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Are We Teaching them Anything?: A Model for Measuring Methodology Skills in the Political Science Major

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Are We Teaching Them Anything?: A Model for Measuring Methodology Skills in the Political Science Major

**CHRISTI SIVER, SETH W. GREENFEST, AND
G. CLAIRE HAEG**

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Are We Teaching Them Anything?: A Model for Measuring Methodology Skills in the Political Science Major

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G. CLAIRE HAEG

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College of St. Benedict and St. John's University

While the literature emphasizes the importance of teaching political science students methods skills, there currently exists little guidance for how to assess student learning over the course of their time in the major. To address this gap, we develop a model set of assessment tools that may be adopted and adapted by political science departments to evaluate the effect of their own methods instruction. The model includes a syllabi analysis, evaluation of capstone (senior) papers, and a transcript analysis. We apply these assessment tools to our own department to examine whether students demonstrate a range of basic-to-advanced methodological skills. Our results support the conclusion that students at our institution are learning methodological skills, but that there is room for improvement. Additionally, the results support others' conclusions regarding the importance of an integrative approach to methods instruction. For those in the discipline seeking to understand the effect of methods instruction on student performance, this model can be easily replicated to assess student learning.

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Keywords assessment, integrative approach, research methods, rubric, pedagogy

Introduction

Those of us who have taught research methods for several years recognize the looks of bemusement as we ask our budding political science students to read a table of statistical results for the first time. Many political science students skip over the methods section when reading scholarly articles, preferring to simply accept the author's description of his or her findings. As political science professors, we understand the importance of research and being able to understand different methodological approaches. Many political science departments offer, and some require, a methods course as part of the student's major (Turner and Thies 2009). Professors have piloted different techniques to better interest students in research and methodology and to communicate their long-term importance. Recent research suggests that integrating methods instruction and content may lead to greater acceptance of the importance of methods by students. However, there has been little assessment of these efforts, particularly over the span of a student's academic career. How can

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we measure whether our efforts to teach our students about methodology result in student learning?

In this article, we present a model for assessing students' methodological skills through a discussion of our efforts to develop an assessment plan to measure our students' development over the course of their time in the political science major. We begin by looking at the existing literature on teaching political science methodology. We then describe our institution's approach to teaching methods that allows us to examine whether there is a relationship between the type of methodology instruction students receive and subsequent performance on a host of indicators. While other institutions most likely do not mirror our exact approach to methods instruction, the assessment tools we have developed are common to most institutions, including analysis of syllabi, evaluation of capstone papers, and transcript analysis. To illustrate the utility of this model, we present a subset of our findings, which suggest that we are teaching students some methodological skills. The model helps us to identify areas where we are more successful and areas that need improvement. For those wishing to assess methodology instruction in their departments, our model provides a framework upon which departments could build an assessment plan.

Teaching Research Methods: An Evolving Pedagogy

Although there is a growing consensus on the importance of teaching research methods, the literature based on the pedagogy of doing so is still evolving. First, we note the increasing acknowledgement that methods are at the core of political science as a discipline and the need to communicate this to our undergraduate students. Findings show that we need to communicate this not just in an additional course to complete the major but across the curriculum.¹ Then we discuss a newer move to overcome student discomfort with methods by integrating methods with content. While there is a great deal of practical literature providing techniques for improving methods *instruction*, there has been little consistent *assessment* beyond traditional means of grading student work and students' self-reported views. There is almost no literature providing guidance on evaluating students' methods skills over the course of their academic careers. Here, we address this gap in the literature by presenting such guidance.

