Blogs, Online Seminars, and Social Media as Tools of Scholarship in Political Science^{*}

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Abstract

How do political scientists use online tools as part of their scholarly work? Are there systematic differences in how political scientists value these tools by field, gender, or other demographics? How important are these tools relative to traditional practices of political scientists? The answers to these questions will shape how our discipline chooses to reward academics who engage with "new media" like blogs, online seminars (webinars), Twitter, and Facebook. We find that traditional tools of scholarship are more highly regarded and more often used than any new media, though blogs are considered most important among new media. However, we also find evidence that these webinars are used and valued at rates comparable to traditional tools when they are provided in ways that meet political scientists' needs. Finally, we observe that women and graduate students are substantially more likely than men and tenure-track academics to report that webinars and online videos are important sources of new ideas and findings.

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Introduction

Journal articles, books, conferences, lectures, and seminars have been basic tools to communicate knowledge for centuries and are staple resources for academics. In the last decade, these traditional instruments have been supplemented by new tools that make use of modern technology: blogs, online videos and seminars (webinars), and social media like Twitter and Facebook. Political scientists must decide as a discipline how they will choose to value contributions made through these new media relative to their traditional counterparts. For example, is blogged scholarship as "serious" or "important" as an essay in an edited volume? How does a scholarly web lecture compare with a conference presentation as a research and service contribution? Should creating an online teaching tool used by thousands of people a year count in one's promotion and tenure package?

In this paper, we study how blogs, online videos, and social media are being used by political scientists as tools of scholarship. Our aim is to provide descriptive information useful for evaluating the importance of these tools to the scholarly community: how often new media are used, how scholars evaluate their utility, and the purposes for which they are valued. Although we do not seek to test any particular theory, we can determine whether there are systematic differences in how political scientists value new and traditional tools of scholarship by field, gender, seniority, and other demographics. We believe that this information will help us determine how decisions about the importance of new media could impact diversity in the field and facilitate the education of the next generation of scholars.

Four findings of our study stand out as especially important. First, blogs are a commonly utilized and valued tool for academic discussion and the dissemination of new ideas in political science. Second, although online seminars (webinars) and videos are less often used than blogs at present, there is substantial latent demand for topically relevant resources of this kind and these resources are widely used when made available. Third, women are more likely than men to report that online and offline modes that maximize personal interaction (webinars, Facebook, conferences, and small groups) are important for learning about ideas and research findings; women rate impersonal exchanges (blog posts) as less important when compared to men. Finally, graduate students are substantially more likely than tenure-track academics to report that online videos and webinars are important sources of new ideas and findings.

Based on our findings, we speculate that the discipline would benefit from a greater focus on producing online videos and webinars. We also surmise that investing in these tools would disproportionately benefit the next generation of political scientists in graduate school as well as underrepresented groups in the discipline. While we find that online videos and blogs are currently not as important to scholars as search engines and the traditional tools of scholarship (journals, conferences, etc.), data from a cross-sectional survey of the discipline and from usage patterns for two widely used online political science resources lead us to believe that there is a large current audience with potential for significant growth in the future.

Data Sources and Comparisons with Prior Work

Our data originate from three sources:

- an internet-based survey of political scientists in the most research-active departments in the United States;
- viewership data collected as a part of the International Methods Colloquium project (IMC), an online seminar series of research talks and roundtables related to political methodology; and
- 3. readership data collected by *The Political Methodologist* (TPM), the newsletter of the Society for Political Methodology (APSA's organized section for methodology).

Survey Data

In August 2015, we used SurveyMonkey to distribute a questionnaire to an e-mail list of 9,840 political scientists. The e-mail list was created by manually collecting e-mails on websites from three sources:

- the e-mail address was listed as that of a faculty member or graduate student on the website of a PhD-granting Political Science department¹ in the United States; or
- the e-mail address was listed as that of a faculty member on the website of a Political Science department at an institution designated as RU/VH, RU/H, or DRU by Carnegie (http://carnegieclassifications.iu.edu); or
- 3. the recipient participated as a viewer or presenter in the International Methods Colloquium (http://www.methods-colloquium.com).²

We received 909 responses that answered at least one question on the survey.³ The survey initially asked whether a respondent had viewed a session of the IMC; if the respondent had viewed the IMC once or more, s/he was asked 8 additional questions about his/her experience about the IMC. The respondent was then asked 5 demographic questions (occupation, gender, age, fields of interest and expertise, and proportion of time spent on research, teaching, and other activities) and 36 questions about their experience with and interest in various online and offline tools of academic work. The full survey questionnaire is included as an online-only appendix.

Figure 1 shows some demographic characteristics of our survey respondents. As the figure shows, our survey respondents include roughly equal numbers of tenure-track academics

¹These departments are listed by the American Political Science Association at http://www.apsanet. org/RESOURCES/For-Students/Institutions-That-Grant-PhDs-In-Political-Science.

 $^{^{2}}$ We repeated all our analysis on a sample that excludes IMC participants, as their solicitation might result in oversampling people who are interested in using online tools and might include scholars from outside the United States. The results, which do not change any of our fundamental conclusions, are presented in an online-only appendix.

