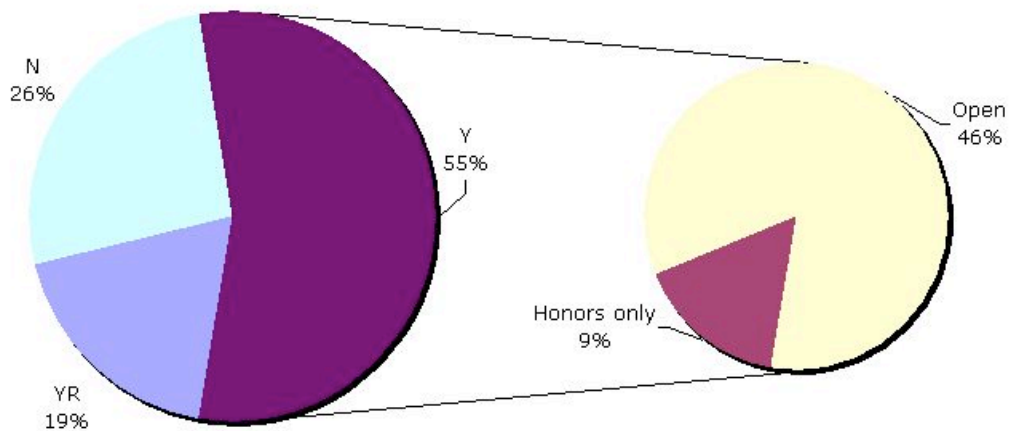


Chart 4
Senior Thesis at Liberal Arts Programs



While the results for this analysis were predicted, we believe they are also related to the findings related to methods courses above. Given the larger size of political science programs at national universities, and the anticipated larger student-to-faculty ratio when compared to programs at liberal arts colleges,¹⁶ it is not surprising that programs at national universities would be less

¹⁶ Although the institutional average student-to-faculty ratio could have been included as an independent variable in this study, the authors concluded this would not likely capture the likely ratio within the political science programs examined here given the large variations of this ratio between given departments and programs at universities and colleges.

likely to require a senior thesis from every undergraduate major. A senior thesis properly and successfully done requires huge amounts of work and time, sometimes from multiple faculty members within a program. This workload, even for larger faculties at programs in national universities, would neither be possible in some instances, nor likely to be recognized as an effective use of resources and time by faculty given higher research and publications expectations. The commitment, at least as an available option, by over seventy-percent of programs at national universities to providing a senior thesis experience for their undergraduate majors is indicative that the push for synthesizing faculty and undergraduate research at national universities may have produced results. To be sure, it is worth noting, however, the degree to which an optional thesis is available only to honors students at national university programs. Future analysis of the historical trends in numbers of senior theses from these programs would illuminate the degree to which this optional thesis is successfully completed, in fact.

4. *Programs at national universities and liberal arts colleges create scholars differently.*

Given the results above, what is the overall results for how national universities and liberal arts programs create political science scholars? We combined all three scales described above into a larger and comprehensive third variable reflecting the degree to which a program created scholars (CS). We readily acknowledge that future political scientists may emerge from a wide variety of curricular designs. Further, we also acknowledge that not every curricular design may be best suited for every undergraduate major. However, by adding together the scores a program received on the methods, methods timing, and thesis scales, we seek to capture the degree to which a program reflects the conventional sequencing of curriculum that includes both a required methods course (early in the sequencing) and a senior thesis. Programs that score highest on this

scale would receive a 3.0 (one point each from the three variables included above); programs that score the lowest would receive a score of zero (no thesis or methods course even available).

Interestingly, the national university and liberal arts cohorts had very similar scores on the CS scale. The national university grouping earned a 1.5, largely reflecting the greater reliance on training in methods by these programs. The liberal arts grouping earned a 1.46, largely reflecting the large numbers of programs that require a thesis from all undergraduate majors.

