California Conference on Library Instruction 2013

Wikipedia & Education:

Adventures in Knowledge Creation and Sharing

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Overview

The Wikipedia Education Program has been partnering with university professors, librarians, and teaching & learning centers to assist with the incorporation of appropriate Wikipedia assignments into classroom activities.

In May of 2010, we started a 17-month pilot project, the Public Policy Initiative. Although the scope was limited to US Public Policy-type classes, the program allowed us to explore the use of Wikipedia as a teaching tool in higher education. We found tremendous interest and enthusiasm in our endeavor.

Although we have made significant changes to the overall program, the basic premise of the Wikipedia Education Program remains simple: Professors assign their students to write or expand Wikipedia articles instead of a more traditional writing assignment.

When we decided to work with universities, the first person I contacted was the Director of Reference at Robert W. Van Houten Library at New Jersey Institute of Technology. Ms. Davida Scharf had presented, "Mythbusting: College Students as Wikipedia Authors: a surprising new pathway to information literacy" at the 2009 Merlot conference. I was intrigued. Davida had teamed up with Professor Jim Lipuma to teach information literacy and used Wikipedia as way to engage students. I wanted to learn about the challenges they faced and successes they had. We then created an advisory group who were already experimenting with Wikipedia assignments in their classes.

Over the years, we learned some of the benefits and challenges for students include:

- Writing for a large, global audience instead of a single person (e.g. professor, instructor, or teaching assistant)
- Receiving feedback from a "real" audience interested in the topic area
- Improving research and information literacy skills
- Developing critical assessment skills by reasoning critically about the sources of information and becoming more capable at distinguishing good sources from bad sources when evaluating information
- Learning how to collaborate and communicate with an online community
- Engaging in a community of practice interacting with global scholars interested in similar topics
- Sharing knowledge with the rest of the world

Now, three and half years later, the Wikipedia Education Program is still learning about the challenges and successes of working with Wikipedia as a "real world," ever-changing instructional tool in university settings across the U.S., Canada and the world. To date we there are educational programs in 39 countries that are using Wikipedia as a tool for educating students (*see map below*). These programs are both large and small endeavors, yet all of them are innovating education through new and unique classroom assignments as well as significantly adding to the world's body of free knowledge.



Blue areas represent countries where Wikipedia is currently being used in classrooms.

Context: Wikipedia by the numbers

I want to give some context for the environment in which students work on Wikipedia assignments. Let's start with some basic information about Wikipedia that you may or may not know.

According to ComScore:

- Wikipedia is the fifth most popular Web site on the Internet—behind Google, Microsoft, Yahoo and Facebook.
- Each month approximately 500 million *unique* visitors come to Wikipedia
- Wikipedia visitors view 22 billion pages
- Approximately 20 Million articles across all language versions
- 280+ language versions

Who writes Wikipedia?

The people who contribute to Wikipedia are ordinary people like you and me who have knowledge and skills to share -- everything from adding references, fixing typos, writing content and adding images. Wikipedians spend several hours a day volunteering their time in a variety of different ways, contributing their skills and sharing their knowledge on Wikipedia. More than 80,000 active editors around the globe write and edit Wikipedia.

An example

Wikipedia's Senior Director of Program Evaluation and Design is a Wikipedian. Frank Schulenburg used to work at the University in Gottingen Germany and wrote papers on 18c Sea Trade for academic journals. He received minimal feedback on his work. Then he started to write for Wikipedia in 2005 and his readership increased tremendously, as did his interaction with others interested in his topic area.

Recently, Frank read more than a dozen biographies about Ben Franklin, then took some time off and wrote the German Wikipedia Article on Ben Franklin. These days you'll find him waking up at 5 am to capture the perfect light for taking photographs of California Lighthouses. His photographs can be seen on many Wikipedia lighthouse articles and help to tell the story of California Lighthouses.

Who writes or edits encyclopedia articles in their free time, for fun? Frank does. And many others.

Incorporating Wikipedia into higher education curriculum.

The Wikipedia Education Program is the first program the Wikimedia Foundation has run to help professors use Wikipedia as a teaching tool. We saw educators experimenting with Wikipedia in their classes to help their students learn about their specific subjects. We wanted to encourage their efforts to assign students to write or expand Wikipedia articles while also looking for ways to make the process systematic and long-term. We interviewed over 40 professors, brought together a team of advisors and determined a Wikipedia Education Model that provided both students and educators the support and tools they needed. We continue to hone the model with experience and input from professors, students, Wikipedians and librarians.