Based on the heated nature of the methodological debates in political science, it is clear that research methods are a core concern of the discipline. The Wahlke Report, which has become the benchmark by which to measure the teaching of political science, describes the goal of political science education: "to maximize students' capacity to analyze and interpret the significance and dynamics of political events and governmental processes" (Wahlke 1991, 49). To achieve this goal, the Wahlke Task Force recommends, "every political science major gain familiarity with the different assumptions, methods, and analytical approaches used by political scientists and by cognate disciplines" (Wahlke 1991, 51). As the Task Force notes, political science majors who learn the analytical methods used and debated in political science will be well prepared to analyze complex issues in whatever field they pursue after college. The 2014 APSA-TLC Track on Research Methods also noted that, in addition to this practical importance, students should recognize methods skills as part of being an active and informed citizen (McGuire 2014).

However, as Thies and Hogan (2005) noted in the findings of their survey of undergraduate political science departments in 2005, not all departments require

majors to complete a methods course. They describe a peculiar disconnect in the literature between the instructors' understanding of the importance of methods training and assumptions that students have gained those skills elsewhere. Many professors of upper division courses and graduate programs focus on content and advanced methodology, assuming that students have learned basic concepts elsewhere. Thies and Hogan (2005, 296) note that "the high level of attention focused on the desirability of teaching different methods in graduate training and their presence in the discipline's journals has rarely been directed at our undergraduate programs." They found that more liberal arts and MA undergraduate programs were likely to require methods instruction than PhD-granting institutions, but the overall commitment to methods instruction still seemed uncertain.

By 2009, the trend seemed to have improved, and Turner and Thies (2009) found that over half of undergraduate political science programs required some instruction in methods. Although they note variation in the content of this instruction, they found some common components, which included the following: measurement, research design, logic of scientific reasoning, causality, sampling, and survey research (Turner and Thies 2009). Although there is little consensus on the "best" way to incorporate methods into political science curriculum, the 2009 "Teaching Research Methods" track of the APSA-TLC proposed some "best practices" that include "basic information literacy skills, sequencing, and teaching content with skill application" (Watson and Brown 2009, 586–587). While some faculty may still resist incorporation of methods instruction into their courses, the overall movement seems to be toward a greater effort to both expose students to different methodologies and to give them some opportunities to apply their skills in research.

In addition to requiring methods instruction, most advocates urge departments to integrate research methods across the curriculum. In addition to basic methods instruction at the lower level, instructors should illustrate and reiterate methods concepts in upper division courses. In the "Teaching Research Methods" track summary of the 2012 APSA Teaching and Learning Conference, the authors note that "research methods should be integrated across the Political Science curriculum, increasing student understanding of politics" (Bachner and Commins 2012, 539). Students need to see methods as an integrated part of the discipline, not a requirement that is unrelated to the content material in which they are most interested.

In addition to integrating methods across the curriculum, some faculty members have tested the integration of methods instruction within specific content-focused courses. Dickovick describes the integrative approach as "discussions of methodology cross-cutting course content wherever appropriate" (2009, 140). He tested the effect of integrative instruction by explicitly including methods instruction in a Comparative Politics course he had previously taught (without methods) and compared students' evaluations of their learning. He made methods a more explicit part of the syllabus by assigning specific readings and asking students to use methodological principles when comparing works with competing viewpoints. He noted that student evaluations of the course improved significantly and that "written comments further substantiate that the integrative approach dramatically enhanced student perceptions of the course" (Dickovick 2009, 146). Although Dickovick acknowledged that his study only focused on students' self-reported views of the course, he noted that an integrative approach could help faculty assess measureable

outcomes that could improve student performance in upper division courses and benefit the institution as a whole (Dickovick 2009).