³We began with 912 observations. We excluded any respondent who answered no questions at all. We also excluded one respondent who said that his current position was "Giant Possum." Among the remaining participants, 14 only answered the first question (about how often they viewed presentations of the IMC).

and graduate students.⁴ As would be expected from our sampling frame, the sample's representation of non-tenure-track academics, emeritus faculty, and political scientists working in industry is much smaller and possibly unrepresentative. Our sample includes generous proportions of faculty working in Comparative Politics, American Politics, International Relations, and Methodology.⁵ We have substantially lesser representation of political scientists in Public Policy and Political Theory, leading us to be cautious in generalizing to these fields from our respondent pool. Our age distribution skews young, as we would expect given that graduate students make up a substantial proportion of our sample and tend to have a compressed age range relative to those in other positions. 62.1% of our sample identifies as male.

To further assess the representativeness of our sample relative to the population of political scientists, we compared the demographic characteristics of our survey respondents to those of a 2015 membership survey for the American Political Science Association (APSA).⁶ In general, our survey closely approximates the gender distribution of the APSA membership but skews substantially younger and contains a disproportionate representation of graduate students relative to faculty members. For example, while only 13% of APSA respondents reported being under 30 years of age, just over 28% of respondents in our survey said that they were under 30. In addition, a substantially larger proportion of our sample identifies as having an interest in methods compared to the APSA sample. This discrepancy may be in part because the APSA survey allowed respondents to indicate only one subfield while our survey allowed respondents to select multiple options.

⁴Our survey asked respondents to identify as tenure-track Assistant Professors or tenured Associate/Full Professors, but we consolidated these two categories into "tenure-track academics" to maximize the sample size in the new single category.

⁵Note that these categories were asked non-exclusively; respondents could indicate as many subfields of interest and expertise as they wished.

⁶The results are shown in an online appendix as figure 9. We obtained the results of the APSA survey from Teka Miller, who sent us the demographic characteristics of this survey in response to our e-mailed request.



Figure 1: Demographic descriptors of survey respondents

International Methods Colloquium Data

The International Methods Colloquium is an online seminar series hosting periodic research presentations and roundtable discussions by political methodologists; it is supported by a grant from the National Science Foundation. Attendance at these seminars is freely available to the public, including the possibility for real time questions and answers as well as discussion among multiple participants (International Methods Colloquium, 2016). As of this writing, the IMC has hosted three seasons of talks coincident with the Spring 2015, Fall 2016, and Spring 2016 academic semesters. Once each live seminar has concluded, the video is uploaded to YouTube for later viewing.

The GoToWebinar software used for live broadcasts in these three seasons tracks the number of participants (including audience members) in each session (GoToWebinar, 2016); the minimum number of participants is 4 (the speaker, the moderator, and two production assistants), though on at least one occasion only one production assistant was present. YouTube also tracks the number of video views over the lifetime of each video (YouTube, 2016a,b). These tracking statistics give us insight into the size of the audience for research-related video presentations, at least among political scientists interested in (quantitative) methodology.

Data from The Political Methodologist

In late 2013, *The Political Methodologist* started a WordPress blog to run alongside its biannual print edition.⁷ WordPress collects detailed statistics about the number of unique visitors to each article and to the blog as a whole (WordPress.com, 2016). These statistics provide us with a direct measure of interest in blogged academic research from the political methodology community. It also provides us with some insight as to what types of blog posts attract the most interest.

⁷The blog is located at http://thepoliticalmethodologist.com.

Comparison with Prior Studies

Our project is distinguished from prior work in two important ways. First, although political scientists have written frequently about blogging and using social media as an academic, much of this work studies these activities as strategies to engage with policy makers and the larger public beyond political science (e.g., McKenna, 2007; Farrell and Drezner, 2008; Carpenter and Drezner, 2010; Farrell and Sides, 2010; Walt, 2010; Sides, 2011; Gruzd, Staves and Wilk, 2012; Klunk, 2012; Farley, 2013; Nyhan, Sides and Tucker, 2015; Lynch, 2016) or as a teaching tool to educate students (e.g., Sjoberg, 2013). By contrast, this paper is primarily about how political scientists use blogging, social media, and webinars as tools for scholarship, including learning about new findings and updating one's own research toolkit. We see using online tools for research purposes as being complementary to using them for outreach and teaching. For example, greater acceptance of blogs as a forum for scholarly discussion within the academy presumably lends legitimacy to blogging as an academic activity, encouraging scholars to blog more and thereby communicate with journalists and policy makers.

Second, most prior studies of blogs, online videos/webinars, and social media as research tools draw inferences from small-scale intensive interviews (Dawson and Rascoff, 2006; Maron and Smith, 2008; Acord and Harley, 2012; Esposito, 2013; Papalexi et al., 2014). The few extant large-scale surveys have mostly employed convenience samples of large and heterogeneous groups of academics from many locations and disciplines (Procter et al., 2010; Ponte and Simon, 2011; Rowlands et al., 2011; Gruzd and Goertzen, 2013). By contrast, our survey specifically studies the research-active community of political scientists in the United States and uses a sampling frame targeted at this group.⁸ Consequently, our study makes a novel contribution of particular interest to the discipline of political science.