The program provides training, expertise and materials on:

- Welcome to Wikipedia: A guide to getting started
- How to incorporate Wikipedia into your syllabus
- How to evaluate articles
- The technical skills required to edit Wikipedia
- How to write for an encyclopedia
- How to work in a collaborative environment with the Wikipedian community
- A 14-week sample syllabus
- How to use Wikimedia Commons -- free licenses, how to upload photographs, and how to use images on Wikipedia

Wikipedia Ambassadors

There are two types of Wikipedia Ambassadors helping students, professors in the Wikipedia **Education Program:**

Campus Ambassadors are Wikipedians who live in the area, students, Teaching Assistants, and university staff (e.g. librarians, teaching & learning center faculty) who volunteer to teach the basics of contributing to Wikipedia. Campus Ambassadors help students and professors with Wikipedia questions, researching topics, consulting with professors about his or her assignment, and introducing Wikipedia editing skills as well as how to collaborate with Wikipedians.

Why Librarians as Wikipedian Ambassadors?

To us, the answer is quite obvious. Librarians can help students:

- Evaluate sources and citations
- Learning how to do research and consume information
- Understand the importance of verifiability on Wikipedia
- Understand how to absorb information, digest it, and recreate the content in a way that does not constitute plagiarism

"A lot of students had trouble with the research aspect. Students today are so used to relying on Google and Internet sources... I will have to reacquaint them with the library. Some of them have probably never used the library." —Professor

University libraries with a Wikipedia Campus Ambassador working with our program

- New Jersey Institute of Technology
- University of Michigan
- Drake University
- Millersville University
- Hunter College
- LaGuardia Community College
- Algonquin College
- California Maritime Academy
- California Polytechnic University
- Montana State University
- Indiana University

- Indiana University— Purdue University Indianapolis
- Barnard College
- Washington University
- Colgate University
- Georgia Tech
- Georgia Southern
- University of Arizona
- University of Alabama
- Appalachian State University

Online Ambassadors are experienced Wikipedians with a track record of helping newcomers. Each class works with an Online Ambassador who serves as their Wikipedia mentor, answering any questions they have along the way. Online Ambassadors are generally available nearly 24-7 in an IRC chat-room.

Areas for Learning

Typically, we have found that the majority of educators that are incorporating Wikipedia assignments into their class are focused on learning outcomes that involve at least one of the follow areas:

- Writing skills
- Information Literacy
- Research skills
- Critical thinking
- Collaboration
- Translations skills
- Literature review skills

Let's look at a few of these key areas for learning

Writing Skills

Many educators use Wikipedia Assignments to improve student writing skills. Rather than writing a traditional persuasive paper, student lean how to write for an encyclopedia, presenting their research in a verifiable, neutral point of view—without arguing an opinion or perspective.

"I have learned so much about writing I cannot even express... and it shows. My last two papers have been A's! I think the grades speak for themselves." —Student

Information Literacy

Wikipedia assignments help students improve their Information Literacy. Working with Librarians, students can develop the skills to access appropriate information, then interpret that information for "non-academics," and write Wikipedia articles that captures, creates and shares knowledge effectively.

"Students use Wikipedia. It is very critical that we, meaning academia, get on board with this, because it is going to happen if we like it or not. We need to work with them to learn to how use Wikipedia correctly and contribute to it to make it better." —Professor

Research and Critical Thinking

Students learn how of identifying credible sources, especially with respect to what makes a quality Wikipedia article. We know that students use Wikipedia, so an assignment in Wikipedia teaches them to think about what makes a Wikipedia credible article and what are signs that an article needs more supporting information. Encyclopedias like Brittanica and Wikipedia are a good place to get initial information, and through this project students learn to consult the "reference" section at the bottom of each Wikipedia article for primary sources.

"Particularly in terms of research it is valuable. I think it does increase the amount of research a student is forced to do." —Professor

Peer Review and Collaboration

"If I had to pick one main advantage of a Wikipedia assignment, it would be the peer editing between Wikipedians that often doesn't take place with traditional assignments. The feedback from other users and students in my class really helped me improve my articles." -Student

Literature Review Skills

Wikipedia is a tertiary source and does not allow original research. With that said, it is essentially review of secondary sources and literature about a specific topic area. Wikipedia writing assignments require students to review the literature about their chosen topic and then write content for Wikipedia that reflects the various points of view about the topic.

