Writing a Wikipedia Article on Cultural Competence in Health Care

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ABSTRACT. This article describes how librarians created a Wikipedia article on cultural competence in health care to support the medical school’s curriculum. Wikipedia, often considered not as reliable as scholarly articles, continues to be popular. Rutgers librarians conducted a Wikipedia project to improve its content to benefit students. The importance of cultural competency in health care is widely recognized due to increasingly diverse patient populations. Medical schools integrate cultural competency in curricula to train students to be culturally competent. Therefore, this topic was chosen for the Wikipedia Project. It is hoped that health sciences librarians and educators will benefit from their experience.

KEYWORDS. Cultural competence, cultural competence in health care, cultural competency, librarians, Wikipedia, Wikipedia collaborations, information literacy

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Wikipedia has been widely accessed and read since its inception in 2001. It is no doubt the largest free, open access Internet-based encyclopedia with 35 million articles written in 288 languages.\(^1\) Studies have been conducted to determine the prevalence and usefulness of Wikipedia among students and professionals in different disciplines as well as the general public. One study found that 94% of medical students used Wikipedia while they were studying medicine.\(^2\) The students chose to use Wikipedia because of the ease of access to and understanding of the content as well as its user-friendly interface.\(^2\)

However, despite the popularity of Wikipedia, the reliability of its content has constantly been questioned, and the usefulness of Wikipedia has often been controversial. The fact that Wikipedia articles are written and edited by anyone who is interested and registered in Wikipedia makes many people feel skeptical about the authoritativeness, credibility, and accuracy of Wikipedia content. It is not surprising that librarians and educators tend to discourage students from using Wikipedia for research and academic purposes, not to mention that very few librarians were found to contribute content to Wikipedia articles based on a series of literature searching.

Nevertheless, in spite of the general perception that Wikipedia content is not as reliable as scholarly articles, Wikipedia’s popularity does not seem to diminish. Instead, it continues to grow. According to Alexa Internet,\(^3\) Wikipedia was ranked the sixth most popular website in the world as of March 26, 2015.\(^4\) The free Internet encyclopedia was accessed by nearly 500 million unique visitors and had 18 billion page views each month.\(^1\) Wikipedia was also found to be used more often as the starting point for research than many other authoritative resources. Considering
that librarians can’t change their patrons’ preference, they might as well spend some time improving the quality of Wikipedia content so that students can benefit from it. There was discussion of using Wikipedia as a potential venue for academic publishing in the literature. For example, one study showed the benefits of publishing in Wikipedia in terms of cost and timeliness. It is free and openly accessible. It is dynamic allowing quick and frequent updating. Meanwhile, Wikipedia administrators are fully aware of the skeptical views about the credibility and accuracy of Wikipedia articles. They continue to explore ways to make Wikipedia content more reliable and authoritative with its established peer review system and to integrate Wikipedia content with library and scholarly resources to make it more acceptable by the academic community. One of their endeavors was the Wikipedia Library Project, a collaborative effort between OCLC and Wikipedia.

BACKGROUND

In early 2014, Rutgers University Libraries (RUL) was invited to participate in the Wikipedia Library Project along with a few other selected higher education institutions. In this project, the participating librarians “evaluate the depth and authoritativeness of Wikipedia’s diversity content and identify content gaps based on the relevant Rutgers curricula; and work with Wikipedia editors to add reliable RUL licensed resources and digital content to close the identified gaps in Wikipedia articles.”

There were two phases of the project. In phase I, a survey was conducted by two project leaders to learn about undergraduate students’ research and learning behavior and to test the usefulness of some selected resources including Wikipedia. In the survey, students were asked to
answer a set of questions about their understanding of evaluating and using academic and non-academic sources. Then they were asked to read a pre-selected Wikipedia article and give feedback on its authoritativeness, intent, and quality by using a brief rubric (modified SEER® Rubric). They were also asked to list their alternatives if the Wikipedia article did not supply sufficient information. The findings of the survey indicated that the undergraduate students were not able to tell the differences between Wikipedia and Google; their order of preferences when selecting sources for papers was, firstly, ease of access and then relevancy and authoritativeness of the sources. The length and nature of the bibliography of the source were considered not important.  

Phase II was focused on working with two experienced Wikipedia editors who were invited to serve as the virtual visiting scholars at RUL. They worked with the project team to provide assistance to edit articles and write new articles when needed. It was in Phase II that the project team intended to add value to Wikipedia articles so their content could align with the schools’ curricula in one of the thematic areas (see the sidebar) that Rutgers has designated as part of its strategic plan as shown at <http://universitystrategy.rutgers.edu/building-plan/themes-academic-distinction>.