⁸A few political scientists from outside the United States enter our sample because we included participants in the IMC in our survey. However, our qualitative results are robust to the exclusion of all IMC participants (see results in an online-only appendix).

Descriptive Results

We begin by describing the self-reported experience of our survey respondents with online tools; this is depicted in figure 2. The figure depicts responses on a six-point scale to the question "about how often do you use online tools as a part of your work in the following ways?" Summarizing over all nine possible experiences in the figure, 82.0% of our respondents engaged in at least one new media activity as a part of their work "once a month" or more; 68.1% engaged in at least one activity "2-3 times a month" or more.

Blogs

The most commonly performed online activity covered by our survey is reading a blog post; note that our question asks specifically about "blog post[s] related to your academic work" and not non-academic content or content in unrelated fields. The modal respondent in our survey reads an academic blog post "once a week or more." On average, our survey respondents report reading academic blog posts between once and 2-3 times per month.

Our survey's responses for blogs match well with readership data collected from *The Political Methodologist*; this data is shown in Figure 3. The figure shows steady growth in TPM's page views from September 2013 (the first month for which data are available) to June 2016, with leveling off of the readership after this point near about 4,000 page views per month. By comparison, as of August 1, 2016, the e-mail listserv of the Society for Political Methodology had 3,258 members.

From these two pieces of information, we infer that blogs are an increasingly important source of information for political scientists. However, we should not overstate the importance of blogs relative to other, more traditional tools of scholarship at present. This point is underscored by political scientists' self-reported importance scores for sources of new ideas and research findings. Our survey respondents rated nine different sources on a five-point scale (with 1 = "not at all important" and 5 = "extremely important"); their ratings are



Figure 2: Experience Working with Online Tools



Figure 3: Page Views from *The Political Methodologist*

shown in Figure 4.

The figure shows that search engines and one-on-one/small group conversations with colleagues are rated as the most important sources of information, with the modal respondent rating these sources as "extremely important." Journals and conferences are also comparatively high-rated sources of information, with the modal respondent rating these sources as "important." In our survey, blogs have not yet achieved this level of importance: respondents are roughly equally likely to report that blogs are "slightly important," "somewhat important," and "important" with an average rating of 2.91 on our five point scale. However, blogs are rated as considerably more important compared to other online sources (viz., webinars and social media).

Our data from *The Political Methodologist* indicate that not all blog posts are of equal interest to the scholarly community. It appears that blogs play a role as a source for practical advice and/or discussion of "inside baseball" issues of disciplinary importance rather than as an outlet for original research findings. Of the ten most-viewed posts on *The Political Methodologist* between September 2013 and August 2016, five are either technical or career advice⁹ and the remainder are commentaries on issues of disciplinary significance. Far and away the most popular post is a piece by Thomas J. Leeper on creating high-resolution graphics for manuscripts that will show up as sharp and clear when printed in a journal or book (Leeper, 2013).¹⁰

Collaboration and Learning via Online Video

Figures 2 and 4 appear to indicate that, at present, online videos and seminars play a secondary role as tools for scholarship in political science. The modal respondent to our survey has "never" attended a web seminar or used an online video or guest lecturer in class,

⁹These five blog posts are: "Making High-Resolution Graphics for Academic Publishing," "What Courses Do I Need to Prepare for a PhD in Political Science?," "Building and Maintaining R Packages with devtools and roxygen2," "A Checklist Manifesto for Peer Review," and "Student Advice: Should I Go to Graduate School? If So, Where Should I Go?"

¹⁰Table 1 in an online appendix shows the titles of the ten most-viewed posts between September 2013 and August 2016 alongside the page views they accumulated over this period.



Figure 4: Sources of New Ideas and Research Findings Rated by Importance

and rates webinars and online videos as "not at all important" as a source for new ideas and research findings. However, online video-based resources do play some role in scholarly work: the modal respondent uses an online video to learn a new skill or collaborate with a co-author "a few times per year."

Perhaps the reason that political scientists do not use online video resources is not because they aren't interested, but because it is difficult to find high-quality resources targeted at researchers' interests and are convenient for scholars to use. Figure 5 indicates that our modal survey respondent is "interested" in "learning about new research findings" and "receiving feedback on [his or her] own work" via online video resources, although Figure 2 indicates that they rarely do so. This conclusion is consistent with Procter et al.'s (2010) conclusion that "among occasional users, there is considerable enthusiasm [for new technologies] that has not yet been translated into routine use" (p. 4052).

