Turning Introductory Comparative Politics and Elections Courses into Social Science Research Communities Using Wikipedia: Improving Both Teaching and Research

Ryan Kennedy, *University of Houston*
Eric Forbush, *Northwestern University*
Brian Keegan, *Northeastern University*
David Lazer, *Northeastern University/Harvard University*

ABSTRACT   This article advocates a lesson plan for introductory comparative politics and elections courses. The authors argue that Wikipedia (yes, Wikipedia) provides a unique platform for improving learning outcomes and a useful social good from traditional student papers on elections. The proposed lesson plan can achieve this in at least three ways: (1) by providing social incentives for learning and a method for students to contribute to social science knowledge from their earliest courses, the incorporation of Wikipedia editing can improve student learning and retention; (2) incorporating an online information component can help both future students and researchers by improving the quality and quantity of easily accessible and well-referenced information about historical and upcoming elections; and (3) the use of the Wiki format is becoming increasingly common in both business and government. Teaching the basics of editing is an increasingly useful skill for students to learn for future employment.

This article proposes that instructors in introductory comparative politics and comparative elections classes use Wikipedia as part of a classroom assignment. Wikipedia's platform provides unique learning opportunities: a method for students to share what they have learned publicly; explicit encouragement to reference sources; a large user community that can provide immediate feedback and discussion; public presentation of research; and an increasingly useful skillset for writing in business, government, and research. Many of these aspects adhere to what social science research suggests are the most effective methods for teaching new materials (e.g., King and Sen 2013; Lawrence and Dion 2010).

This platform also provides a method for students to have an immediate impact on social science knowledge, inculcating the values of creating and sharing knowledge from their first introductory courses. For better or worse, Wikipedia often is the first source for students (as well as many researchers in government and business) to learn about a new topic. Search engines often report Wikipedia entries first in response to general, fact-based queries. In September 2013, comScore noted that Wikipedia Foundation sites had the ninth-largest audience on the Internet—more than the *New York Times* and Fox News Group combined (Lella 2013).

Encouraging students to share their research on elections with the Wikipedia community can increase dramatically the

Ryan Kennedy is an associate professor of political science at the University of Houston. He can be reached at rkennedy@uh.edu.
Eric Forbush is the lab manager of the Science of Networks in Communities (SONIC) Lab at Northwestern University. He can be reached at eric.forbush@northwestern.edu.
Brian Keegan is a postdoctoral research fellow in computational social science at Northeastern University. He can be reached at b.keegan@neu.edu.
David Lazer is a professor of political science and computer and information science at Northeastern University and visiting scholar at Harvard University. He can be reached at d.lazer@neu.edu.

quality of information available on the site. The citation style of Wikipedia allows for documentation of diffuse sources in a manner that is almost impossible in even the best academic data-collection efforts. Leveraging the work of thousands of students can help future generations of students as well as researchers who want to quickly gather information about elections and polls around the world.

In this article, we outline and discuss the methods for and the advantages of incorporating Wikipedia into a class research project about elections. We also provide a sample lesson plan in an accompanying website—set up as an editable Wiki—for instructors interested in adopting the course project.

THE LESSON PLAN

In the accompanying website for this article, we provide all of the necessary materials for implementing this research plan, including a lesson plan, grading rubric, sample paper, and illustrated

Readers will recognize that these questions are similar to standard topics taught in introductory classes: electoral systems, different governance systems, authoritarianism versus democracy, and so on. Some professors also may want to ask students to relate what they find to general theories taught in class, such as Duverger's law and the perils of presidentialism. In the lesson plan, we provide a list of resources for students to use in researching their particular election. Of course, the amount of information available will depend on when and where the election took place; certain questions (e.g., the existence of polling data) must be adjusted accordingly.

In addition to the paper, students are asked to explore the Wikipedia page for their election. These pages typically can be found through any search engine by typing, for example, "[country] Presidential Election [year]." In some cases, students may be directed to a more general "Elections in [country]," which usually provides links to specific elections.

Leveraging the work of thousands of students can help future generations of students as well as researchers who want to quickly gather information about elections and polls around the world.

tutorial on how to edit Wikipedia.[1] The lesson plan is straightforward and similar to those in introductions to comparative politics and comparative elections courses.

