# Sleeping with the Enemy: Wikipedia in the College Classroom

Cullen J. Chandler and Alison S. Gregory *Lycoming College* 

"WIKIPEDIA IN THE COLLEGE CLASSROOM? Are you serious?"

"Yes, quite."

"But hasn't Jimmy Wales, the founder of Wikipedia, discouraged college students from using this free online encyclopedia, saying, 'For God sake, you're in college; don't cite the encyclopedia'?"

"Yes, but..."

Wikipedia is a free online encyclopedia that is written and edited solely by volunteers who have no qualifying credentials save an Internet connection. With over 3.1 million articles in English, Wikipedia is indeed a formidable reference web site.<sup>2</sup> From a research standpoint, Wikipedia is both the sinner and the saint: because anyone can make changes to content, Wikipedia lacks scholarly backbone in the form of subject experts and a referee process, but there is strength in its continual updating, allowing new information to be added very quickly instead of taking years to be added to a traditional print encyclopedia.<sup>3</sup> While it certainly should not be the one and only source for undergraduate research, Wikipedia may have appropriate uses in the college classroom.

If there are no editors or peer referees, where is the quality control in Wikipedia? Some will argue that if enough Wikipedians are working on

and watching a given article, surely they will catch any errors. Print encyclopedias go through rigorous professional editing and review—surely they must be inherently more accurate! Not necessarily. According to a 2005 study done by Nature, Wikipedia contains only slightly more inaccuracies in science-related topics than does *Encyclopaedia Britannica*.<sup>4</sup> Wikipedia averaged four inaccuracies per entry, while Britannica had three; in terms of serious errors (i.e., misinterpretations of important concepts) the encyclopedias each weighed in with four.<sup>5</sup> There is a tendency within academia to think that print encyclopedias are "the gold standards of information quality against which the failings of faster or cheaper resources can be compared. These findings [from the *Nature* study] remind us that we have an 18-carat standard, not a 24-carat one." While having no official editors, the Wikipedia community has the benefit of being composed of "ideal library patrons. These are people who are passionate about acquiring and sharing information." Perhaps we have been hasty in our judgment of Wikipedia's accuracy.

Scholars understand that new ideas, be they philosophical or scientific in nature, build on the knowledge of those who have come before. Scholars can take advantage of the foundations of wisdom and experience that precede—and frame—what is to come next. But academicians are not the only ones who understand this contextual concept: "wiki authors understand that the recording of information by any one of us really only builds on the efforts of all the other thinkers, readers, and writers who have gone before. It embraces the process nature of reading and writing, preferring the constantly-evolving-but-never-finishing to the static and rapidly obsolescing 'product.'" Wikipedians seem to understand that the information-building process does not exist in a vacuum. The online product is thus very similar to more traditional encyclopedias in that its articles are syntheses of accumulated knowledge, ready to serve as quick references.

Wikipedia's accuracy levels are similar to traditional tried-and-true sources. Its entries on academic topics (i.e., not popular culture topics) are timely and are built according to the principles of knowledge as a process. Perhaps from an academic standpoint, Wikipedia is not completely useless. Since it is constructed as older, paper reference works, and indeed benefits from a good degree of expert contributions (anecdotal evidence shows that at least some Ph.D. holders have written for Wikipedia), college faculty should be no more afraid of Wikipedia than they are of *Britannica*. Moreover, increasing numbers of faculty openly admit to checking facts for lectures there—just as students find facts for research or studying.

Students feel comfortable with Wikipedia and will use it to find information. The problem faculty have is with students' blind acceptance of its information—produced by God-knows-whom and thus potentially suspect.

Students, these faculty would say, need to be more aware of the drawbacks of Wikipedia and the need to be careful using it. Many college instructors ban the use of Wikipedia for these reasons. But, if critical thinking is part of a college education, why not teach students about the nature of Wikipedia like we do for primary and secondary sources and thus help to sharpen their critical awareness?

Lycoming College is a small, private liberal arts college located in Williamsport, Pennsylvania. With an enrollment of about 1,500 students, Lycoming is a close-knit community where faculty know their students and where faculty collaborations are strongly encouraged. Lycoming's students are like most other undergraduates—trying, often for the first time, to do research. They attempt to find at least nominally relevant resources, preferably available in full-text online. Wikipedia seems a "godsend" to these novice researchers; one need only Google the topic, see what Wikipedia has to say, and "Voila!"—research completed. Two faculty at Lycoming College wanted to incorporate this resource into a research and information literacy project, with the goal of enhancing students' critical awareness of its strengths and limitations.