5. *Faculty numbers, institutional rank, and credit hours in the program do not affect the creation of scholars.* We found that there was little or no effect of faculty numbers, institutional rank, or the number of credit hours required for the major on the score the program earned in creating scholars (CS). Faculty embrace the responsibility of creating scholars through a conventionally designed major regardless of the number of faculty in a department, the institution's rank within the top programs studied here, or the number of overall credit hours that the undergraduate major is required to complete.

Of the programs that require methods (YR) at national universities, there are 22.71 faculty members on average. This result is actually two faculty positions *fewer* than the average for the entire national university cohort (24.91). Similarly, programs at liberal arts colleges that require methods (YR) have *fewer* faculty members than the average for the cohort (7.37 versus 9.04). National university programs that require a thesis, although small in number, have approximately the same number of faculty as the overall cohort (25.86 versus 24.91). Programs in liberal arts colleges that require a thesis actually have *fewer* average faculty (8.05) compared to all other liberal arts programs (9.04).

We readily acknowledge the effect that graduate students, part-time instructors, and visiting professors could have on the findings for both cohorts. The degree to which individuals in these

groups could be helping programs teach methods courses is a compelling hypothesis and worthy of additional research, although accurate and longitudinal data may be difficult to obtain given the reluctance of programs to acknowledge a reliance on these non-tenure track instructors and graduate students. We are somewhat emboldened in this finding, however, given the degree to which this result also correlates with the results related to a required senior thesis. While we allow for the high likelihood that non-tenure track individuals, particularly at larger national universities could and do teach courses in methods, we are less convinced that these same individuals are advising undergraduates in developing, executing and successfully completing a resource-intensive, lengthy project like a senior thesis.

An institution’s rank in the *U.S. News & World Report* system similarly has little or no effect on the ability of programs to be using the conventional curricular tools to produce scholars. As detailed in Table 2 below, the differences between programs at the top 50 national universities and top 50 liberal arts colleges and their respect cohorts is detailed below.

Table 2 Effect of Rank on Program Curricula

	National Universities		Liberal Arts Colleges	
	Top ranked programs (50)	Total cohort (120)	Top ranked programs (50)	Total cohort (104)
Methods	.80	.70	.53	.56
Senior thesis	.54	.40	.47	.46
Creating scholars (CS)	1.70	1.70	1.31	1.46

The number of credit hours required to complete a political science major also had little effect on likelihood that programs would include or require the conventional curricular tools to produce scholars. As described in Table 3, the differences between the forty programs requiring the most credit hours and the respective cohorts are mostly not significant.

Table 3 Effect of Credit Hours on Program Curricula

	National Universities		Liberal Arts Colleges	
	Programs requiring most credit hours (40)	Total cohort (120)	Programs requiring most credit hours (40)	Total cohort (104)
Methods	.72	.70	.64	.56
Senior thesis	.40	.40	.49	.46
Creating scholars (CS)	1.40	1.50	1.64	1.46

Discussion

From the beginning, we did not expect our dataset to produce particularly striking correlations or conclusions (for example, that large research universities would do better than small liberal arts colleges); rather, we were simply seeking to find out how schools managed to deal with creating political science scholars. While large universities would presumably have larger faculties (indeed, this is quite evident), they also have more undergraduates as well as graduate students, likely offsetting certain advantages (e.g., better course selection, more faculty) and creating other disadvantages (e.g., advising loads).

Nonetheless, while we do not advocate a particular curriculum as the best for all political science departments to follow (we accept and agree with the contention that every institution has particular needs and circumstances),¹⁷ there are several propositions we put forward here as ideal ways to transform undergraduate majors into undergraduate scholars.