Students either select or are assigned to an historic election; a complete list from 1945 to 2011 is available from the National Elections across Democracy and Autocracy (NELDA) dataset (Hyde and Marinov 2012).[2] Students also can be assigned to upcoming elections and follow them as the class proceeds. The assignment is for students to write a six-page paper (not including tables, figures, and works cited) about the election. They must address the following seven main areas:

- What is the political system of the country? Is it a presidential, semipresidential, or parliamentary system? Is it a federal or unitary system of government?
- What is the electoral system for this election? If it is legislative, is it a single-member district, proportional representation, mixed-member, or another formula? If it is executive, is it a single- or two-round election?
- What is the electoral environment like? Were these elections expected to be free and fair? Was the country considered a democracy? What were the expected or actual problems with the voting process, if any?
- For parliamentary elections, which major parties were competing? What was the name of the incumbent party and was it part of a coalition? For executive elections, who were the major candidates and which parties did they represent? On which issues did the parties and candidates campaign?
- Which economic factors and other key issues were important in the election?
- Were any polls available before the election? If so, what did they predict?
- What was the outcome of the election? Was the result disputed? If so, did this dispute result in protests or riots?

Pages may not exist yet for certain elections. Our team reviewed all 901 pages associated with the executive elections listed in the NELDA dataset to ensure that, at a minimum, "stubs" (i.e., short and general pages) exist for all elections (figure 1 is an example of a stub); therefore, students rarely need to create a new page. However, students easily can create their own page and use their research to start the public data-collection process. In other cases, election pages may be quite detailed—even more so than most magazine and newspaper descriptions of the elections (figure 2 is an example). The page for the 2006 Mexican Presidential Election has 41 citations; continues for many pages (too many to show in figure 2); and includes information from 51 preelection polls, a state-by-state breakdown of the results, polling-station results and reporting times, and significant historical detail. In these cases, students may need to add very little, but they still will provide a valuable service by including citations, checking grammar and spelling, and verifying currently posted information.

After students complete the Wikipedia editing, instructors can evaluate their work by having them (1) write a two-page paper describing the condition in which they found the Wikipedia page and the changes they made (i.e., for larger classes), or (2) use the Wikipedia page as a visual aid in a class presentation about their particular election (i.e., for smaller classes).

BENEFIT FOR STUDENTS

Compared with the traditional description papers about another country's system of government or a particular election, the incorporation of Wikipedia has many advantages. First, it incorporates several tactics that social science research suggests are useful for student learning and retention. King and Sen (2013, 621) suggested that social science research presents three main generalizations about improving teaching: "(1) social connections motivate, (2) teaching teaches the teacher, and (3) instant feedback improves learning." To some extent, all three of these generalizations are incorporated in Wikipedia editing.

Figure 1

Example of an Election "Stub" on Wikipedia

Source: https://en.wikipedia.org/wiki/Liberian_general_election,_1955.

Convincing people to do work that benefits only themselves often is more difficult than convincing them to do work that involves social interaction or that benefits the community (King and Sen 2013, 622). In this case, motivating students to conduct research so that they can write a better paper and earn a higher grade is likely to be less motivating—especially in the era of grade inflation3—than knowing that their work will be read by and benefit a larger community of students and researchers. The idea that they will be presenting their work to a much broader audience for evaluation is likely to be a strong motivation for excellent research and avoids the tendency for students to do "just enough" to receive the grade they desire. For example, teachers in Advanced Placement and National Writing Project classes reported that writing for a broader online audience gave students "an opportunity...to get more diverse feedback on their work, which encourages them to think more consciously about audience as they write, and in turn leads to greater investment in what is written" (Purcell, Buchanan, and Friedrich 2013, 25). Similarly, Lawrence and Dion (2010, 153; see also Wheeler, Yeomans, and Wheeler 2008, 993) reported that online writing "may encourage students to communicate more clearly and with greater grammatical correctness (if only to avoid potential ridicule from their classmates and the public at large!)."

Many studies have shown that "teaching teaches the teacher" (e.g., Chi et al. 1994; VanLehn et al. 2007). Every instructor has had the experience in which a concept they may have glossed over when taking a course is finally mastered when they are required to teach it to others. Some courses attempt to incorporate this using in-class presentations or relevant online tools. Creating a Wikipedia entry incorporates these same elements of teaching. A student writing about a presidential election with two rounds or a parliamentary election with closed proportional representation will be incentivized to understand these concepts to adequately explain the campaign and election results.

