Wikipedia as a Tool for Teaching Policy Analysis and Improving Public Policy Content Online

Donna Lind Infeld and William C. Adams
Trachtenberg School of Public Policy and Public Administration
The George Washington University

ABSTRACT
Most young Americans use Wikipedia. Among those in the age range of most MPA and MPP students (18–29 years old), 62% report turning to Wikipedia (Pew, 2012), although they probably know it is taboo to cite it as a source in an academic paper. Ironically, however, encouraging students to strengthen Wikipedia may be pedagogically valuable. During the 2010–2011 academic year, the Wikimedia Foundation launched WikiProject U.S. Public Policy, “aimed at finding better ways to recruit experts and students to help improve Wikipedia content” (//bit.ly/jpae-w). This case study of one Wikipedia project examines the pedagogical utility of using open-source, wiki-based assignments in policy analysis courses.

Keywords: policy analysis, Wikipedia, Internet, pedagogy

WIKIS AND WIKIPEDIA
A wiki is a Web application that allows collaborative authorship. Unlike blogs, wikis are not time based or sequential. The three basic types of wikis are (a) those that can be edited and accessed only by group members; (b) those, such as Weebly, that can be edited only by group members but can be accessed by the general public (Martin & Smith, 2011); and (c) those that are “open-source,” editable and accessible to the public. The most widely used open-source wiki is Wikipedia, the Wikimedia Foundation’s online encyclopedia, which allows members of the public not only to read it but also to add to and amend its content. Wikipedia
ranks as the sixth most widely viewed website both world-wide and in the United States. Only two other wikis not under the Wikimedia umbrella1 can be found in the top 1,000 websites (WikiHow and Answers.com; see http://www.alexa.com/topsites). Student engagement with open-source editing as described here could well apply to other sites; however, because Wikipedia is the most widely used, it is an ideal starting place for engaging students.

Wikipedia currently posts nearly 4 million articles in English. As a result of being open source, the accuracy and balance of these articles are subject to debate. One early study, using expert blind comparison of 50 science topics in Wikipedia and Encyclopedi—a Britannica articles, found both sources to have low rates of serious errors, but Wikipedia had slightly more minor mistakes (Giles, 2005). Studies in a range of fields including medicine, pharmacology, philosophy, and library science have reported Wikipedia to be generally accurate. Brown (2011), examining coverage in political science, concluded, “Wikipedia seems to be roughly as accurate as established reference sources” (p. 339). However, Rector (2008) found a higher error rate in articles in the field of history compared to three leading reference books. Thus recent studies indicate that Wikipedia is more accurate than many may think, but they also suggest room for improvement in this perpetual work in progress. Indeed, as will be seen, class projects offer a provocative opportunity to refine Wikipedia content.

Wikipedia has been incorporated into teaching a wide range of disciplines at both the undergraduate and graduate levels, including, for example, history, chemistry, psychology, law, American studies (Wikipedia: School and university projects), anthropology, and environmental studies (http://outreach.wikimedia.org/wiki/Education/Case_Studies). Several potential advantages of using Wikipedia in academic courses have been identified by authors who have written about their experiences (Callis et al., 2009; Obar, 2011; Patch, 2010). Among other things, these authors have suggested that contributing to Wikipedia can give students valuable experience in four important areas:

1. Collaborating in a diverse environment
2. Fostering critical thinking about evidence
3. Effectively communicating information to a broad public audience
4. Appreciating the role of access to information in a democratic society

These objectives reflect the pedagogical approach that Newman, Marks, and Gamoran (1996) call authentic pedagogy. They argue for educational activities requiring students to be engaged in the construction of knowledge, engaging in disciplined inquiry, and providing value beyond school. Although these tactics could be helpful in many fields, they are particularly germane to the pedagogy and practice of both public administration and public policy where team-based research is widely used. Analysts must carefully weigh the best available evidence and then must successfully communicate their findings to varied stakeholders.
Other pedagogical values of using wikis may derive from the power of social networking and external transparency. Public access to student products via wikis can “increase the motivation for delivering work with high quality” (Dalsgaard & Paulsen, 2009). The presence of an engaged audience outside the classroom is a distinctly positive incentive for students (Baltzersen, 2010). If this Wikipedia assignment does indeed spur students in these ways, it could be a serious pedagogical tool.