Dr. Cullen J. Chandler, Assistant Professor in the History Department at Lycoming College, has struggled, like other faculty members, to help students learn how to do appropriate college-level research (i.e., going beyond Google.) A purist, Chandler believes that traditional publications like books and journals are still the gold standard, as they are produced by experts and are frequently peer-reviewed. He also sees the quite valuable potential of the Internet in making quality sources widely available as well as the many online resources that are not necessarily of high quality. Tired of seeing Wikipedia in his students' bibliographies, Chandler decided to ban its use entirely for papers in his classes. Use Wikipedia and the paper would receive a grade of zero, no questions asked.

This banning tactic represents one end of the spectrum of ideas college professors have about Wikipedia; on the other end are those faculty members who tolerate, even if they do not embrace, its use. There are those who instead say, "Why rush to ban the single most impressive collaborative intellectual tool produced at least since the *Oxford English Dictionary*, which started when a non-academic organization, the Philological Society, decided to enlist hundreds of volunteer readers to copy down unusual usages of so-called unregistered words."

In the summer of 2007, Chandler saw an idea in the "H-Teach: Teaching history in the University" listserv that made him reconsider his approach to the place of Wikipedia in his classes. <sup>10</sup> The listserv dialogue was about a class project that had students deliberately insert false information into

existing Wikipedia articles, with the goal of teaching students that anyone can edit the famous free encyclopedia and not always for the greater good. Intrigued with the idea of embracing the controversial resource rather than fighting it, Chandler began to consult with Alison Gregory, an Assistant Professor in the Snowden Library at Lycoming College. "What if, instead of having the students *tamper* with Wikipedia, we had the students actually *write* the articles?" he asked. Chandler and Gregory thus set about constructing an assignment that would blend research, technology, and information-literacy goals with the standard aim of building critical thinking abilities.

The perfect opportunity for this enterprise presented itself in the form of "History 232: The Rise of Islam," scheduled for the Spring 2008 semester. Twenty-six students registered for the class—a manageable number for a project of this nature—and it is a course that addresses topics that are either frequently debated (i.e., jihad, Sharia, and the Crusades) or are little known (i.e., the battle of Jacob's Ford, Bukhtishu, and Abd al-Aziz ibn Musa).

The goals of this project were fourfold. Chandler and Gregory wanted the students to learn how to do college-level research, in this case on topics of Islamic history. The second goal was to have the students learn about the use of Wikipedia as a research tool, with the third goal of having students learn wiki-technology. The final goal was to have the students become better, more informed "information consumers."

After students in the course paired up, Chandler gave them a list of topics from which to choose. These topics were either completely missing from Wikipedia, or they had only a "stub" article (the designation that Wikipedia gives to very brief articles that are lacking in structure.)<sup>11</sup> The first stage of the project was to have the students research their topics, then write a four- to five-page paper based on primary and scholarly sources, and finally (after approval from Chandler) either create a new Wikipedia article or insert their research into the appropriate existing article.

While Chandler was generating a list of potential topics, Gregory was engrossed in a crash-course in the mechanics of Wikipedia. While it is quite simple to make minor edits or additions to existing text, it proved slightly more complex to establish a course page and to learn Wikipedia's coding system. Much to her relief, Gregory found a Wikipedia Projects Page that included a boilerplate template for projects of this nature. The Wikipedia Projects Page shows that Wikipedia is aware of, and in support of, initiatives like the Lycoming College Islamic history research venture. The Lycoming History 232 course page follows the pattern of the project template, giving students an introduction to the project, brief exercises to complete, and project deadlines.

Early in the semester, Chandler brought the students to the multimedia

library classroom for a session on finding appropriate resources for researching their topics, and also for a discussion of the Wikipedia project and its mechanics. The first step was to show students how to establish a username—Gregory also stressed the importance of always logging in to Wikipedia prior to making any edits, so the edits can be tracked by username, and Chandler would be able to verify the students' work. Gregory instructed the students to not use their real names, but to create a name that was neutral and at least did not detract from the group's credibility. One student group's first attempt to register a username—"thejesuschrist-vampirehunters"—was almost immediately censored by Wikipedia, which was an interesting first lesson for the students.

After establishing a username, students were asked to go to the course page where they had to complete three exercises. The first exercise asked students to experiment in a Wikipedia Sandbox, a special page designed for trial-and-error learning. When properly created, the Sandbox is automatically restored to its original version on a regular basis. The Sandbox for this course page was not correctly coded, requiring periodic manual resets by Gregory. Despite this minor setback, the practice sessions paid dividends. Students did their Sandbox practice in pairs during class, and their classmates, as well as Chandler and Gregory, could hear expressions of triumph and/or frustration. True to the nature of the wiki-enterprise, collaboration was the key ingredient; pairs of students helped other pairs with technical issues, modified each others' Sandbox entries, and worked with each other both online and by calling out across the room.