Our survey provides us information about the features that high-quality online videos and webinars ought to possess. We asked an array of questions pertaining to "what factors would make [the respondent] more or less likely to attend a webinar / online presentation." The responses for all nine questions are available in an online appendix.¹¹ Of the nine factors analyzed, two stood out as particularly important in determining whether respondents would attend: a presentation on the topic relevant to the respondent's core interest, and the availability of a recorded video that can be watched at any time. Videos relevant to a researcher's core interest, with a recorded video available for viewing at any time, make almost all survey respondents "much more likely" or "somewhat more likely" to view an online presentation.

The data from the International Methods Colloquium project provides us with insight as to how a source of high-quality online research seminars will be utilized by the scholarly community. The number of participants (including speakers, moderators, and staff) in each of the IMC's presentations is shown in Figure 6. The figures show that live attendance at

 $^{^{11}\}mathrm{See}$ figures 10, 11, and 12.



Figure 5: Interest in Video-based Online Resources for Types of Scholarly Work

Reported Interest in Using On-Line Tools in Each Category

an IMC seminar is typical of what one might expect for attendance at a conference panel for a subfield meeting. However, unlike a conference panel, these seminars are widely used after the fact: a seminar with a live audience of ≈ 30 can expect ≈ 200 later views on YouTube.¹² It may even be the case that this relationship is nonlinear: a live audience three times larger than the previous example (≈ 90) is predicted to receive a far larger number of views (close to 1500). However, the small number of data points with ≥ 45 attendees makes any inferences in this range tentative at best.

The strong live attendance numbers of the IMC and even stronger delayed viewing statistics for IMC recordings, combined with our survey results, lead us to two conclusions:

- 1. there is a strong latent demand for topically relevant video-based online resources, and
- 2. making recorded videos available for viewing at any time is an important part of serving that demand.

Thus, although the usage and importance ratings for online seminars and videos lag substantially behind those for blogs and traditional tools of scholarship, we believe that these resources have substantial potential for future growth in political science.

Statistical Analysis of the Survey Results

Our final task is to determine whether certain kinds of political scientists are more or less inclined to consider online tools an important resource for their scholarly work. To this end, we created a model that predicted survey responses to the question "How important would you say the following sources are for you in terms of hearing about new ideas and research findings related to your work?" for several online tools (blogs, webinars/online videos, Facebook, and Twitter) as well as some traditional sources (conferences, journals, small groups of colleagues, and students); this is the raw data depicted in Figure 4. The

 $^{^{12}}$ The model in the inset of Figure 6 uses a simple linear model, whereas the main model adds squared and cubed terms of webinar attendees to predict YouTube views. As the Figure shows, the predictions of both models are similar when the number of webinar attendees is < 45.



Figure 6: International Methods Colloquium, Attendance vs. YouTube Views

dependent variable is ordinal with five levels. We therefore use an ordered probit regression using the **polr** function in the MASS package in R (Venables and Ripley, 2002). We predict responses using gender, field of expertise or interest,¹³ current position, and proportion of work time spent teaching. The estimated coefficients from our models are shown in an online appendix.¹⁴

Although the raw coefficients are not particularly informative, we do see that there is a statistically significant relationship between male gender and lower importance ratings for webinars, Facebook, conferences, and small groups but higher importance ratings for blogs.¹⁵ A substantive interpretation of these coefficients is facilitated by Figure 7. As in our descriptive results, we focus on the perceived importance of blogs and webinars (the two "new media" tools rated as most important in Figure 4). We compare blogs and webinars to conferences, a venerable and important mode of scholarly activity. Figure 7 shows the predicted probability of each importance rating for conferences, blogs, and webinars/videos separately for men and women; independent variables other than gender are held at fixed values.¹⁶

According to our model, women are are about 7 percentage points less likely than men to rate a webinar as being "not at all important" (43.3% for women as opposed to 50.7% for men). Women are also about 9 percentage points more likely than men to rate conferences as being "extremely important" (30.0% for women as opposed to 20.6% for men). By contrast, women are 3 percentage points more likely to rate blogs as being "not at all important" compared to men (15.7% for women as opposed to 12.7% for men). Although our research design is not set up to determine *why* these differences exist, we observe that one thing that conferences, webinars, small groups, and Facebook have in common (and blogs do not)

 $^{^{13}}$ Note that survey respondents could indicate more than one field of expertise or interest, and therefore these categories are not mutually exclusive.

 $^{^{14}}$ These coefficients are in table 2.

¹⁵The gender difference in the importance rating for blogs becomes statistically insignificant in the analysis excluding IMC participants; see table 3 in the online appendix.

¹⁶For Figures 7 and 8, the gender variable is set to "male," all field variables are set to zero, position is set to tenure-track academic, and time teaching is set to 30 percent whenever the variable in question is not depicted in the graph.

is that they encourage interpersonal interaction among scholars. Our finding is especially interesting in light of the Procter et al. (2010, p. 4044) study's conclusion that "there is a gender bias" in users of Web 2.0 technologies for scholarly communications, "with men making up two-thirds of frequent users, while women make up a slight majority in non-users."