**The Wikipedia Public Policy Project**

Over 30 faculty members at 26 universities participated in the WikiProject *United States Public Policy* during academic year 2010–2011 (Table 1). Courses that incorporated Wikipedia activities ranged from general policy courses to field-specific courses in environmental policy, economics, law, and many others (Table 2).

Table 1. Participating Universities

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<th>Boston University</th>
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<td>San Francisco State University</td>
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Approximately 800 students participated in the project. Brief descriptions of the class assignments are available online (//bit.ly/jpae-a). In most courses, students were tasked, either individually or in groups, to develop a new page or substantially improve existing Wikipedia pages (e.g., Georgetown University [//bit.ly/jpae-b]
and James Madison University [//bit.ly/jpae-c]). In a few courses, students often created new pages on rather specific topics that lacked any coverage (e.g., Louisiana State University [//bit.ly/JPAE-LMtS9j], Western Carolina [//bit.ly/JPAE-NVb5dJ],

Table 2.
Examples of Courses in the Wikipedia Public Policy Project

- Examples of Courses in the Wikipedia Public Policy Project
- General Courses
- Policy Analysis
- Public Policy Analysis: Public Roles in Private Markets
- Public Policy Making (including policy analysis)
- Public Policy Design and Evaluation
- Political Research Seminar
- Professional and Technical Editing
- Political Communication Seminar
- Public Relations Seminar
- Public Affairs Seminar
- Wikipedia and Public Policy
- Policy-Focused Courses
- Telecommunication Policy Analysis
- Environmental Policy
- Energy Economics and Policy
- Cyberlaw
- Federal Indian Law and Policy
- Copyright, Commerce, and Culture
- Advertising and Marketing Law
- Transnational NGOs in World Affairs
- Refugees in the Arab World
- International Trade and Strategy
- Approaches to Development
- Women and Human Rights
- Habituating and Addictive Drugs in Our Culture

Source. WikiProject United States Public Policy
and San Francisco State University [/bit.ly/jpae-d]). Some assignments required students to use the qualitative assessment matrix ([/bit.ly/Y6cKSZ] to evaluate current pages (e.g., at Michigan State [/bit.ly/JPAE-MGazom] and Troy University [/bit.ly/jpae-e]).

Although the Public Policy Project has ended, the Wikimedia Foundation maintains a multidisciplinary Wikipedia Education Program that provides support in the form of newsletters, training materials, and sample assignments as well as online and in-person “Wikipedia Ambassadors” trained to assist new contributors. Of course, any faculty member can develop a Wikipedia assignment without formal affiliation with such a project. The following case experience recounts how it can be an interesting, useful, and engaging undertaking.

Before initiating the WikiProject U.S. Public Policy, staff from the Wikimedia Foundation met with faculty of several policy schools to gauge their interest and encourage participation. They visited the Trachtenberg School of Public Policy and Public Administration at The George Washington University in the late spring of 2010. I was intrigued by the idea of integrating Wikipedia into the policy analysis class, and I pilot tested a short assignment that summer, requiring students to critique online public policy content and offering bonus points if they changed online text.² The following fall, my class (and several others at GW) became official participants in the project. Two of our MPA/MPP students, trained as Wikipedia Ambassadors, give brief instruction about editing Wikipedia content to the class. With their support, I required students to add new material to Wikipedia pages after conducting extensive policy research.

Although some courses in the Public Policy Project jumped right into a Wikipedia assignment, I considered some substantive expertise to be essential before editing a Wikipedia page. Therefore, I continued to require a fairly traditional policy analysis paper, but instead of being due at the end of the semester, it was due two thirds of the way through. Only after that paper was completed were students to move on to the Wikipedia assignment.