The second exercise was to make a small change to any Wikipedia article. The students were allowed to choose any topic, since the purpose of the exercise was to expose them to the Wikipedia editing system. Many of the students made changes to the Wikipedia article about Lycoming College; some made changes to articles about favorite cartoon characters, movies, or music groups. For this exercise, one pair of students (using the username "Screaminghistoriansofdoom") created the athletics section of the Wikipedia entry for Lycoming College.<sup>14</sup>

The third exercise required students to add a reference to a Wikipedia article (most of the students added a reference for the change they had made for Exercise 2). Because this project was for a college course, the students would have to document the sources they used just as they would for a more traditional research paper. Chandler and Gregory wanted the students to be familiar with how Wikipedia incorporates the documentation of sources, an important lesson to learn for both technical and academic reasons. "Screaminghistoriansofdoom," when creating the athletics section for Lycoming College, linked to the college's athletic pages using the Wikipedia code editing features.

In addition to wiki-technology skills, students deepened their abilities to work with other online technologies. Lycoming College uses an open-source course management system called Moodle. Within the Moodle application for History 232 was a link to the Wikipedia course page, so that students could easily access the page, along with an online forum dedicated to this project. Students were required to record their Wikipedia usernames on one thread within the forum, and additional threads for each exercise allowed students to document their work in the Sandbox, the changes they had made to an existing article, and the references they had added. The forum functioned as a communal message board for students to report their progress, ask questions, and express frustrations. Chandler and Gregory used the forum to respond to questions and to track efforts and accomplishments.

The students had approximately seven weeks to research their topics and to compose the four- to five-page "working papers." Chandler reviewed these papers and made suggestions to strengthen the content; all content had to receive approval from Chandler before the students were allowed to add their work to Wikipedia. These hard-copy papers, rather than the Wikipedia entries, were the basis for the students' grades on the project. This was done for two reasons: first, where students were adding to an existing article, they frequently had to reapportion their work to insert paragraphs (and sometimes only sentences) to blend with the existing content, and secondly, given the ever-changing nature of Wikipedia, we anticipated that some of the students' work would be almost immediately changed and we wanted to be sure that the unadulterated work was what was graded.

After all of the groups had posted their research on Wikipedia, the project moved into a second stage. The students were required to monitor the articles to see what changes other users would make to the page as a whole and to the students' information in particular. The students posted their findings—and often irritated comments—on the forum within Moodle, addressing what changes others had made to "their" Wikipedia page. The students' ownership of the articles was overwhelming! For the students in this course, it was the first time they had the "opportunity to become involved with creative work that, throughout the past century, has been largely a one-way stream from producers to consumers." <sup>15</sup>

Several intriguing incidents arose from this project. One pair of students (self-dubbed "iraka\_verona") earned the honor of having a fact from their article on "Islamic Civilization During the European Renaissance" appear in the Wikipedia "Did you know..." box on March 11, 2008, just six days after creating the page. "Did you know..." features vignettes from newly created articles and recently expanded stub articles. 16 It was

a mark of distinction for the students to have their work highlighted this way for public consumption.

Unfortunately, not all of the student groups fared so well. In addition to the one student pair who had their initial username censored, the students encountered other breaches of "wikietiquette." Wikipedia banned one pair of students for a 72-hour period because they repeatedly re-posted copyrighted song lyrics on the "History of Istanbul" page; the students were indignant because they felt that a simple reference to the musical group should negate the copyright issue (an unanticipated lesson in copyright as opposed to plagiarism). Another student group copied a picture from a movie studio site and posted it on Wikipedia; the image was removed and the students were prepared to re-post until Gregory reminded them that Wikipedia could ban them, too. One student article on Sharia (Islamic law) suffered from severe, profane vandalism; Wikipedia "bots" automatically detected the offensive words and reverted the changes to the previous article versions, but the page history still shows these incidents.

Perhaps the most interesting incident resulting from this project was that a professor at Illinois Central College contacted Chandler asking to see a copy of a student paper. Lycoming College and Illinois Central College both utilize Turnitin.com, a subscription-based plagiarism prevention service. (Chandler required the students in this class to submit their work through Turnitin.com prior to putting the material on Wikipedia.) Evidently, a student at the Illinois Central College plagiarized from a Wikipedia page that had been created by a student group involved in this project. Turnitin.com reported the match with the Lycoming students' paper, which had become the Wikipedia article. There was much twittering in the classroom about this—could you imagine taking your research from some other undergraduate taking basically the same class?! A very enlightening lesson indeed. The students began to see the importance of author authority by contemplating the differences between a credited author and an anonymous author.

The students learned many lessons from this project; some were intentional and some were added bonuses. Chandler and Gregory wanted the students to learn that anyone could have written the Wikipedia entry—do you really want to be quoting a person whose username is "pinkbunnyslippers" in your research paper? The author *could* be an expert with a sense of humor, or he or she could be the crazy cat collector down the street. Unintentionally, the students learned that Wikipedians do monitor usernames, profanity, and copyright. They also learned that their work is not sacrosanct and that there are many other Wikipedia editors out there who may or may not be polite in pointing out that the article is poorly written, or who may change the article contents to information that contradicts the sources!