<sidebar>

Rutgers University Strategic Plan: Themes for Academic Distinction

Ethnicity, diversity, and migration in the formation of communities and nations

A. Exploring diversity as an engine of social and economic change

B. Demographic change and cultural identity

C. The politics and aesthetics of difference
D. Impact of immigration on American history, society, and economy

E. Diverse peoples and their contribution to a dynamic democracy

Based on the strategic plan, the theme of Phase II of the project was called “Cultures, Diversity, and Inequality – Local and Global.”

In this phase, two experienced Wikipedia editors, D. Mejia and K. Bunday, were interviewed and invited to participate in the project. Ms. Mejia is a graduate in Psychology from the University of Florida. She graduated Phi Beta Kappa and was the recipient of several scholarships and awards while at the university. She is a member of WikiProject Women scientists and WikiProject Statistics. Mr. Bunday is a magna cum laude graduate of the University of Minnesota Law School and has had a varied career as an intellectual property attorney, an English language teacher in China, and a jazz musician. Bunday is an active member of the Minnesota Wikipedia Editors’ group. Both scholars are long-term and active Wikipedia editors. They were invited to work with the RUL project team by teaching the practice guidelines of editing content in Wikipedia that is valued by the community.

In early May 2014, one of the project sponsors called for volunteers among RUL liaison or subject librarians to participate in Phase II of the project. Several librarians answered the call. Before long, the RUL Wikipedia Project Team was formed; the team held the first meeting in May 2014 with eleven members in presence and then the second meeting in June 2014, at which the two aforementioned Wikipedia editors were virtually introduced via teleconference to the team as the virtual visiting scholars at Rutgers. They would work with the participating librarians to edit or add Wikipedia articles to enrich Wikipedia content. The team discussed how to identify
subjects which align with the institution’s strategic direction and digital content collection and how the visiting scholars were to train the participating librarians to become familiar with Wikipedia editing practice. The team learned from the visiting scholars the basic steps of writing a Wikipedia article: searching Wikipedia first, practicing in a sandbox, naming the article, gathering information, requesting feedback, and being aware of copyrights. As a result of the meeting, four topics related to the project theme were selected: 1) Women in Jazz, 2) Newark Jazz history, 3) Asian immigrant experience in New Jersey, and 4) Cultural competence in health care. This article is focused on the fourth topic to describe what was learned from writing the Wikipedia article on cultural competence in health care.

Rationale for Choosing Cultural Competence in Health Care

The importance of cultural competence in health care is widely recognized as patient populations are becoming more and more diversified. Medical schools integrate teaching cultural competency in their curricula to assure that students will possess the knowledge, skills, and attitudes that enable them to provide high quality and culturally competent care to patients. Despite its importance, however, the status of cultural competence in health sciences libraries does not seem be much addressed. No research studies have been identified that address libraries or librarians’ role in providing culturally competent services to their diverse users. Searches in several databases also yielded no relevant information on how to train librarians’ cultural competencies. Choosing this topic would give the participating librarians an opportunity to understand better what needs to be done to improve library diversity services. Therefore, this
topic was chosen for RUL’s Wikipedia project, which was to extend Wikipedia content in order to create a useful and authoritative next generation reference source.

Cultural competence in health care refers to the ability of health care systems to demonstrate cultural competence toward patients with diverse values, beliefs, and behaviors.\textsuperscript{10} This process includes consideration of the social, cultural, and linguistic needs of patients for effective cross-cultural communication with their health care providers.\textsuperscript{11} The goal of cultural competence in health care is to reduce health disparities and to provide optimal care to patients regardless of their race, ethnic background, native languages spoken, and religious or cultural beliefs.\textsuperscript{12} Figure 1 illustrates what the beginning of the Wikipedia article looks like.