Clearly, writing for Wikipedia is not the same as producing a policy analysis. Policy analysis is generally defined as including certain basic steps: problem definition, specification of criteria for evaluating policy alternatives, identification of policy options, and a comparative analysis culminating in a policy-relevant recommendation. Each of these steps involves gathering information about what currently is known, identifying what is agreed upon, and frequently applying findings from one arena to a different issue.

In contrast, Wikipedia is an encyclopedia, designed to share agreed-upon knowledge, not to assess likely outcomes of untried initiatives. However, some key components of a policy analysis—especially the problem definition and identification of policy options—do offer relevant and appropriate content for Wikipedia.

Students identified a Wikipedia page related either to the policy problem that was the focus of their analysis or to one of the policy alternatives they had
assessed. In every case, students found relevant Wikipedia pages. They described the quality of these pages as ranging from “limited” to “impressive.” Topics included

- Alternative Minimum Tax
- “Don’t Ask, Don’t Tell”
- DREAM Act
- Emergency Contraception
- Equal Pay for Women
- Maternal Health
- Oakland Unified School District
- Occupational Safety and Health
- Piracy in Somalia
- Recidivism

Students drew on class readings in critiquing the page and submitted changes online to improve its substance, style, tone, and/or documentation. They were expected to contribute at least half a typed page of new content, as a single section or throughout an article. Most inserted a page or more. They had the benefit of feedback on their major policy paper; but they were empowered to make Wikipedia changes as they saw fit, without preapproval from me. The final stage was to monitor feedback from the Wikipedia community. I asked them to track the page for at least 10 days, which seemed to be a reasonable window to make sure all reactions were noted. Only about one third of the students received any feedback, typically within a few days after posting. They reported all their Wikipedia contributions, along with the ensuing online reception, in a summary and analysis (employing relevant course readings) submitted to me at the end of the semester.

Learning the technical skills of editing Wikipedia was not difficult for these graduate students. Most were in our MPA program, and some were in our MPP or related master’s degree programs. Although a Wikipedia Ambassador conducted the in-class training the first semester, not a single student came to her lab sessions or contacted her individually for help. In subsequent semesters, I simply offered a 10-minute in-class segment about editing Wikipedia. Initially, the process of editing Wikipedia was more daunting to me than it was to these Facebook-generation students.

How did contributing to Wikipedia, an open-source Wiki, enhance the teaching of policy analysis in terms of the four objectives noted earlier?

**Objective 1. Collaborating in a Diverse Environment**

Working in teams or other work units is central to careers in public administration and public policy, particularly in conducting policy analysis. Certainly on the job, analysts will rarely be able to produce and release research (or anything
else, for that matter) without considerable review and scrutiny. As an apprenticeship for the real work of collaboration and negotiation, MPA and MPP courses often assign students to team projects.

Students working on Wikipedia projects must be prepared to engage in a more challenging sort of collaboration, involving many people from varied backgrounds, and not confined to the United States. They must do so in a demanding online, written dialogue. Contributing to Wikipedia entails more than just adding or deleting content. Via the history and talk tabs on each page, contributors (and readers) can see the trail of past changes and have off-line conversations with others interested in that page in order to defend their modifications. The result is collaborative authorship beyond a school paper with perhaps like-minded friends.

Wikis are democratic in that everyone can participate, and they permit “distributed authorship,” engaging groups to reach consensus (en.wikibooks.org/wiki/Wiki_Pedagogy/Pedagogical_Potential). As Jonathan Obar, a communications professor, put it (2011):

Students learn the technical and social skills needed to work with wiki-technology, they’re pushed to collaborate and engage with Wikipedia’s social network, they are thrust into a thriving open-source movement, and they are exposed to a growing and increasingly relevant wiki-culture. Students experience all of this, while simultaneously learning course content. (//bit.ly/JPAE-PXQVzM)

In fact, two thirds of the students in my class did not receive any revisions or pushback on their Wikipedia contributions following their postings. Some students found themselves surprisingly disappointed that their work had not prompted feedback or counter-editing, although I argued that this outcome implied that their work had been so very solid—fair, well documented, and clearly conveyed—that it did not invite criticism or further editing. By monitoring activity of regular “watchers” of their page, they could see that others were tracking its amendments, so this was a plausible interpretation.