First, all other things being equal, more courses in a political science major are better than less. While our data suggest that there is no connection between credit hours and the likelihood that research courses or theses would be available, many of the honors programs (whether

¹⁷ Wahlke, "Liberal Learning and the Political Science Major," 49.

departmental or external) that offered these also added extra courses, such that students could complete a thesis on top of their required courses. In comparing political science to other social sciences like economics, or even sociology, it is readily apparent that political science is considerably more fragmented in its structure of courses and their presentation. The economics undergraduate education, in particular, is highly standardized across the nation and hews to the sequential learning recommended by the 1985 AAC report, with most schools providing introductory courses in micro- and macro-economics, more complex courses in intermediate micro- and macro-economics, along with one or two courses in econometrics, statistics, or game theory, and then whatever upper-level electives a student might desire.¹⁸ It appears that adding a capstone or thesis program to an economics major, although not without problems, can be done relatively easily.¹⁹ Journal articles in *Teaching Sociology* likewise suggest that while curricular issues exist, adding a capstone course or a senior thesis was more a matter of rethinking the sequencing of the curriculum²⁰ to match the suggested four-level sequence of courses the American Sociological Association (ASA) provided in a 1990 report,²¹ such that the process of sequential learning could culminate in an integrated, “coherent and mature conception of sociology as an approach to inquiry and to life.”²²

In contrast, our brief survey of the selected curricula suggests many departments provide either a broad introduction to the discipline, or require three or four introductory courses in each

¹⁸ See John J. Siegfried and James T. Wilkinson, "The Economics Curriculum in the U.S.: 1980," *American Economic Review* 72, no. 2 (1982).

¹⁹ See Donald Elliot, John Meisel, and Warren Richards, "The Senior Project: Using the Literature of Distinguished Economists," *Journal of Economic Education* 29, no. 4 (1998), John J. Siegfried, "Principles for a Successful Undergraduate Economics Program," *Journal of Economic Education* 32, no. 2 (2001).

²⁰ James Dickenson, "The Senior Seminar at Rider College," *Teaching Sociology* 21, no. 3 (1993): 215, Thomas J. Schmid, "Bringing Sociology to Life: The Other Capstone Mandate," *Teaching Sociology* 21, no. 3 (1993): 220, James L. Steele, "The Laden Cart: The Senior Capstone Course," *Teaching Sociology* 21, no. 3 (1993): 243.

²¹ See Paul Eberts et al., "Liberal Learning and the Sociology Major," (Washington, D.C.: American Sociological Association, 1990), 15-17.

²² *Ibid.*, 16.

of the subfields, after which students take further, advanced courses. One problem is that the division of our discipline into distinct subfields emphasizes their differences, making it difficult to devise a sequential process of introductory-to-intermediate courses that covers the discipline as a whole. For many departments, the solution is to apply the introductory-to-intermediate sequence for each subfield, or to have students focus on one subfield after completing minimal requirements in the other subfields, as a way to develop one area of expertise.²³ Considering the ten-to-twelve courses that represents the typical major, adding research method requirements diminishes the number of elective courses a student might take, further diluting any advanced development in the subject. In particular, given the APSA 1991 “Liberal Learning and the Political Science Major” report’s recommendation that “every political major [should] gain familiarity with the different assumptions, methods, and analytical approaches used by political scientists and by cognate disciplines,” and that “attention should be given to this in subject matter courses, as well as in ‘scope and method,’ ‘analysis’ or ‘political inquiry’ courses (if any),”²⁴ the more courses in which these methodological aspects can be discussed in a sophisticated manner, the better.

Second, all other things being equal, teaching research methods earlier in the curriculum is better than later. Related to the APSA recommendation above is the notion that students should understand the discipline is also a social science, and that the “facts” we teach have often been hypothesized, tested, and confirmed (not always conclusively, of course). All undergraduates should thus have some acquaintance with the use of scientific procedures, whether they go on to write a senior research project or not.²⁵ The recognition that “facts” are obtained through systematic procedures is important, even to students who choose non-academic professions after

²³ Our survey thus matches the findings of Wahlke, “Liberal Learning and the Political Science Major,” 51.

²⁴ *Ibid.*: 51-52.