Probability of Each Conference Importance Response for Females and Males



We note one other interesting finding: graduate students are more likely to rate webinars/online videos and Twitter as important sources of ideas and findings relative to tenure track faculty members.¹⁷ As Figure 8 shows, graduate students are over 10 percentage

 $^{^{17}}$ They also differ from tenure-track faculty in several other ways, for instance in rating small group discussions as more important and journals as less important; we focus on the findings that relate specifically

points less likely to rate webinars as "not at all important" (50.7% for tenure-track academics compared to 39.9% for graduate students), with this difference being distributed over the higher categories of importance (e.g., 21.1% of graduate students rate webinars and videos as "somewhat important" relative to 15.9% of tenure-track academics). There are also differences between tenure track academics and people in other positions (e.g., those working in industry), but our confidence in these measurements is considerably diminished because our survey's sampling frame was not designed to systematically sample these populations.

Conclusion: Investing in the Future of Scholarship in Political Science

To summarize our findings, political scientists have limited experience with but substantial interest in using online tools as a part of their work. Other than search engines, blogs are the most widely used and important online tool that we study. However, traditional tools of scholarship (like conferences and journal articles) are (on average) still considered by political scientists to be more important than online tools like blogs, webinars, online videos, and social media. On the other hand, certain segments of the discipline (women and graduate students) are more likely to believe that webinars and online videos are important sources of ideas and information relevant to their work. Moreover, the reason why political scientists are not likely to use online video resources may have more to do with the availability of high-quality and topically appropriate resources as opposed to a lack of latent demand (which we measure as being relatively high).

Based on our findings, we surmise that the discipline would benefit by investing in the creation of more online tools for scholarly work. Although at present political scientists consider most online tools less important than journals, conferences, and in-person interactions with colleagues, our usage data from the International Methods Colloquium and *The Political Methodologist* is evidence that even the current demand for scholarly blog posts to online tools.



Figure 8: Model Predicted Importance of Online Tools, by Position

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and webinars is still strong. Moreover, the substantial interest expressed in our survey for video-based online resources indicates to us that there is a potential for significant growth in the utilization of these resources if they are created. The results of our survey, especially figures 7 and 8, lead us to speculate that webinars and online videos would be of particular importance to groups that will play a very important role in the future of our discipline: women and graduate students.

We also note that the importance of a resource is at least partially endogenous to availability. It is hard to think that webinars are as important as conferences when webinars are so much rarer. At the same time, webinars may not be offered if they are perceived as undervalued—a catch 22. The experience of the International Methods Colloquium indicates that, if this cycle is broken, these resources *are* utilized at rates comparable to traditional methods (i.e., conference panels). Moreover, participants seem to like what they see: our survey respondents who participated in IMC talks rated them highly (with the modal evaluation being "very good") and are "very likely" to attend the IMC again.¹⁸

As noted by Acord and Harley (2012, p. 381), "an understanding of sharing practices should be put in the context of the primary drivers of scholarly communication behavior, which, in competitive institutions, are career self-interest, advancing the field, and receiving credit and attribution." Based on the results of Ponte and Simon (2011, p. 153), blogs and professional social networks are currently considered almost irrelevant for evaluating researchers in the disciplines they survey. If we wish to encourage provision of high quality online tools of scholarship, we may have to be more generous in rewarding these sorts of activities mean when they appear on a curriculum vitae.

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¹⁸See figure 13 in the online appendix for more details.

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Online Appendix A: Comparison of Respondents to APSA Membership Data



Figure 9: Demographic Comparisons

(a) Current Position

(continued)



Figure 9: Demographic Comparisons, continued

Note: Survey respondents could choose more than one subfield specialization in our data, but chose only one specialization in the APSA survey; thus the figures in panel (b) are not directly comparable.

Online Appendix B: Full List of Responses, Factors Making Respondents More or Less Likely to Attend a Webinar







Figure 11: What factors would make you more or less likely to attend a webinar/online presentation? (Part Two)



Figure 12: What factors would make you more or less likely to attend a webinar/online presentation? (Part Three)

Online Appendix C: Extra Tables and Figures Referenced in the Main Text



Figure 13: Evaluation of the International Methods Colloquium by Attendees

Post Title	Page Views
Making High-Resolution Graphics for Academic Publishing	53446
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A Decade of Replications: Lessons from the Quarterly Journal of Political Science	3228
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Which Methodologies Are Useful for Policy-Making?	2266
A Checklist Manifesto for Peer Review	1773
Student Advice: Should I Go to Graduate School? If So, Where Should I Go?	1444