Students who did receive feedback were strikingly positive about their experiences. Andrew Harris described editing on Wikipedia to the student newspaper. Someone changed his text within 48 hours, but by applying the expertise he acquired in conducting his policy analysis, he justified the new content in the online discussion section and had it reinstated in full (Ferris, 2010).

One very different case might be viewed as having a negative but constructive outcome. This student had her content completely and rapidly removed because it was considered biased and inadequately sourced. I had given her similar feedback on drafts of her research, but it appeared that her embarrassment from online outcome had more impact.
Most students were pleasantly surprised by the quality and civility of the ensuing conversations, and trepidation turned to confidence. One typical observation:

My first experience editing Wikipedia was initially wrought with fear because I was unsure what feedback my content would receive from the public. My fear was unnecessary, however, as the response to the content was subdued and uneventful. Ultimately, I felt that all of the changes made were valid and served to enhance the accuracy of the page’s content.

Another student reflected:

My communication with … other users on various talk pages shows that you can have a discussion on a public and free forum about [what a complex policy topic] means for different races and genders. The debate and our subsequent interaction shows how complicated this policy problem can be. Our back and forth demonstrated the various viewpoints on pertinent details surrounding the issue, and how the Internet can be a constructive forum.

Ultimately, in their careers as administrators and analysts, graduates will have to face having their work products vetted and critiqued by strangers. In this exercise—with a far wider audience than an ordinary class assignment—students seemed to gain confidence that strong preparation and a high-quality product, along with a respectful and collegial discourse, made an enormous difference in their capacity to have a constructive voice.

Objective 2. Fostering Critical Thinking About Evidence

Much of the pedagogy of public administration can be traced to the teachings of Dwight Waldo. In an interview by two of his students, Brown and Stillman (1986, p. 141), Waldo emphasizes two fundamental questions related to conceptual clarity and strength of evidence: “What are we talking about?” (Is it a concept, a problem, or a fact?) And, “How do we know?” (What tests of truth are relevant and admissible?) These questions are central to study across social science disciplines and fundamental to public policy and the tool of policy analysis. These are essentially the skills of critical thinking. Students are expected to be explicit about what we know and how we know it, with thorough documentation, for each step of a policy analysis.

The need to be able to clarify “messy” problems is a vital skill in policy analysis. O’Hare (2008) notes that MPP students must learn to address poorly specified questions that are typically based on vague or ambiguous concepts. He argues that faculty can best teach these skills with activities that involve actively coaching rather than telling students exactly what to do and how to do it. Likewise, Abel argues
that MPA students need to learn, among other things, “how to make rapid decisions based on incomplete and biased information” (2009, p. 154). Thus we need teaching tools that enable students to clarify concepts and problems as well as assess the validity of information they use. Although writing a policy analysis paper requires these skills, adding a Wikipedia component means that how well they convey and document that evidence will be tested with a much wider audience.

The Wikipedia assignment forced me, as the instructor, to address how to assess information sources even more explicitly than I had in previous semesters. But just describing valid information or giving students feedback on a paper is different from getting that feedback from the Wikipedia community. To an extraordinary degree, the assignment heightened students’ commitment to be able to defend their online input with the strongest possible evidence. Rather than something to collect dust in a professor’s file cabinet, they were suddenly targets that the entire world could appraise.

Critical thinking in policy analysis employs fact-based information but is ultimately, as specified in its name, analytical. In contrast, Wikipedia, as an encyclopedia, calls for agreed-upon facts. Two Wikipedia policies are especially relevant to this distinction. Content cannot be original research (unpublished data, concepts, etc., “or any new interpretation, analysis or synthesis of published data”), and content must be verifiable, citing reputable sources (en.wikipedia.org/wiki/Wikipedia:List_of_policies). Validity of information on Wikipedia is established through peer review by an engaged and, hopefully, cumulatively fair-minded community (Dede, 2008).