Longer term studies that track students over the course of their progress in the major also suggest that an integrative approach is both better appreciated by students and contributes to the development of research methods skills. Olsen and Statham (2005) examine the effect of integrating methods in an introductory Comparative Politics class. Focusing on in-class essays and take-home assignments, Olsen and Statham found that performance improved over the semester and students reported perceived advancement in their skills. They also found that students who took this Comparative Politics class went on to perform better in an upper division methods course than students who did not take the class. While they admit there may be alternative explanations for this correlation, their experience does suggest that students who learn methods in the context of content may be better able to master those skills and to apply them in future courses. In a similar project in the United Kingdom, Leston-Bandeira, in her discussion of a particularly intensive model of research methods instruction, argues that “embedding the teaching of methods in the discipline of politics — is a crucial element in engaging students in the learning process” (2013, 215). After a yearlong intensive methods course, during which the students were able to construct a research design on a topic they chose, the feedback on the course was very positive. Leston-Bandeira also noted that many of these students went on to complete dissertations (capstone papers) that earned higher grades. While integrating methods instruction with content certainly requires more resources in terms of faculty time and teaching staff, it seems to result in better outcomes for students’ understanding and application of methods skills.

Any faculty member or department looking to emphasize methods instruction in the curriculum would find a wealth of suggestions and techniques. Many papers presented at the APSA Teaching and Learning Conference “Teaching Research Methods” track offer approaches and specific assignments tested in different institutions and classrooms. Many of these papers have gone on to be published in professional journals including the *Journal of Political Science Education*, *PS: Political Science and Politics*, and others. Suggestions include incorporating assignments to introduce students to information literacy skills, giving students experience with survey and statistical techniques, and integrating methods instruction with relevant content. All of these papers and articles are rich sources of possible means of better bringing methods into the undergraduate curriculum.

One omission in this literature has been assessment and comparison of different approaches to methods instruction. A particular challenge in assessing methods instruction is the difficulty of measuring some of the specific skills being developed. A few articles, including Dickovick, Olsen and Statham, and Leston-Bandeira, do assess their particular approaches in creative and meaningful ways. However, this assessment is limited because it only assesses the skills developed in a short, discrete time period, that is, a semester. Attempting to track long-term retention, Van Vechten (2012) conducted a survey of students who had taken methods courses with slight differences in focus. Although it was difficult to discern any different outcomes between the methods courses, students did report greater confidence in their methods skills and a greater respect for their importance in the discipline. Although these papers represent progress, there is still much work to be done to meaningfully assess methods instruction and to compare different approaches.

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Assessing Research Skills across the Curriculum

Understanding the development and application of methods skills from a lower level course to a senior capstone paper is a complex process. There are many variables, both inside the curriculum (differences in faculty approaches, student course selection) and outside (student interest) that can impact student learning, retention, and application of methodological skills. We have built on previous efforts to create a model for assessing the learning of these skills. This model includes understanding what our learning goals are in our methods courses, emphasizing reinforcement of methods skills in the upper division courses, and assessing students' ability to use these methods skills in their senior capstone paper. This model is generalizable to other institutions interested in assessing their methods instruction across the curriculum. Other departments may usefully employ the tools we identify in order to track their students' skill development. Furthermore, our curriculum also provides us with an opportunity to assess and compare different approaches to teaching research methods. Below, we describe the different steps we have taken in this journey that have led to our model, including a syllabi analysis of our research methods courses, the development of a rubric to assess research methods skills applied in a senior capstone paper, and a transcript analysis that better understands the interim training students receive between their methods and capstone courses.

At our institution, political science majors first take two introductory courses: Introduction to American Politics and Introduction to International Relations. We then have three required sophomore-level courses, one of which is a methods course. For this methods course, students can choose either Analysis of US Policy and Elections, Comparative Politics, or Courts, Law and Policy. Each methods course introduces students to methodology in the context of the particular subfield (ideally the subfield in which they eventually complete their seminar paper). Students then take four upper division courses that can range across the subfields. The major concludes with the Senior Seminar, in which students write a substantial research paper.

In our recent program review, we sought to assess the effectiveness of the subfield approach to methods instruction and developed the model presented here to implement that assessment. To better understand the differences between these approaches, we completed a syllabi analysis to categorize the different approaches to teaching research methods present in these courses. We examined the learning goals outlined in the syllabus, the course readings, and the major assignments.