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				Depende	nt variable:			
	Conference	Blog	Webinar	Journal	Small Group	$\operatorname{Facebook}$	Twitter	Students
male	-0.296^{***} (0.080)	0.131^{*} (0.077)	-0.188^{**} (0.080)	-0.007 (0.079)	-0.250^{***} (0.083)	-0.515^{***} (0.081)	0.030 (0.085)	0.052 (0.078)
field: American	-0.229^{**} (0.106)	-0.021 (0.104)	-0.037 (0.107)	-0.056 (0.105)	-0.099 (0.110)	0.132 (0.109)	0.170 (0.115)	0.102 (0.104)
field: Methods	0.080 (0.087)	0.125 (0.085)	0.151^{*} (0.088)	-0.057 (0.086)	0.217^{**} (0.092)	0.188^{**} (0.089)	0.183^{**} (0.091)	0.189^{**} (0.085)
field: Public Policy	0.109 (0.109)	-0.377^{***} (0.108)	0.266^{**} (0.109)	0.073 (0.109)	0.142 (0.114)	-0.151 (0.113)	-0.479^{***} (0.124)	$\begin{array}{c} 0.113 \\ (0.107) \end{array}$
field: Political Theory	-0.235 (0.144)	-0.092 (0.141)	0.061 (0.145)	0.117 (0.146)	-0.109 (0.151)	-0.172 (0.153)	-0.507^{***} (0.168)	$0.199 \\ (0.141)$
field: Comparative	-0.055 (0.097)	0.125 (0.095)	0.109 (0.098)	-0.020 (0.096)	-0.051 (0.101)	0.083 (0.099)	-0.020 (0.105)	0.005 (0.095)
field: International Relations	0.037 (0.100)	-0.100 (0.097)	0.115 (0.100)	0.026 (0.099)	-0.084 (0.104)	0.101 (0.101)	-0.137 (0.107)	0.239^{**} (0.097)
position: graduate student	-0.084 (0.089)	0.060 (0.086)	0.275^{***} (0.090)	-0.259^{***} (0.088)	0.438^{***} (0.093)	-0.121 (0.091)	0.307^{***} (0.094)	0.146^{*} (0.086)
position: academic, non-tenure-track	-0.279^{*} (0.167)	-0.038 (0.165)	0.272 (0.169)	-0.310^{*} (0.166)	0.148 (0.172)	0.042 (0.170)	0.325^{*} (0.179)	0.203 (0.164)
position: emeritus	0.109 (0.443)	-0.482 (0.479)	0.300 (0.445)	0.071 (0.441)	-0.788^{*} (0.431)	-0.528 (0.507)	-0.238 (0.520)	0.971^{**} (0.448)
position: industry/government	-0.124 (0.368)	0.114 (0.361)	0.819^{**} (0.366)	-0.309 (0.361)	0.061 (0.385)	-0.156 (0.394)	0.510 (0.379)	-0.462 (0.368)
prop. of time spent teaching	-0.0002 (0.003)	-0.006^{**} (0.003)	0.003 (0.003)	-0.002 (0.003)	-0.001 (0.003)	-0.001 (0.003)	-0.001 (0.003)	0.002 (0.003)
Observations	799	798	800	797	799	796	796	797
Note:						* p<0).1; **p<0.05;	***p<0.01

Online Appendix D: Analyses Without IMC Participants





(b) Subfield Specialization

Figure 14: Demographic descriptors of survey respondents, excluding IMC participants

(c) Age



















Reported Interest in Using On-Line Tools in Each Category

				Depende	int variable:			
	Conference	Blog	Webinar	Journal	Small Group	Facebook	Twitter	Students
male	-0.290^{***} (0.084)	0.090 (0.081)	-0.194^{**} (0.084)	0.012 (0.082)	-0.268^{***} (0.087)	-0.540^{***} (0.085)	0.018 (0.090)	0.032 (0.081)
field: American	-0.214^{*} (0.112)	-0.023 (0.110)	-0.048 (0.113)	-0.084 (0.110)	-0.083 (0.116)	0.125 (0.114)	0.109 (0.122)	0.102 (0.109)
field: Methods	-0.004 (0.093)	0.069 (0.091)	0.121 (0.095)	-0.056 (0.093)	0.219^{**} (0.099)	0.209^{**} (0.095)	0.043 (0.099)	0.202^{**} (0.092)
field: Public Policy	0.071 (0.114)	-0.374^{***} (0.113)	0.245^{**} (0.115)	0.067 (0.113)	0.173 (0.120)	-0.209^{*} (0.118)	-0.563^{***} (0.133)	$0.134 \\ (0.112)$
field: Political Theory	-0.219 (0.145)	-0.086 (0.143)	0.090 (0.147)	0.122 (0.148)	-0.109 (0.153)	-0.204 (0.154)	-0.534^{***} (0.171)	0.173 (0.143)
field: Comparative	-0.030 (0.103)	0.124 (0.101)	0.121 (0.104)	0.001 (0.102)	-0.066 (0.107)	0.090 (0.105)	-0.060 (0.113)	-0.001 (0.100)
field: International Relations	0.025 (0.104)	-0.103 (0.102)	0.062 (0.104)	-0.008 (0.103)	-0.091 (0.108)	0.081 (0.106)	-0.182 (0.113)	0.178^{*} (0.102)
position: graduate student	-0.073 (0.092)	0.073 (0.090)	0.332^{***} (0.094)	-0.231^{**} (0.092)	0.443^{***} (0.097)	-0.102 (0.094)	0.369^{***} (0.099)	0.189^{**} (0.090)
position: academic, non-tenure-track	-0.335^{*} (0.179)	0.015 (0.176)	0.210 (0.181)	-0.319^{*} (0.177)	0.162 (0.184)	-0.009 (0.182)	0.378^{**} (0.193)	0.268 (0.175)
position: emeritus	0.147 (0.443)	-0.447 (0.480)	$0.394 \\ (0.445)$	0.112 (0.441)	-0.787^{*} (0.432)	-0.530 (0.510)	-0.136 (0.518)	0.972^{**} (0.449)
position: industry/government	-0.013 (0.450)	0.155 (0.444)	0.621 (0.454)	-0.428 (0.437)	-0.264 (0.457)	0.118 (0.471)	$0.540 \\ (0.462)$	-0.349 (0.446)
prop. of time spent teaching	0.001 (0.003)	-0.006^{**} (0.003)	0.005^{**} (0.003)	-0.001 (0.003)	-0.001 (0.003)	-0.0003 (0.003)	-0.0005 (0.003)	0.003 (0.003)
Observations	731	730	732	729	731	728	728	730
Note:)>d*).1; **p<0.05;	***p<0.01