[PLACE FIGURE 1 HERE]

Legend: FIGURE 1. Cultural Competence in Health Care Wikipedia Article

In addition to the importance of the topic, one of the librarians in the project team already had some working knowledge of cultural competence in health care. She maintains a research guide on cultural competency\textsuperscript{13} to support medical students’ needs. She also served as an invited consultant during the period of 2012–2013 for the development of the Virtual Library initiative of the American Medical Association, the National Medical Association, and the National Hispanic Medical Association’s Commission to End Health Care Disparities (CEHCD).\textsuperscript{14}

The last, but also an important reason this topic was chosen, was because cultural competence has been widely covered in the medical school’s curriculum. Based on a quick search of the medical school’s curriculum performed in May 2014 via an in-house developed curriculum mapping search engine, it was found that there were 33 events in 13 blocks
concerning cultural competence. As the main objective of the project was to enrich the Wikipedia content to support the university’s curricula, addressing cultural competence in health care in this project could not be more suitable and more appropriate for this project.

METHODS

A working group of three including the project manager, a health sciences librarian, and a virtual Wikipedia visiting scholar was formed to work on Cultural Competence in Health Care (CCHC) in Wikipedia. The Wikipedia CCHC Working Group started the project by registering for a Wikipedia account and then worked with the visiting Wikipedia scholar, who was assigned to this group based on her knowledge of and interest in the selected topic. The three held a virtual meeting via Google Handout and worked out a plan to carry out the task. As part of the plan, the health sciences librarian conducted a session to teach the visiting scholar how to effectively search PubMed so that the visiting scholar would perform good searches for literature on cultural competence in health care in PubMed. In return, the scholar trained the librarians how to properly edit and write Wikipedia articles via Skype.

The group retrieved many citations on cultural competence in health care from PubMed and some other databases. The references were placed in a reference manager and were screened for relevancy first, before literature review was performed. Having read the literature retrieved in addition to the knowledge on the subject gained previously, the group felt confident and ready to contribute content to Wikipedia. As instructed by the Wikipedia visiting, the group started searching cultural competence in health care in Wikipedia to see if it had been written there
according to the criteria of completeness, availability of substantive peer-reviewed resources, and objectivity of approach.

After extensive searching and investigation, not one single article was found in Wikipedia that was devoted fully to cultural competence in health care. Instead, one article was located entitled “Cultural Competence,”¹⁵ which is very broad and general. That article does contain a section on cultural competence in health care. However, the content in that section was not sufficient to cover the topic. Initially, the librarians were planning to expand the section by adding more information; then they considered rewriting the section to make it more coherent, meaningful, and useful. Those thoughts were shared with the Wikipedia visiting scholar. Considering that this topic is quite important and is addressed by almost all disciplines in health care, it deserved to be covered in a single, primary article. The decision was not to edit the existing section of Cultural Competence in Health Care in the Cultural Competence Wikipedia article but to write a brand new Wikipedia article concentrating fully on cultural competency in health care.

At the end of June 2014, a Wikipedia sandbox was created by the Wikipedia visiting scholar for the group to start adding content in the article. Since the main objective of the project was to enrich the Wikipedia content so that it aligned with the medical school’s curriculum, the scope of the article was limited to the United States and the focus was on the discipline of medicine. The article would feature sections such as a definition and cultural competence in a variety of settings including the health care system, leadership and workforce, clinical practice, research, medical education, and patient education. References would be cited using a citation management tool. In the process of writing, several issues were encountered. For example, multiple individuals writing concurrently resulted in overwriting each other’s contributions;
built-in citing style was limited to Wikipedia style, only requiring manual tweaking if citing in a different style. One of the big challenges in writing the Wikipedia article was a lack of familiarity with the Wikipedia editing guide. In this regard, the Wikipedia visiting scholar was tremendously helpful. She created many useful resources in the sandbox and provided ad-hoc tips and technical assistance. When the initial draft was completed in the sandbox, it was rolled out to the public in the live environment.

**RESULTS**

The Wikipedia article was written and rolled out in a timely manner in accordance with the proposed timeline of the university libraries’ Wikipedia Project Phase II. The article was sent for review to an expert who is a faculty member at the medical school. He made some constructive comments and suggestions including: 1) it was a nice first draft; 2) colleagues at the Georgetown National Center for Cultural Competence are major leaders in this field; 3) pay attention to the Office of Minority Health’s National Standards for Culturally and Linguistically Appropriate Services in Health and Health Care (also known as the National CLAS Standards); 4) it had a bit of a medical focus; 5) include additional challenges; 6) avoid being too “US-Centric.” Some modifications were made based on these valuable comments. The article was also reviewed by peer librarians and Wikipedia editors. This article has been rated as B-Class\(^\text{16}\) on the project's quality scale and as Mid-importance on the project’s importance scale\(^\text{16}\) by WikiProject Medicine.\(^\text{17}\) A B-Class ranking indicates that “the article is mostly complete and without major problems, but requires some further work to reach good article standards.”\(^\text{18}\) As with all
Wikipedia entries, it is a work in progress. More areas will be added such as cultural competence in various health-related disciplines and other barriers and challenges will be included as well.