After this analysis, we identified three categories of approaches: technique-focused, design-focused, and content-focused. A technique-focused course uses existing knowledge about the subfield to introduce students to different techniques for collecting and analyzing data. Technique-focused courses emphasize practical application of research skills and include instruction in quantitative and qualitative methods. These courses also include an introduction to statistical software and an analysis of data sets. A design-focused course centers more on the research design. These courses focus on identifying and defining concepts and how to set up research projects. They may be less ambitious in introducing students to different ways of collecting and analyzing data. Some of the limits in a design-focused course may be related to tradeoffs in favor of covering content. A content-focused course only examines methodology as a side issue, perhaps in the reading of scholarly material on content-related topics. In a content-related course, there would be no explicit discussions about research design or techniques of data collection or

analysis. At our institution, the three methods courses offer examples of these three approaches. 235

Analysis of US Policy and Elections focuses on techniques for collecting and analyzing data. Despite the fact that two faculty members had taught the course, comparison of the syllabi demonstrated that the learning goals and assignments were very similar. The students used concepts with which they were already familiar from an Introduction to American Politics course and investigated means to collect data and analyze it. 240

Comparative Politics introduces students to the field of comparative politics and social science methodology. Prior to 2011, the previous instructors of this course had taken vastly different approaches. One professor had focused solely on content, assigning books and articles related to the field of comparative politics. Unfortunately, the faculty member was not available to answer questions about whether he had discussed methods during the course. The other professor had assigned very advanced readings on methods, which anecdotally students had reported had “gone over their heads.” This professor also used books and scholarly articles from the field to help students understand important concepts in political science. Since 2011, this course has included content and methods instruction but has focused more on research design than techniques. The instructor has also focused more on qualitative techniques (case studies) used widely in the field. 245 250

Courts, Law, and Policy introduces students to “the study of law and legal process with an emphasis on the relationship between courts and public policy.”² This course makes a limited commitment to explicit methods instruction. In 2011, two instructors had taught this course, but their approaches had been virtually the same. There was no identification of specific readings or course topics related to methodology. In 2013, a new professor taught this course, and he outlines methodology as one of the primary components of the course and outlines quantitative reasoning as one of the learning goals. The course assignments include exams, a presentation, and a research design. 255 260

Based on this syllabi analysis, we developed hypotheses about the different skills we expected to see in the capstone papers based on which methods course students had taken. Using the 2006 APSA-TLC Research Methods Track summary, which attempted to synthesize best practices in the discipline, we developed a rubric to identify the following skills: basic disciplinary skills (ability to identify and discuss key social science indicators — including concepts and measurement, finding appropriate literature and data) and advanced methods skills (assessment of scholarly literature, developing and testing hypotheses, use of statistical or qualitative methods, and data presentation skills) (Brandon et al. 2006). We measured these skills via the rubric shown in Table 1. 265 270

Based on the syllabi analysis, we predicted that there would be variation in the students’ research papers based on the methods course they took. We expected that Analysis of US Policy and Elections students would fare better on the parts of the rubric that dealt with techniques, including hypothesis development and testing, statistical or qualitative techniques, and data presentation. However, since these students were primarily focused on techniques and not content, we suspected they might have more difficulty identifying and defining social science concepts, finding appropriate scholarship and critical analysis of literature. 275 280

Comparative Politics, since it tried to balance content and methods and focused on research design, might tend to do better in terms of defining social science

Table 1. Rubric for evaluating methods skills (adapted from 2006 APSA-TLC research methods track)

Skill		Measurement
Basic Disciplinary Skills	Social Science Indicators	Explicit definition and measurement of concepts (democracy and voter participation)
	Scholarly Sources	Presence of more than seven scholarly sources in the literature review*
Advanced Methods Skills	Critical Assessment	Section in Literature review about gaps or weaknesses in the literature
	Hypothesis Development	Explicit description of the relationship between dependent and independent variables
	Statistical or Qualitative Techniques	Use of a quantitative or qualitative method to gather and analyze original data
	Data Presentation	Creation of original tables, charts, or figures

*Because the capstone papers crossed subfields, the threshold of seven scholarly sources seemed to represent a depth of knowledge on the topic.