Table 3: Predictors of Importance for Sources of New Ideas and Research Findings

Figure 18: Model Predicted Importance of Online Tools without IMC Participants, by Gender



Probability of Each Webinar Importance Response for Females and Males

Figure 19: Model Predicted Importance of Online Tools without IMC Participants, by Position



Online Appendix E: Survey Questionnaire

The following pages reprint the full survey questionnaire as it was entered into the Survey-Monkey software package, including the initial information and consent form. Questions are listed sequentially in the order in which they were presented to participants. Questions listed under the same heading (e.g., "Demographics") were presented to the participants on the same screens.

Survey Information and Consent

You are being invited to participate in a research study titled "Using On-line Resources in Political Science." This study is being done by Justin Esarey and Andrew Wood of Rice University. You were selected to participate in this study because your e-mail address was listed as that of a faculty member or graduate student on the website of a PhD-granting Political Science department, your e-mail address was listed as that of a faculty member on the website of a Political Science department at an institution designated as RU/VH, RU/H, or DRU by Carnegie (http://carnegieclassifications.iu.edu), or you participated as a viewer or presenter in the International Methods Colloquium (http://www.methods-colloquium.com).

The purpose of this research study is (a) to find out how political scientists use on-line resources as a part of their work, and (b) to evaluate the progress of the International Methods Colloquium project. If you agree to take part in this study, you will be asked to complete an on-line survey/questionnaire. This survey/questionnaire will ask about on-line resources related to your work and does not include questions of a sensitive nature. We anticipate that this survey will take approximately 10-15 minutes to complete.

You may not directly benefit from this research; however, we hope that your participation in the study may allow the political science community to better understand how on-line tools are used for research and teaching and to allow future researchers to design on-line tools and resources that meet the community's demands.

We believe there are no known risks associated with this research study; however, as with any on-line related activity the risk of a breach of confidentiality is always possible. We will minimize any risks by collecting only de-identified data (i.e., we set SurveyMonkey to collect anonymous responses without recording IP addresses, names, or e-mail addresses); however, SurveyMonkey does record which invited persons answer the survey without linking this information to the responses. Data will be maintained on password-protected computers and on-line services (e.g., Dropbox accounts and SurveyMonkey accounts) accessible only to those researchers affiliated with the project and to the services themselves. However, de-identified data (without IP addresses, names, or e-mail addresses) will be shared with other researchers via posting to public websites for replication purposes and secondary use.

Your participation in this study is completely voluntary and you can withdraw at any time. You are free to skip any question that you choose.

If you have questions about this project or if you have a research-related problem, you may contact the Principal Investigator, Justin Esarey: e-mail: jee3@rice.edu, phone: 678-383-9629. If you have any questions concerning your rights as a research subject, you may contact William Turner, Assistant Vice Provost for Research, at Rice University. Email: william.turner@rice.edu or Telephone: 713-348-6071.

By continuing on with the survey, you are indicating that you are at least 21 years old, have read and understood this consent form and agree to participate in this research study. Please print a copy of this page for your records.

Please click the "Next" button below to start the survey.

IMC Participation

1. How many on-line presentations hosted by the <u>International Methods Colloquium</u> (IMC) have you viewed? (The link leads to the IMC's website.)

- O None
- One
- Two or three
- More than three

IMC Specific Questions

2. How much would you agree with the following statements about the International Methods Colloquium (IMC) seminar(s) that you viewed?

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
The presentation was interesting and informative.	0	0	0	0	0
Slides and other visual cues were easy to read and understand.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
I was able to hear and understand the presentation clearly.	0	0	\bigcirc	\circ	0
Technical glitches were an impediment to enjoying the presentation.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
The question and answer period resulted in an engaging exchange of ideas.	0	0	0	0	0
The presentation was scheduled at a convenient time for me.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

3. How would you evaluate your experience with the IMC as a whole?

- Excellent
- Very good
- Good
- 🔘 Fair
- 🔍 Poor

4. Based on your experience, how likely are you to attend another International Methods Colloquium event?

- Very likely (more than 75% chance, less than or equal to 100% chance)
- Likely (more than 50% chance, less than or equal to 75% chance)
- Somewhat likely (more than 25% chance, less than or equal to 50% chance)
- Unlikely (more than 0% chance, less than or equal to 25% chance)
- No chance

5. Optional: Do you have additional comments or suggestions for the IMC?

Demographics

Please answer a few questions about yourself.