Finally, although Wikipedia does not guarantee instant feedback, many tools are available for it to be incorporated. The Wikipedia community has tens of thousands of contributors who regularly check entries. Every page on Wikipedia includes a "talk" page, where contributors can discuss the entry. The site also incorporates a "recent changes" page that is examined daily by many people and where others in the Wikipedia community (i.e., "Wikipedians") can conduct a type of peer review (Reagle 2011; Sunstein 2006, 153). In addition, Wikipedia incorporates several methods for noting when a page is not well referenced or the neutrality of an article is in dispute. Instructors also may encourage instant feedback by having students check one another's pages, which guarantees immediate feedback.

Furthermore, having students learn to write and edit Wiki pages is becoming an increasingly important skill and it fits well with instructor goals of providing more real-world writing in the classroom (e.g., Trueb 2013). Wiki pages are being used in numerous professional fields. They provide a document that anyone can edit and discuss easily; some companies suggest that they can cut the time needed to finish projects by 50% (Sunstein 2006). Among other companies, Wikis are used by Walt Disney, IBM, Yahoo!, Pixar, SAP, Oxford University Press, and parts of the US military. Sunstein (2006, 163) noted that "some people project that in the next five years, Wikis will be used by most businesses in the United States." Teaching Wiki editing skills may prove to be a marketable skill for our students as well as a demonstration of technological savvy that is useful in job applications. Learning about Wiki use also may help students when they design their own projects or conduct their own research in the future. (Many technical manuals and online course materials are now provided in Wiki format.)

Other projects in political science have shown that public presentation of online work improves student outcomes (e.g., Grossman 2011). Wikipedia provides a convenient, highly developed set of tools for encouraging experiential learning.

BENEFITS TO ACADEMIA

In addition to the benefits for student learning, we believe that having thousands of new editors working on Wikipedia's

election pages provides a significant benefit for a broader community of students, academics, and researchers in government and business.

Wikipedia entry typically provides links and citations (often absent in traditional encyclopedias), referring students to more reliable sources than can be found using a simple web search.

In addition to the benefits for student learning, we believe that having thousands of new editors working on Wikipedia's election pages provides a significant benefit for a broader community of students, academics, and researchers in government and business.

Whether or not we like it, the first source for most students in doing their research is Wikipedia; this is not always a bad thing. In addition to the information in the article, a well-formed

Although there are many well-known anecdotes about Wikipedia giving students misleading information and studies that document reliability problems in particular areas (e.g., Rector 2008),

Figure 2

Example of a Well-Developed Election Page on Wikipedia (edited for space)

Source: https://en.wikipedia.org/wiki/Mexican_general_election,_2006.

there also are several studies suggesting that Wikipedia is surprisingly accurate, especially in technology, mathematics, and the natural sciences. Indeed, one study found that some experts ranked Wikipedia-article credibility *higher* than nonexperts and estimated that 13% of articles contain mistakes (Chesney 2006). Another study in *Nature* found that Wikipedia was comparable to science entries in *Encyclopedia Britannica*. Of the 42 entries evaluated, the average Wikipedia article contained four inaccuracies, compared with *Britannica*'s three (Giles 2005). Specifically addressing political coverage, Brown (2011, 339–40) found that "Wikipedia is almost always accurate when a relevant article exists" and that it "suffers less from inaccuracies than omissions," especially on "older and more obscure topics."

The general rule for Wikipedia is that quality is proportional to the number of people actively editing an article, the number of edits, and the number of credible citations incorporated in the article. For example, the Liberian-election page shown in figure 1 was edited a total of 11 times by seven people, whereas the Mexican-election page shown in figure 2 was edited 1,246 times by 363 people. From this perspective, warning students away from Wikipedia may be more destructive (and futile) than encouraging them to improve entries. By sharing the results of their research on Wikipedia, students contribute not only to their own learning but also to the future learning of other students.