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concepts, finding appropriate literature, and critical assessment. We thought that Comparative Politics students might be able to develop hypotheses. We also suspected they would fare poorly in using quantitative or qualitative methods and data presentation. Although a new instructor took over this course in 2011 and focused much more explicitly on methods instruction, we expected to see a modest improvement in performance in the design-related indicators and did not expect to see a change in the technique-oriented skills.

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Courts, Law, and Policy takes a more content-based approach, so these students should be able to identify appropriate scholarship and to critically analyze the literature. However, given their lack of methods instruction, we expected they would fare poorly in terms of identifying and defining social science concepts, development and testing of hypotheses, use of quantitative or qualitative methods, and data presentation. These hypotheses are limited, however, to students that took the course before 2013. Students that took the course in 2013, a small part of our overall *N*, might be expected to perform better on hypothesis testing, quantitative reasoning, and data presentation given their exposure to those skills. These hypotheses are summarized in Table 2.

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After an initial analysis of research papers to test the rubric, we worked together to analyze a larger collection of papers, increasing our *N* to 204. The coauthors, to achieve intercoder reliability, used the rubric to code the same subset of papers. We met to discuss our coding and were confident that we were applying the rubric consistently.

We also conducted a transcript analysis of all the students whose research papers are included in our database. In this transcript analysis, we noted the sophomore-level methods course and counted the number of upper division political science classes students had taken in the department prior to writing their capstone papers. In our department, we have an expectation that all students in upper division courses

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Table 2. Summary of hypotheses

Research methods skills	Types of Method Instruction		
	Analysis of U.S. policy and elections	Comparative politics	Courts, law, and policy
Social Science Indicators	Less Likely to Demonstrate	More likely to Demonstrate	Less Likely to Demonstrate
Appropriate Scholarship	Less Likely	More likely	More likely
Critical Assessment Hypotheses Development	Less likely More likely	More likely More likely	More likely Less Likely (2013– More likely)
Statistical or Qualitative Techniques	More likely	Less Likely	Less Likely (2013– More likely)
Data Presentation	More likely	Less Likely	Less Likely (2013– More likely)

will write a literature review. While this expectation is not a comprehensive reinforcement of methods skills, it does require students to engage with scholarly literature and presents the possibility of reinforcement of those skills. Our transcript analysis enhances our model for assessing student learning and could explain some of the variation we see in student performance in terms of methods skills. Thus, in addition to the hypotheses on the variation in the different methods courses, we also hypothesize that students with more upper division political science courses taken before writing their capstone paper will perform better in terms of methods skills.

The model we have developed is fairly simple and would be relatively easy for other departments to adopt. We require a methods course for students in our major and encourage them to take the course in the second year, before they begin upper division courses. In all upper division courses, faculty assign a literature review as part of course requirements, encouraging students to continue their engagement with the literature and exposure to different methodologies in their subfield. In the senior year, students must write a capstone paper that includes a literature review and research design in which they develop hypotheses and test them empirically. Each year a group of faculty reviews the research papers based on the methodological principles the department has identified as part of the learning goals for the major and identifying patterns of student performance.

Findings — Students are Learning with Room for Greater Improvement

In this section, we report a selection of our findings to help demonstrate the usefulness of our assessment model for evaluating student performance. In our department, the hope is that we can use this information in assessment and curriculum development discussions moving forward. For other departments interested in adopting the model described above, these findings serve as a useful guide in determining the types of conclusions that might be drawn from assessment of the effectiveness of methods courses.