The perceived stakes of the Wikipedia project seemed to dramatically increase students’ commitment to reliable, justifiable evidence:

This assignment has proven to be a great training for being able to present only reliable information.

[You become] personally invested. … In fact, after I posted my content, I checked the website almost daily to see if anyone had changed it. I was armed with hundreds of pages of research to back up my postings in case anyone had audaciously changed my content.

The possibility that external critics might find their contributions flimsy and unsubstantiated seemed to dramatically increase the pressure:

I was really concerned by the fact that publishing any information that was not well supported by evidence could have been contested. Therefore I wanted to be perfectly sure that the text I was going to publish could not be challenged under the points of sourcing and neutrality.
Objective 3. Effectively Communicating Information to a Broad Public Audience

The participatory culture of Wikis creates a sense of social connections because participants care what other people think and believe that contributions matter (Jenkins, 2006). Becoming engaged in this culture helps students develop a professional self-image. According to Warschauer and Ware (2008, p. 222), “Technology and literacy are intimately tied up with expressions of individual and social identity, as users of technologies enter into new communities of practice and enact new social roles.”

Writing for the Wikipedia audience is clearly different from conducting a policy analysis. Several major textbooks explicitly define the central role of an identified client in policy analysis, often in a contractual relationship (e.g., Bardach, 2011; Patton, Sawicki, & Clark, 2012; Weimer & Vining, 2010). The goal of some clients may be truly unbiased and value neutral, but the client may still be engaged with defining the issue and other aspects of an analysis. In the case of submitting content to Wikipedia, there is a large audience but, strictly speaking, no client. If students prepare traditional policy analyses with a client in mind, transporting their research to Wikipedia requires them to consider the content from a different vantage point, that of the general public.

Comments from several students conveyed that interacting with a large public audience helped them develop confidence and feel responsible for their work. For example:

Knowing that the content I was editing would [be] visible to every Wikipedia user made me feel responsible for the reliability of my production. I would dare to compare this feeling of responsibility to one that a policy analyst feels towards her client: all Wikipedia readers (almost all Internet users with knowledge of the English language) were my potential clients. … At first I was almost scared by the large audience I could reach just by improving a simple wiki-page. But at the same time this represents the great potential that Internet can offer.

One student noted that the assignment had helped her examine evidence closely as well as convey it clearly.

This exercise was very useful in furthering my ability to apply what Bardach calls the “Grandma Bessie Test,” i.e., to be able to explain my story to someone with little or no knowledge of the topic in a simple and clear way.
Objective 4. Appreciating the Role of Access to Information in a Democratic Society

One broader benefit of using a Wikipedia assignment is encouraging students to think about the importance of access to information. As James Madison (1822) put it long ago, “A popular Government without popular information, or the means of acquiring it, is but a Prologue to a Farce or a Tragedy; or, perhaps both.” Their online work seemed to vividly remind students of this essential component of a participatory political system:

This Wikipedia assignment opened my eyes for the need for policy makers to be more involved in the free exchange of information over the Internet.

Drawing on a class reading, one student noted:

Al Gore, in his book Assault on Reason, identifies the Internet as not only the best option available, but as the actual path towards participative democracy. I think “wiki” platforms can be considered one of the best representations of this potential. … Internet and platforms such as Wikipedia can be helpful in increasing democracy and information sharing.

Likewise, other comments addressed how students felt engaged and responsible as a result of this exercise:

I loved contributing my hard-earned research and ideas to Wikipedia. I felt I was helping a grander audience have a more balanced perspective on my issue. It was awesome!

One student perfectly summed up this objective:

[I got to] … take my semester-long research project out of an academic context and focus on aspects most relevant to the general public. It gave me a first-hand insight into the way Wikipedia helps promote accuracy by encouraging users to forge a consensus. ... It helped me to realize the role that social media sites have in defining policy problems for the public.