The Cultural Competence in Health Care Wikipedia article has been frequently visited by the public users. Figure 2 shows the statistics of page views since its inception on August 6, 2014 to the end of September 2015. The chart reveals that the number of accesses to the article has increased as time goes on. During the first six months, the number of monthly views was below 1,000. However, in the past eight months, the number has been steadily above 1,200 views for each month. This indicates that the article has been accessed often and/or used by the public.

[PLACE FIGURE 2 HERE]


Since its publication in Wikipedia, the Cultural Competence in Health Care Wikipedia article has been linked from several Wikipedia articles, such as Health system, Global Handwashing Day, and Cleveland Clinic’s 10 top medical innovations for 2015.

It was hoped that more contributors would join to enrich the article content; however, other than the original writers, very few Wikipedia editors jumped in to work on the content. Occasionally it was noted that some suspicious or spamming actions took place. Once the content was even abusively altered. But interestingly, very quickly it was restored by anonymous Wikipedia editors. Figure 3 indicates the most recent revision history of the article.

[PLACE FIGURE 3 HERE]

Legend: FIGURE 3. Article Revision History
**LESSONS LEARNED**

When writing an article for Wikipedia article, it is important to keep these points in mind: 1) know the core elements in a high quality Wikipedia article, 2) remember the importance of being neutral in tone, 3) make sure the points put forward are verifiable, and 4) remind yourself that Wikipedia articles are not original research.\textsuperscript{22,23}

Other questions were also raised during the writing process, but some of them were resolved on their own along the way. Examples of questions were: what is the rule of thumb to add links to terms or phrases to other Wikipedia articles? For the list of references, how many references will the list arrange into two columns? (Discovered later: it will be automatically arranged into two columns when it reaches a certain number.) How often do Wikipedia authors / editors monitor their articles? Would it be weekly, monthly, or quarterly? If it gets rolled out in the live environment, will the sandbox history be included? ( Noticed after the roll out: the previous editing history in the sandbox was not carried over to the live history version.)

The learning curve for mastering Wikipedia writing format is steep and it requires constant refreshing of the editing guides. It is essential to stay neutral. Initial training in Wikipedia editing is highly desirable for writing a successful Wikipedia article, especially for beginners to write/edit within a limited timeline. Citing is not flexible to regular scholar writers. If using a non-Wikipedia style, it requires manual editing. When multiple people edit content simultaneously, it may result in unintended overwriting.

**FUTURE STEPS**
As mentioned earlier, just like any other Wikipedia entries, this Cultural Competence in Health Care Wikipedia article is a work in progress. The immediate next step will be to expand the content. Hopefully, this article will intrigue other Wikipedia writers to add their value content to enrich this article. For example, Wikipedia contributors can add value content to more disciplines in health care including nursing, dental health, pharmacy, and public health, as well as various kinds of barriers or challenges such as social barriers, attitudes of health care providers, and political challenges.

It will be important to increase interaction with other Wikipedia writers and learn to use the Talk feature to communicate with other contributors. Also important will be identifying more incomplete or gap content and contributing more reliable sources in Wikipedia.

**CONCLUSION**

Despite the general perception that Wikipedia content is not as reliable as scholarly articles and the fact that librarians and educators often discourage students from using and citing articles and other content in Wikipedia, Wikipedia’s popularity does not seem to diminish; instead, it continues to grow. Considering librarians can’t change their patrons’ preference, they might as well make an effort to improve the Wikipedia content quality so patrons can benefit from it. By writing the Cultural Competence in Health Care Wikipedia article, the Wikipedia CCHC Working Group learned how Wikipedia articles were written and edited. With this editing exercise, the librarians have a better understanding of how to evaluate a Wikipedia article. They will use the lessons learned to train students on editing Wikipedia content and encourage them to
apply the knowledge to future Wikipedia editing. This exercise was intended to help students to develop critical thinking skills and to encourage faculty to use Wikipedia content as teaching material. Based on the outcome of this project, educators can not only contribute their expertise to improving and enriching Wikipedia content but also encourage their students to learn how to write and edit Wikipedia articles. This project demonstrated that librarians are innovative and instrumental in supporting school curricula and are ready to meet the needs of their patrons with emerging information technologies.

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