"[Students] become better consumers of information."—Professor

Student Impact

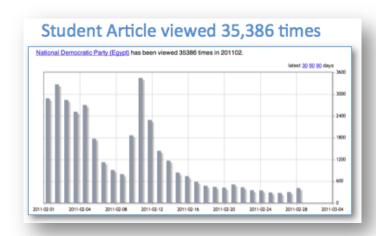
We already talked about who writes Wikipedia articles. Now let's look at the impact of just student-editors. Collectively, in the three years of this program students have contributed over 24,000 pages of quality content to Wikipedia. This means that student-editors in classrooms around the world are creating accessible knowledge, driven by classroom assignments and based on research, for people everywhere.

"The students are not just writing a paper that is given to me and no one will see it again. It could be viewed by the whole world and that raises the pressure on them. This adds another element that inspires them do a good job." —Professor

Let's take a look at a few student experiences and their impact in the world.

Case Study I — Real-world events

As you've been aware, things have changed dramatically in Egypt. One in the program student, Patrick, wrote on the Democratic National Party of Egypt, then the Arab Spring happened. He saw the readership on the article jump from about 100 people a day to several thousand a day in the heat of the protests. By February of 2011, the article had been viewed thousands of times.

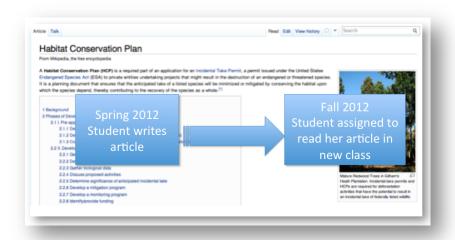


Even though his class ended, he's been online and actively keeping the article up to date. This is one of the main benefits for student learning is that the students aren't done when the class is over -- they keep going back to their articles to make sure the information is current.

Case Study II — Expertise in the classroom

As a master's student in Environmental Management at the University of San Francisco and an employee at environmental consulting firm Analytical Environmental Services (AES), Jacqueline knew a lot about habitat conservation plans (HCPs) — but there wasn't anything on the topic on Wikipedia. So when she enrolled in Professor Aaron Frank's Environmental Law class in spring 2012 and discovered that Professor Frank assigned writing a Wikipedia article on a course-related topic, Jacqueline gravitated toward creating one.

Jacqueline was excited by the prospect of writing something that would have a global audience, and further her study of the conservation of special status species.



Other professors at the University of San Francisco noticed that the article on such an important topic to their field of study had been created, although they didn't realize a student in their program had written it. One such professor assigned the article as required reading for students in his fall 2012 Natural Resources Management course. Little did he know, the author of the article was taking his class that term.

Case Study III — Expanding knowledge

Infant Mortality is an article that a few students at Rice University worked on in Fall 2012. Allyssa, edited this article with a few of her classmates and contributed in many ways. This was not the first time Allyssa had a Wikipedia assignment in one of her classes. She also edited Wikipedia articles in spring of 2012. This time she knew what to expect—both in class and with Wikipedians.

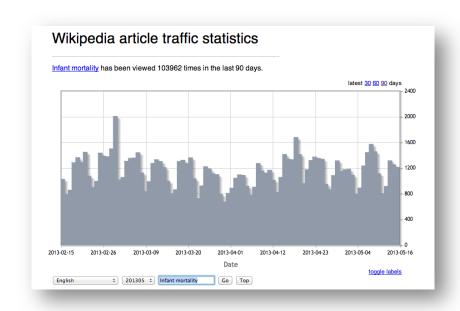
Prior to working on it, the article had 25 references. After Allyssa and her classmates worked on the article, key sections causes and treatments were added. The global section was expanded and now the article also includes 72 references.

Before:

http://en.wikipedia.org/w/index.php?title=Infant mortality&oldid=518799748

After

http://en.wikipedia.org/w/index.php?title=Infant mortality&oldid=526237959



In the last 3 months, the Infant Mortality article has been viewed 100,000 times. And over 247,000+ times since Allyassa improved it significantly.

Summary

There is a natural fit between Wikipedia, Librarians and Instruction. The higher aim of each is to effectively share knowledge and help educate learners.

Not only are Librarians important to the success of Wikipedia assignments in the classroom, they are critical to helping students learn, research, and think critically about a topic area. Librarians play a significant role in supporting students and professors with research projects based on learning objectives. They can also help students understand how to evaluate a Wikipedia article quality; teach them how to identify reliable sources and how to find them. Librarians are key allies in ensuring students understand the importance of information fluency in the capturing and development of real-world, content that improves Wikipedia.

How to get involved

If you're a librarian who is interested in becoming a Campus Ambassador for your university, you'll need to complete some online training and speak with an Ambassador who will make sure you have all of your questions answered and are comfortable supporting professors and students who are editing Wikipedia in the classroom. Please contact Jami Mathewson at imathewson@wikimedia.org to pair with a mentor and prepare for the semester.