- 6. What is your current primary occupation?
- graduate student
- on tenure-track academic (e.g., Adjunct Professor)
- U tenure-track academic (e.g., Assistant Professor)
- Utenured academic (e.g., Associate or Full Professor)
- vetired academic (e.g., Professor Emeritus)
- non-academic private industry
- non-academic government
- Other (please specify)

7. What is your gender?

- Male
- Female
- 8. What is your age in years?

9. What do you consider your core areas of interest and expertise? (Select all that apply.)

American Politics
International Relations
Comparative Politics
Political Theory
Political Methodology / Research Design
Public Policy
Other

10. What percentage of your work time do you devote to research, teaching, and other activities? Give your best estimate; exact answers are not necessary. (Enter a number between 0 and 100 for each activity; the answers should sum to 100.)

Research	
Teaching	
leading	
Other	

Frequency of Using On-line Tools

Now, we'd like to ask you some questions about the ways in which you use various on-line tools as a part of your work.

11. About how often do you use on-line tools as a part of your work in the following ways? (Choose the option closest to how often you engage in each task.)

	Never	Rarely (less than once per year)	A few times per year	Once a month	Two or three times per month	Once a week or more
Communicate with a co- author/colleague with a video call	\bigcirc	\circ	\circ	\bigcirc	\circ	\circ
Have a guest lecturer appear in your class via telepresence (e.g., using Skype)	0	0	\bigcirc	\bigcirc	0	\bigcirc
Write a blog post related to your work	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0
Send a tweet or write a Facebook post related to your work	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Present your research or participate in a roundtable discussion via telepresence for an audience of colleagues outside the university	0	0	0	0	0	0
Assign an on-line instructional video to your class as a part of your curriculum	0	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Use an on-line instructional video to learn a new skill	0	0	0	\bigcirc	\bigcirc	0
Listen to a research presentation with at least one speaker appearing via telepresence	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Read a blog post related to your work that is authored by an academic	0	0	0	0	0	0

Hearing About New Ideas and Findings

Now, we'd like to ask you some questions about how you hear about new ideas and research findings related to your work.

12. How important would you say the following sources are for you in terms of hearing about new ideas and research findings related to your work?

	Extremely Important	Important	Somewhat Important	Slightly Important	Not at all Important
blog posts	\bigcirc	\bigcirc	0	0	0
Twitter	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
one-on-one or small- group conversations with colleagues	\bigcirc	\bigcirc	\circ	\circ	0
Facebook	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
reading the table of contents of new journal issues	0	0	0	0	0
seminar presentations a a conference	t O	\bigcirc	\bigcirc	\bigcirc	\bigcirc
search engines (e.g., Google)	\bigcirc	\bigcirc	\circ	\bigcirc	0
conversations with students (in and out of class)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
webinars and on-line videos	0	0	0	0	0

Interest in On-line Seminars

Now, we'd like to ask you some questions about your interest in webinars and other on-line presentations. By webinars, we mean live or recorded on-line audiovisual presentations.

13. What factors would make you more or less likely to attend a webinar / on-line presentation (as an audience member)?

	Much more likely	Somewhat more likely	Neither more or less likely	Somewhat less likely	Much less likely
Well-known / famous presenter	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0
Topic relevant to your core area of interest / expertise	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Topic relevant to new research outside your core area	0	\bigcirc	0	0	0
Convenient time for live broadcast	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Availability of recorded video that can be watched any time	0	\bigcirc	0	0	0
Opportunity to ask questions / interact with presenter	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Relevant to job prospects	\bigcirc	0	\bigcirc	\circ	0
Teaches applied / practical skills (e.g., software)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Recommended to you by a friend or colleague	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0
Presenter from outside Political Science	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Topic relevant to a course you are teaching	0	\bigcirc	\bigcirc	\circ	0

Uses for Video-Based On-line Resources

Now, we'd like to ask you about how interested you are in using video-based on-line resources (webinars, YouTube videos, Skype, etc.) for your work.

14. How interested are you in using video-based on-line resources for the following aspects of your work?

	Extremely Interested	Interested	Somewhat Interested	Slightly Interested	Not at all Interested
Learning how to use a software program / coding	\bigcirc	0	\circ	0	0
Learning about new research findings	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Learning a new analytical technique (e.g., how to use a statistical model)	0	0	0	0	0
Communicating with co- authors and colleagues	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Teaching material to students	0	\bigcirc	\bigcirc	0	\bigcirc
Receiving feedback on your own work	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Debating topics of importance to your work	0	\bigcirc	\bigcirc	0	\bigcirc