²⁵ *Ibid.*: 114-15. Kim Hill enumerates seven objectives central to a science-grounded education in political science.

graduation, especially if they maintain some connection to politics. Given how students (and the general public) may regard findings or policy recommendations as “agenda-driven,” an appreciation of how these results were established through ostensibly replicable investigations further emphasizes the *science* while simultaneously minimizing the *politics* that may have spurred the original research. As a number of scholars have urged, it is crucial to emphasize political science research is a worthwhile venture with important “real world” implications and consequences.²⁶

Third, because there is a difference between the theory and method of scientific research and the scholarly presentation of research, the latter can likely wait until upper-level courses or be reserved for those students writing senior theses. This also implies that “research methods” should be split, with an early exposure to the general procedures of inquiry (initial conception of a puzzle, hypothesis, measurement, empirical confirmation or disconfirmation, deduction, etc.), and a subsequent explanation of the purpose and content of introductions, literature reviews, and research design.²⁷ Subfield-specific puzzles can be discussed in subject-matter courses through the lens of scientific research; in learning “facts,” students can also learn how and why these puzzles arose, the manner in which scholars posed their hypotheses and sought data, and the resulting conclusions.²⁸ As Kim Hill observes, “reinforcement, elaboration, and applications in multiple contexts are widely considered critical to a successful educational program.”²⁹ Along

²⁶ See, for example, Arthur Lupia, "Evaluating Political Science Research: Information for Buyers and Sellers," *PS: Political Science and Politics* 33, no. 1 (2000).

²⁷ In fact, elements of this latter aspect of research can be taught throughout the curriculum; see Pamela A. Zeiser, "Teaching Process and Product: Crafting and Responding to Student Writing Assignments," *PS: Political Science and Politics* 32, no. 3 (1999), Clifford Bob, "A Question and an Argument: Enhancing Student Writing through Guided Research Assignments," *PS: Political Science and Politics* 34, no. 3 (2001).

²⁸ See, for example, D. Scott Bennett, "Teaching the Scientific Study of International Relations to Undergraduates," *PS: Political Science and Politics* 35, no. 1 (2002).

²⁹ Hill, "The Lamentable State of Science Education in Political Science," 115.

with a general understanding of what scientific knowledge is (and its limitations), students should be urged to take “qualitative” or “quantitative” courses (where offered).

This research initially arose from the particular circumstances of the authors’ respective departments or programs, and a desire to learn how other schools tackled the problem of providing courses in research methods and dealing with senior theses. Both Guilford College’s Department of Political Science (5/32 [8]/N/Y/na/CS 0.5)³⁰ and Boston College’s relatively new International Studies (IS) Program (23³¹/42 [14], 48 [16] with thesis/Y/Y/MPT/CS 1.0) are essentially liberal arts programs. We turn to a brief discussion of these two.

Guilford College’s eight-course major (with four required introductory courses in each subfield, and no methodology courses available) means aspiring students who wish to write theses must also take the initiative to learn, by themselves, the suitable methods for tackling their topics, but under the close supervision of their adviser. Hence, the “more courses are better” dictum definitely applies here—this is, in fact, a proposal currently under consideration, with a specific methodology course being added. However, even now, prior agreement by the faculty to integrate collectively the ideas and methods of research in their subject-matter courses can help the transition from political science majors to political science scholars, by introducing earlier the necessary ideas of research that would be needed later to complete a senior thesis.

Boston College’s IS program, on the other hand, requires a minimum of seven core courses, six more in a specialty (either Economics, Political Science, or “History, Culture, and

³⁰ Guilford College was not included in our data set—the figures here are for comparison.

³¹ The International Studies program is an interdisciplinary major (and minor—no graduate program exists), drawing its faculty from nearly all academic departments in the College of Arts and Sciences. While 23 associated faculty are mentioned on the website, all but one (Nakazato) have their own home departments. The IS Program, with its specific curriculum of courses, replaced the College of Arts and Science Independent Major in International Studies six years ago.

As noted earlier, the relevant curriculum examined in this paper is from the Department of Political Science (23/30cr [10]/Y/Y/M)—honors students in Political Science take 2 extra seminar courses, but do not necessarily write a thesis. Political Science majors in the A&S Honors Program usually write theses.