Overall, our data indicate that students can demonstrate some methods skills. First, we address our broad hypothesis implicit in our question about whether we see any *skill development* from the methods courses to the senior capstone paper. Second, we examine the specific hypotheses about the *different approaches* (technique, design, and content) of methods instruction. Finally, we examine the results of our *transcript analysis* to see how well we may be incorporating methods across the curriculum. As noted above, our focus here is less on declarative claims and more on explicating a model to assess whether our students are learning.

Skill Development

First, based on Table 3, we are teaching them some skills. Students show the strongest performance on basic disciplinary skills, including identifying social science indicators and scholarly sources. Over half (52%) identified and described measurements for the relevant social science indicators, and two thirds demonstrated knowledge of the relevant scholarly literature. Although ideally these percentages would be higher, the students can demonstrate important skills. However, in terms of more advanced methods skills, students performed quite poorly. Only a little over a quarter of the students critically analyzed the literature (27%) and developed hypotheses (26%). Less than a quarter explicitly utilized statistical or qualitative techniques (24%) or presented their data visually (20%). Some students used existing models and tested them in case studies they were interested in, for example, the role of public opinion and interest groups on environmental policy in Minnesota. Other students compared explanations for complex phenomena, including weighing the influences of economic conditions, state capacity, and ethnic tension on the likelihood of conflict in Africa. The data show that students are showing some capacity to apply basic skills, but very few show advanced skills.

This model, by identifying specific areas of strength and weakness, is very helpful for professors teaching both the methods course and upper division courses by demonstrating specific areas that they could emphasize more. The data also provide specific areas where supplemental instruction may be needed in the capstone course.

Different Approaches

The data in Table 4 show that there may be less of a difference in our approaches to methods instruction than we originally thought.³ Performance on each of the skills is fairly similar across the courses, with some notable exceptions.

In terms of the basic skill of identifying social science indicators, students performed well across all three methods classes. We expected that Analysis of US Policy and Elections and Courts, Law, and Policy would perform less well, but they performed better than (58%) or relatively equal to (50%) to Comparative Politics (52%). This suggests that students are able to bring forward basic concepts learned in previous courses and to achieve a more developed understanding of those concepts. The data also provide some evidence for the integrative approach — students are understanding notions like definition and measurement through subfield specific content.

All students also performed well in terms of identifying scholarly sources, although both Analysis of US Policy and Elections (75%) and Courts, Law, and -Policy (67%) students demonstrated greater skills than the Comparative Politics

Table 3. Skill development across select indicators, aggregated across all three methods courses

	Social science indicators	Scholarly sources	Critical assessment	Hypothesis development	Statistical or qualitative techniques	Data presentation
	Does not demonstrate skill	Does not demonstrate skill	Does not demonstrate skill	Does not demonstrate skill	Does not demonstrate skill	Does not demonstrate skill
	Demonstrates skill	Demonstrates skill	Demonstrates skill	Demonstrates skill	Demonstrates skill	Demonstrates skill
Percent of students (<i>n</i> of students)	52% (107)	66% (134)	73% (148)	74% (150)	76% (156)	80% (164)

Note: N of students is 204 students.

Source: Data collected by the authors.

Table 4. Percentage (and count) of students demonstrating skills across methods courses, for select indicators

	Analysis of U.S. policy and elections (technique- focused)	Comparative politics (design- focused)	Courts, Law, and policy (content- focused)	<i>p</i> value
	(<i>n</i> = 52)	(<i>n</i> = 58)	(<i>n</i> = 94)	
Social Science Indicators	58%	52%	50%	.666
Scholarly sources*	75%	55%	67%	.085
Critical assessment**	40%	19%	26%	.036
Hypothesis development**	35%	33%	18%	.042
Statistical or qualitative techniques	31%	24%	19%	.282
Data presentation	27%	17%	17%	.306

Note: Cell entries are the percent of students by methods course demonstrating a skill. Total *N* of students is 204 students.