From an academic perspective, having students expand the information about historic elections on Wikipedia can be a great help to scholars interested in studying elections. Although the NELDA project (Hyde and Marinov 2012) is a major step forward in our ability to study historic elections, it has certain easily anticipated issues. Codebooks can provide only a finite amount of information. Whereas the general sources used are listed (and provide the core of our recommended sources for this project), the source(s) of any particular coding decision is opaque. For example, when the dataset lists a credible poll or reports of fraud as existing, we do not know from which report(s) these claims originate. Neither do we know the specific details of these claims—what were the numbers reported by the polls or what was the extent of the alleged fraud? Wikipedia provides an easy, accessible forum for posting this information. Indeed, encouraging the collectors of election data within academia, non-governmental organizations, and the government to post this information on Wikipedia provides an almost limitless method for documenting data collection and publicizing resources such as Organization for Security and Cooperation in Europe (OSCE) reports.

Researchers in business and government also can benefit from an expansion of Wikipedia's historic election coverage. Information that is readily available in the context of US elections—for example, historical accuracy of polling companies, political-party records, and even results of past elections—is often more difficult to find for other countries. To learn simple facts about historic elections in a country of interest, junior researchers rely on large book volumes or databases that are available only in university libraries. Putting this information on Wikipedia would provide an invaluable first source for their investigating. Even after more university resources are digitized and/or opened to the public, Wikipedia's citations can provide a quick, convenient place for researchers to discover where desired information is located.

CHALLENGES

We are not the first scholars to suggest the use of Wikipedia for teaching. The Wikipedia Foundation provides a guide for using Wikipedia editing as part of a course,[4] and the Wikipedia Ambassadors attempt to train students about how to edit Wikipedia.[5] The associated websites provide numerous materials for instructors. One example of a successful project is from the field of law, in which a law professor leveraged the research of students in his Cyberlaw class to create or improve 198 Wikipedia pages on general topics and case summaries.[6]

These resources also outline some of the challenges. Students should be informed that Wikipedia articles are intended to be neutral in content and tone. They also should be aware of the importance of citations and using quality sources. With high school experience primarily in writing opinion-based essays and generally unfamiliar with citation standards, students may encounter problems if they are not aware of these norms. Wikipedia provides specific examples of best practices for classroom projects.[7]

Instructors should review these materials and become familiar with the mechanics and editing policies of Wikipedia. However, these challenges are no more daunting that those typically associated with other classroom technologies; in fact, they are much easier to master than many online technologies currently used in university classrooms.

CONCLUSIONS

We advocate the incorporation of Wikipedia editing into a simple lesson plan for introductory courses on comparative politics or elections. Taking this step is expected to improve student learning outcomes and benefit a much broader community. Although we recognize the widespread antipathy toward Wikipedia in academia, instructors and students are likely to be better served by embracing it as a resource and encouraging students to be active stewards than by discouraging them from visiting the site. As noted previously, we provide a website with all of the resources that an instructor needs to implement the lesson plan (available at http://electionwikiproject.wikispaces.com).[8] In the spirit of this article, most of the assignment documents are structured as a Wiki. We encourage readers to submit their own changes, additions, and advice in the document and on the website, and we look forward to the feedback. ■

NOTES

1. See http://electionwikiproject.wikispaces.com.
2. See hyde.research.yale.edu/nelda.
3. See www.gradeinflation.com.
4. See en.wikipedia.org/wiki/Wikipedia:Student_assignments. See outreach.wikimedia.org/wiki/Using_Wikipedia_as_a_teaching_tool_in_higher_education_%28Bookshelf%29.
5. See en.wikipedia.org/wiki/Wikipedia:Ambassadors/Resources.
6. See en.wikipedia.org/wiki/User:Brianwc.
7. See en.wikipedia.org/wiki/Wikipedia:Student_assignments#Examples_of_best_practices.
8. Users can click on the "pages" link on the right-hand side of the page to access .pdf versions of documents that explain how to edit Wikipedia and a student's sample report about the 2012 Mexican election.

REFERENCES

Brown, Adam R. 2011. "Wikipedia as a Data Source for Political Scientists: Accuracy and Completeness of Coverage." *PS: Political Science and Politics* 44 (2): 339–43.

Chesney, Thomas. 2006. "An Empirical Examination of Wikipedia's Credibility." *First Monday* 11 (11). DOI: http://dx.doi.org/10.5210%2Ffm.v11i11.1413.