Society”), and a senior seminar. Students who wish to be IS majors must apply in the first semester of their sophomore year, and begin the program in the second semester (some of these courses can be taken while non-IS majors). Students who wish to write a thesis can, with careful planning, take suitable methodology courses in the middle of their programs (M), but given the large number of IS majors who go abroad for one or both semesters in their junior year, many do not or cannot take such courses. Moreover, the multiple tracks and selection of acceptable courses from various departments further impede any sequential learning in a specific discipline, as well as any consistent exposure to scientific methods of research.

Like Guilford College, the faculty response has been to provide individual attention to thesis writers, but because many also supervise thesis writers in their “home” departments, IS majors must get faculty to accept them even earlier, with fleshed-out proposals to help convince faculty that they can undertake independent research—something these majors often have little or no experience with, or even exposure to, in their earlier coursework. One recent solution has been to provide a seminar for IS majors in the first semester of their senior year (hence also PT). It is not required, though; in fact, it would be impossible to accommodate all the thesis writers in the IS program in one seminar, and at present, manpower requirements preclude extra sections.

The seminar has been taught in different ways over the past few years. Initially, it was a highly theoretical examination of the underlying epistemological concerns of research, but it failed to address adequately the more basic and mundane elements of academic presentation: as many students observed, they didn’t care about causation, they wanted to know what a thesis “looked like.” Another attempt went the other way: discussing the formulation of a topic question, finding suitable hypotheses to test, searching relevant sources to create a literature review and body of data to apply, and so forth, ending mid-way through the semester to give

students time to work on their projects and present these at the end. As an exercise in moving through the steps of research, the course worked, but it was administratively unwieldy and pedagogically flawed; with fifteen separate projects to discuss, it was difficult to connect the underlying themes. More recently, an attempt to integrate these two extremes has been made, by introducing a common set of readings students might find illuminating as a foundation. As the beginning of the paper noted, these types of courses cannot do one task or the other very well, and introduce important ideas quite late in an undergraduate education.

However, the International Studies Program can nonetheless adopt some of the prescriptions we have mentioned above. Students who only spend one semester abroad in their junior year should take a methods course (the program accepts methods courses provided through several academic departments), while core course instructors, where practical and relevant (not all core courses are from the social sciences; for example, one required course is in the Theology department), can adopt practices to emphasize the social scientific study of international relations.

Somewhat gratifying (and awe-inspiring) to learn, our research reveals it is possible to require methodology courses as well as senior theses, even with limited faculty numbers and fewer courses than one might expect. Even a lesser goal, a required course in methods with an optional thesis, can be implemented with departmental coordination. While not all departments can do these, it is nonetheless evident that carefully designed curricula and individual subject-matter courses can meet two separate but related demands: undergraduates wanting to know about politics, and instructors wanting to present their discipline as a social science. A synthesis is thus possible, and research methods need not be presented as something unrelated to *politics*,

when we emphasize to our students throughout their undergraduate education that the systematic acquisition of knowledge is the process of political *science*.