Source: Data collected by the authors.

p* < .10. *p* < .05.

students (55%). Some of this difference may be due to variation in the senior seminar course expectations. The data suggest that faculty working with the Comparative Politics students should continue to reinforce the importance of scholarly sources and perhaps work on students' research skills in this area. 385

Students performed less well in critical assessment of the literature, which was surprising since we expected two of the three courses to perform well on this measure. Analysis of US Policy and Elections students performed the best, with 40% providing some critical discussion of the literature. This leads us to suspect that either the course is not as technique focused as the syllabus indicates, students are developing these skills in other courses, or they are benefitting from supplemental instruction in upper division courses and their research seminar course. Courts, Law, and Policy students (26%) and Comparative Politics students (19%) both performed poorly. Failure to demonstrate critical discussion included lack of democratization literature specific to the Middle East, limitations of studies regarding state support of social movements, and gaps in representation literature explaining specific votes against legislation that clearly benefits constituents. The model again provides us with important insight that faculty could use in focusing their discussions and designing assignments to improve students' methods skills. 390 395

As expected, in terms of the more advanced methods, students in the technique-based Analysis of US Policy and Elections course performed much better in advanced methods tasks of hypothesis development (35%), use of statistical and quantitative techniques (31%), and data presentation (27%). However, overall these percentages are still quite low. Students in Comparative Politics show some hypothesis development skills (33%) but fare less well in using statistical or qualitative techniques (24%) and data presentation (17%). In the content-focused Courts, Law, and Policy, few students showed any of the advanced methods skills. Using this 400 405

data, instructors could think about how they could increase exposure to these concepts. The department could also discuss whether these are important goals that deserve greater emphasis and resources or indicate a need for curriculum revision.

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The differences amongst the approaches were not as great as we expected, although there did seem to be greater difference between the courses that included methods instruction (Analysis of US Policy and Elections and Comparative Politics) and the course that did not explicitly include methods. Our data indicate that the integrative approach can be successful in helping students develop methods skills, although more development is needed in the more advanced methods skills.

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Although we are fortunate to have the staff and resources to offer an integrative approach to teaching research methods, our model would be helpful to any department in analyzing differences in outcomes of any number of approaches.

Transcript Analysis

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Our transcript analysis, shown in Figure 1, indicates that participation in upper division courses does help develop students' methods skills.⁴ The most significant increase in methods skills seems to come between the first and second upper division course, although the skills seem relatively similar as the number of upper division courses a student takes increases. We expected that more upper division courses would result in an increased ability to apply methods skills, but the data suggest skill level remains similar. This may be due to inconsistency across upper division courses or a lack of faculty support for methods instruction. In our department, we see fairly strong performance on basic skills of identifying social science indicators and relevant social science literature but weaker performance in terms of more advanced skills. The transcript analysis portion of the model helps the department understand whether faculty are reinforcing methods skills in their upper division courses. These

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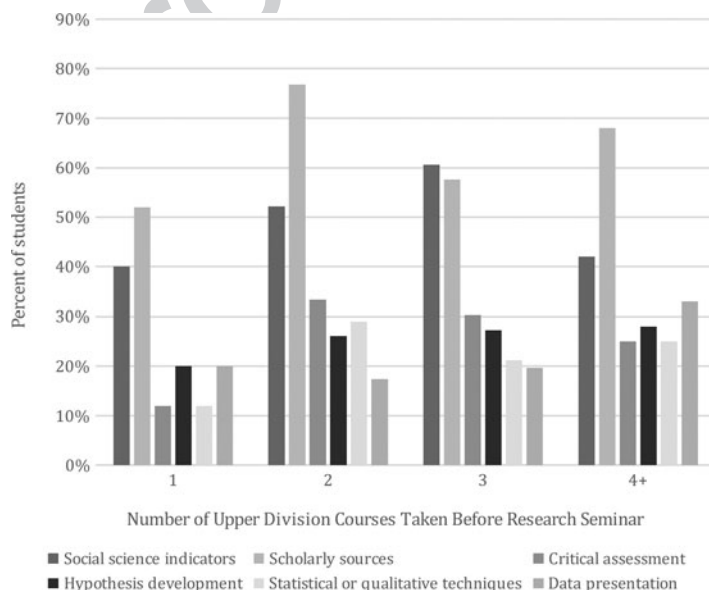