Thus, as a result of this assignment, students seemed to feel a heightened level of engagement with the policy debate.
**Lessons Learned**

Lesson one: Implementing a Wikipedia assignment, although perhaps initially intimidating, is not difficult, either for the instructor or students. Trained Wikipedia Ambassadors are available on many college campuses. Wikipedia offers tutorials and “cheat sheets” (//bit.ly/jpae-t) on how to edit content online. In fact, unless there are changes to fonts or style, it is basically just a matter of cutting and pasting.

Lesson two: Be prepared for a range of strong reactions. The assignment generated considerable interest, including an article in the campus newspaper. However, there was also pushback from some colleagues who dismissed the assignment as anti-academic and nonscholarly. Wikipedia is still controversial in academic circles, and this project can inflame that debate.

Lesson three: At the outset, it is essential to be clear about how the exercise employs and sharpens skills required of policy analysts. In the concluding anonymous class evaluations, a few (5 out of 30 students) wrote that the assignment was insufficiently pertinent to the course. In subsequent semesters, I more explicitly talked about how the Wikipedia exercise is germane to policy analysis with its similar requirements for thorough documentation of sources, clarity in writing, avoiding bias in content or in tone, sensitivity to a range of perspectives, professional negotiation with outside critics, and providing reliable information to the public. This new prefatory discussion was helpful for those students who did not initially see the logic and embrace the idea.

Lesson four: Teaching with Wikipedia proved to be engaging and pedagogically rewarding. Wikis offer a democratic environment where students can test their knowledge, make a contribution to information in the public arena, and develop professional writing skills and identity. They offer a real-time environment that maximizes interaction, and a platform for refining a range of communication, collaboration, critical thinking, and research skills. Students become more engaged with real-world issues while being held accountable to an audience representing a range of stakeholder views. The Wikipedia experience illustrates Abel’s (2009) call for creative use of stimulating technology to help our students gain the complex array of skills, values, and sensitivities required by public service.

Contributing to Wikipedia helps students clarify whether the topic of concern is a concept, a problem, or evidence. It also forces them to weigh the strength of that evidence as they address the question of “how we know.” When applied to policy analysis, the assignment has direct relevance to the challenge of specifying “messy” problems and identifying and defining policy options available to address those problems. As stated by one student, “I believe Wikipedia is the most ambitious social experiment to answer the question of ‘what is knowledge?’ and I am very happy to be part of this discussion.”

Lesson five: Contributing content to a major, open-source website transformed an ordinary classroom exercise into an opportunity to inform a worldwide audience on challenging public policy issues. With elevated stakes, the process acquired
a greatly heightened level of excitement, pressure, and responsibility. Clearly, Wikipedia can be an innovative tool in teaching policy analysis and a medium for distributing research conducted in a range of policy courses. As students enrolling in our programs arrive with increasing levels of media literacy and technological savvy, they embrace opportunities to employ those 21st-century tools. Using Wikipedia, or another online open-source environment, is a unique and stimulating way to engage students, make the material come alive, and bring our courses into the digital age.

Footnotes

1 Wikimedia Foundation sponsors other open-source sites such as Wikimedia Commons (a data set of usable media files), Wikinews, Wiktionary, WikiSource (free content publication), Wikiquote, Wikibooks (open-source textbooks), and Wikiversity, “a project devoted to learning resources, learning projects, and research” for use in education (wikiversity.org/).

2 Although this entire article is coauthored, this section is written in the first person by the course instructor, Donna Lind Infeld.

References


Donna Lind Infeld is a professor at the Trachtenberg School of Public Policy and Public Administration at The George Washington University, where she is also director of the PhD program. She teaches graduate courses in policy analysis and research methods. Her recent publications have focused on public administration education in the United States and China.

William C. Adams, professor of Public Policy and Public Administration at the Trachtenberg School at The George Washington University, teaches research methods and applied statistics courses to both MPA and MPP students. He has been a frequent contributor to the *Journal of Public Affairs Education*. His most recent book is *Election Night News and Voter Turnout*. 

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