An unintended—but most welcome—project outcome was that the students took a great deal of ownership of the articles that they created or supplemented. Knowing that their research would be out there for the world to see really made them more cautious with what they wrote than they would have been if they thought the only audience their work would have was Dr. Chandler and a drawer in a filing cabinet. "I'm proud of what we wrote," commented one student. Another commented, "We had to look at dozens of sources to find all of the necessary information for even this short article. We compiled it all in one place and that will be helpful for other people who want to know about this topic."

Student reactions to this project ranged from irritation to pride. Beginning on the first day of class, when Chandler introduced the project to the students, they reacted with a greater degree of worry and anxiety than expected. They all acknowledged using Wikipedia and yet they were terribly worried about how complex they feared the project would be and they voiced many complaints about having to do another group project. On the day of the library session where the actual mechanics of Wikipedia were introduced, student reactions eased. Once they saw how easy it was to make changes, their anxiety levels decreased and they even began to comment that, "this isn't such a big deal."

On the last day of class, the students had the opportunity to do a "show and tell" of their articles, the page histories, and the discussion pages for the articles. The students reactions by and large were indignation—how dare someone make changes to our article?! One student group referred to the article's other editors as "Wikijerks." For the few articles that saw no changes by others, those students now consider themselves to be the world's foremost experts (at least through Wikipedia) on the topic. This thought brought a fair amount of amusement to the class at the expense of said "experts," making the students contemplate once again the value of authority. Would you cite research done by your classmate?

How well did the project meet the goals? Chandler and Gregory were pleased with the outcome for the first goal—having students learn to do college-level research. The students did learn how to locate and use the appropriate research sources for this course through a variety of print and electronic resources. As a whole, the research that they did was of a good quality, complete with ample references. They utilized a number of print encyclopedias, an online database dedicated to Islamic studies, the course textbooks, and a variety of other resources. Chandler was pleased with the overall quality of the papers generated by this class and saw a stronger research base than he had seen with previous semesters' papers.

The second project goal was to increase the students' awareness of using Wikipedia as a research tool. Most of us, as academics, have consulted

Wikipedia for fact-checking or other simple information needs. Most of our students have consulted Wikipedia and have approached it relatively uncritically. The students started off as avid Wikipedia fans. One of the many hidden benefits of this project (from the professors' viewpoint, anyway) was that the students could not use Wikipedia—there was no information on their topics because they were to create it! By the end of the project, the majority of students in the class (roughly 80%) said that they now thought Wikipedia was less useful than they originally thought, but that it is still a good place to find citations directing readers to usable sources.

The students exceeded expectations for goal three (learning wikitechnology.) In fact, the students learned more about the functionality of wikis than did Chandler or Gregory. They became quite adept with the wiki-technology and used it effectively, taking advantage of Wikipedia formatting options such as adding images, linking to non-Wikipedia sources, and using the Wikipedia discussion pages quite adeptly. Two students expressed their discomfort with computers in general and said that made the project difficult for them, but that they both found the project useful because it made them aware of how a wiki works and they also became more comfortable with computers in general.

The fourth and final goal of the project was to help the students become better, more informed "information consumers." To succeed with this project, the students had to decide what kinds of information they needed, find said information, then absorb and integrate it. They had to evaluate the existing Wikipedia articles to decide what content could stay and what should be removed, or replaced by their own research. These students definitely became more educated and more critically aware "information consumers."

Fundamentally, the students came to appreciate what Wikipedia *is* and what it *is not*. Students expressed that they think Wikipedia is acceptable for a quick reference, and that the references for the individual articles can be quite helpful, but they were quick to point out that Wikipedia is not the be all and end all of research. As one student remarked at the conclusion of the project, "It's okay for the layperson to get an overview, but it's not good for research unless you just use it for the references."

Jimmy Wales would be proud!

#### Notes

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### Appendix I

## Wikipedia Articles Created or Edited for the History 232: The Rise of Islam Wikipedia Project

History of Istanbul (especially the fall to the Turks, 1453)

Sharia (Islamic Law)

Battle of Jacob's Ford (Crusader States)

Muslim Conquest of Alexandria (7th century)

Zanj Rebellion (9th-century Iraq)

Jihad – History section [\*created by this project]

Bukhtishu (family of medieval Muslim physicians)

Treaty of Orihuela (aftermath of Muslim conquest of Spain, early 8th century)

Islamic Civilization during the European Renaissance [\*created by this project]

Crusades - Islamic Perspective

Abd al-Aziz ibn Musa (conquest of Spain)

Battle of al-Babein (Crusader States)



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