References

- Bennett, Andrew, Aharon Barth, and Kenneth R. Rutherford. "Do We Preach What We Practice? A Survey of Methods in Political Science Journals and Curricula." *PS: Political Science and Politics* 36, no. 3 (2003): 373-78.
- Bennett, D. Scott. "Teaching the Scientific Study of International Relations to Undergraduates." *PS: Political Science and Politics* 35, no. 1 (2002): 127-31.
- Bennett, Douglas C. "Political Science within the Liberal Arts: Towards Renewal of Our Commitment." *PS: Political Science and Politics* 24, no. 2 (1991): 201-04.
- Bob, Clifford. "A Question and an Argument: Enhancing Student Writing through Guided Research Assignments." *PS: Political Science and Politics* 34, no. 3 (2001): 653-55.
- Dickenson, James. "The Senior Seminar at Rider College." *Teaching Sociology* 21, no. 3 (1993): 215-18.
- Eberts, Paul, Carla B. Howery Howery, Catherine White Berheide, Kathleen Crittenden, Robert Davis, Zelda Gamson, and Theodore C. Wagenaar. "Liberal Learning and the Sociology Major." Washington, D.C.: American Sociological Association, 1990.
- Elliot, Donald, John Meisel, and Warren Richards. "The Senior Project: Using the Literature of Distinguished Economists." *Journal of Economic Education* 29, no. 4 (1998): 312-20.
- Hardin, Russell. "Whither Political Science?" *PS: Political Science and Politics* 35, no. 2 (2002): 183-86.
- Hill, Kim Quaile. "The Lamentable State of Science Education in Political Science." *PS: Political Science and Politics* 35, no. 1 (2002): 113-16.
- Hunter, Susan, and Jr. Brisbin, Richard A. "Civic Education and Political Science: A Survey of Practices." *PS: Political Science and Politics* 36, no. 4 (2003): 759-63.
- Ishiyama, John, and Stephen Hartlaub. "Sequential or Flexible? The Impact of Differently Structured Political Science Majors on the Development of Student Reasoning." *PS: Political Science and Politics* 36, no. 1 (2003): 83-86.
- Jervis, Robert. "Politics, Political Science, and Specialization." *PS: Political Science and Politics* 35, no. 2 (2002): 187-89.
- Kaufman-Osborn, Timothy V. "From the Science to the Art of Politics." *PS: Political Science and Politics* 24, no. 2 (1991): 204-05.
- Lupia, Arthur. "Evaluating Political Science Research: Information for Buyers and Sellers." *PS: Political Science and Politics* 33, no. 1 (2000): 7-13.
- Mann, Sheilah. "What the Survey of American College Freshmen Tells Us About Their Interest in Politics and Political Science." *PS: Political Science and Politics* 32, no. 2 (1999): 263-68.
- McCormick, John. "Political Science and Political Philosophy: Return to the Classics—No, Not Those!" *PS: Political Science and Politics* 33, no. 2 (2000): 195-97.
- Monroe, Kristen Renwick. "Shaking Things Up? Thoughts About the Future of Political Science: An Introduction." *PS: Political Science and Politics* 35, no. 2 (2002): 181-82.
- Ostrom, Elinor. "Some Thoughts About Shaking Things Up: Future Directions in Political Science." *PS: Political Science and Politics* 35, no. 2 (2002): 191-92.
- Rudolph, Susanne Hoerber. "In Defense of Diverse Forms of Knowledge." *PS: Political Science and Politics* 35, no. 2 (2002): 193-95.
- Schmid, Thomas J. "Bringing Sociology to Life: The Other Capstone Mandate." *Teaching Sociology* 21, no. 3 (1993): 219-22.

- Schwartz-Shea, Peregrine. "Is This the Curriculum We Want? Doctoral Requirements and Offerings in Methods and Methodology." *PS: Political Science and Politics* 36, no. 3 (2003): 379-86.
- Siegfried, John J. "Principles for a Successful Undergraduate Economics Program." *Journal of Economic Education* 32, no. 2 (2001): 169-77.
- Siegfried, John J., and James T. Wilkinson. "The Economics Curriculum in the U.S.: 1980." *American Economic Review* 72, no. 2 (1982): 125-38.
- Smiley, Marion. "A Plea for Academic Pluralism (and a Little More Intellectual Humility)." *PS: Political Science and Politics* 35, no. 2 (2002): 197-98.
- Smith, Rogers M. "Should We Make Political Science More of a Science or More About Politics?" *PS: Political Science and Politics* 35, no. 2 (2002): 199-201.
- Smith, Steven B. "Political Science and Political Philosophy: An Uneasy Relation." *PS: Political Science and Politics* 33, no. 2 (2000): 189-91.
- Steele, James L. "The Laden Cart: The Senior Capstone Course." *Teaching Sociology* 21, no. 3 (1993): 242-45.
- Wahlke, John C. "Liberal Learning and the Political Science Major: A Report to the Profession." *PS: Political Science and Politics* 24, no. 1 (1991): 48-60.
- Zeiser, Pamela A. "Teaching Process and Product: Crafting and Responding to Student Writing Assignments." *PS: Political Science and Politics* 32, no. 3 (1999): 593-95.