Figure 1. Transcript analysis: percent of students demonstrating skills on select indicators by number of upper division courses taken before research seminar.

data could prompt a broader discussion of the importance of methods instruction in the department.

Opportunities for Further Research

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Although we believe this model is a useful first step in assessing our students understanding of and ability to apply research methods skills, we acknowledge that it can still be improved. In this section, we discuss four further tools: improvements to our measurement of upper division courses, consideration of variation in the capstone courses, efforts to gain broader faculty support, and a greater focus on information literacy.

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We agree that our assumption about the influence of upper division courses may be too broad. Like many political science departments around the United States, and the world, our faculty approach upper division courses in different ways. Some faculty members put more of a focus on methodology by having students draft a research design, while others focus more on students' knowledge of relevant literature by assigning a literature review. Similar to the syllabi analysis done for the research methods courses, it may be helpful to identify upper division courses as more or less methods focused and consider their differing influences on students' methods skills. To better understand the dynamics here, in the short term, we might address this by analyzing syllabi and assignments to determine the degree to which they emphasize methods. In the long term, we might address this more as a curriculum development project in which we rate courses with respect to the degree to which they emphasize methods, which would give faculty and students a way to identify methods-intensive courses.

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There may also be variation in the different capstone courses. Anecdotally, some faculty may have different expectations in terms of scholarly sources used and the focus of the capstone paper. Although our department has tried to standardize the capstone paper by creating a universal rubric (very similar to the rubric we used to analyze the papers), it is not clear that students are being given the same assignment. We plan to collect the specific syllabi and assignments for each of the capstone courses to better understand variation in the capstone papers.

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One challenge that is often noted in the literature about teaching research methods is faculty buy-in. This is a challenge that all departments face. Our model provides a helpful means for collecting data that enables frank conversation about what we want our students to be able to do with their political science degree. We know that these data will help fuel discussion about the learning goals for our department, and the more that these kinds of conversations can happen, the better.

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Finally, we hope to increase our focus on improving information literacy. In 2013, we fielded an information-literacy survey broadly to determine the information literacy of political science majors versus nonmajors. While we are happy to report that our majors are more-information literate than nonmajors, that bar was still lower than we would like it to be. In 2013, we are incorporating the library more into their methods courses and hope to focus more explicitly on information literacy. We are eager to report the results in future work.

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Conclusion

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Our model of assessment could be adapted and adopted by other institutions. Other institutions could examine their methods courses, identify learning goals and develop

measurements, emphasize reiteration in upper division courses and measure the results in students' senior capstone papers. Given the increasingly competitive atmosphere of higher education and the difficult job market our students face, we must have a way to demonstrate that we are providing students with important skills that they can apply in a number of different fields. While our data on different approaches are not very conclusive, it does show us what students are learning and gives us information to consider and decide whether to adjust our expectations. We think we can be confident that we are teaching them something but that there are also ways we can help strengthen their skills.

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Notes

1. This observation has appeared in numerous track summaries of the American Political Science Association – Teaching and Learning Conference (APSA-TLC), "Teaching Research Methods" track.
2. Courts, Law and Policy (POLS 224) Syllabus on file with authors.
3. We did test whether grade point average (GPA) influenced our results, but found that the average GPAs of students in each of the tracks were almost exactly the same: 3.35.
4. We examined whether different tracks led students to take more or fewer upper division courses before their research seminar course but found no difference. Students on average took three upper division courses before their research seminar course.

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