Chi, Michelene T., Nicolas DeLeeuw, Mei-Hung Chiu, and Christian Lavancher. 1994. "Eliciting Self-Explanations Improves Understanding." *Cognitive Science* 18 (3): 439–77.

Giles, Jim. 2005. "Internet Encyclopedias Go Head to Head." *Nature* 438: 900–901.

Grossman, Matt. 2011. "Online Student Publishing in the Classroom: The Experience of the Michigan Policy Network." *PS: Political Science and Politics* 44 (3): 634–40.

Hyde, Susan D., and Nikolay Marinov. 2012. "Which Elections Can Be Lost?" *Political Analysis* 20 (2): 191–210.

King, Gary and Maya Sen. 2013. "How Social Science Research Can Improve Teaching." *PS: Political Science and Politics* 46 (3): 621–29.

Lawrence, Christopher N., and Michelle L. Dion. 2010. "Blogging in the Political Science Classroom." *PS: Political Science and Politics* 43 (1): 151–6.

Lella, Adam. 2013. "comScore Releases Top 50 U.S. Multi-Platform Properties for September 2013." Available at http://www.comscore.com/Insights/Blog/comScore_Releases_Top_50_US_Multi-Platform_Properties_for_September_2013 (accessed on January 30, 2014).

Purcell, Kristen, Judy Buchanan, and Linda Friedrich. 2013. "The Impact of Digital Tools on Student Writing and How Writing Is Taught in Schools." *Pew Research Center National Writing Project*. Available at http://www.pewinternet.org/~/media/Files/Reports/2013/PIP_NWP %20Writing%20and%20Tech.pdf (accessed on January 31, 2014).

Reagle, Joseph M. 2011. *Good Faith Collaboration: The Culture of Wikipedia*. Cambridge, MA: MIT Press.

Rector, Lucy Holman. 2008. "Comparison of Wikipedia and Other Encyclopedias for Accuracy, Breadth, and Depth in Historical Articles." *Reference Services Review* 36 (1): 7–22.

Sunstein, Cass. 2006. *Infotopia: How Many Minds Produce Knowledge*. Oxford: Oxford University.

Trueb, Bettina. 2013. "Teaching Students to Write for 'Real Life': Policy Paper Writing in the Classroom." *PS: Political Science and Politics* 46 (1): 137–41.

VanLehn, Kurt, Arthur C. Graesser, G. Tanner Jackson, Pamela Jordan, Andrew Olney, and Carolyn P. Rosé. 2007. "When Are Tutorial Dialogues More Effective than Reading?" *Cognitive Science* 31 (1): 3–62.

Wheeler, Steve, Peter Yeomans, and Dawn Wheeler. 2008. "The Good, the Bad, and the Wiki: Evaluating Student-Generated Content for Collaborative Learning." *British Journal of Educational Technology* 39 (6): 987–95.

APSA Task Force Reports

The APSA task force reports seek to expand the public presence of political science by:

► applying political science research to public policy issues,

► and sharing exepertise on the most significant topics of public concern.

## APSA's current task force report!

Improving Public Perceptions of Political Science's Value

Read the new APSA task force report, which identifies means by which individual scholars and professional organizations can make political science's insights and discoveries more accessible, more relevant, and more valuable to more people.

Many of the following reports are also available as **FREE** .pdf downloads!

Visit **www.apsanet.org/reports** to obtain your APSA task force publication.

apsa
AMERICAN POLITICAL SCIENCE ASSOCIATION
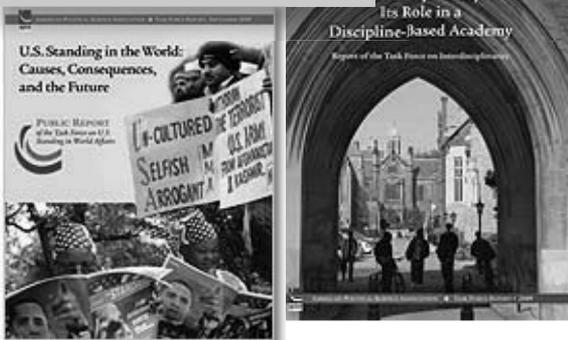
For questions or concerns, please contact publications@apsanet.org.