Shaping Wikipedia editing as a teaching and learning tool to promote deep learning and information literacy

Nadine Dexter EDD, David Lebowitz MD, Amin Azzam MD
University of Central Florida, College of Medicine

Purpose
• Research has shown that at least 94% of medical students use Wikipedia as an information resource (Usaid, 2012), despite medical school faculty telling them not to.
• In fact, medical schools do not train students to improve Wikipedia or use it critically (Azzam, 2017).
• The Wikiproject Medicine course was created at the invitation and in partnership with Dr. Amin Azzam at the University of California San Francisco, who started the original program in 2013.
• This class is offered to 4th year medical students and gives students an opportunity to edit already existing health related articles in Wikipedia to improve their quality and make them more accurate.
• This course enables students to improve and enrich the quality of reliable information read by patients on Wikipedia by becoming a WikiProject Medicine Editor

Background
• Wikipedia’s medical content is made up of over 155,000 articles across more than 285 languages and is supported by more than 1.4 million references.
• Published reports have confirmed that medical entries on Wikipedia can lack reliable sources and have gaps in content (Heilman, 2015, Shafee, 2016).
• But it is often the first source for students, faculty and patients. Health professional educators actively discourage using Wikipedia.
• Instead of fighting student and public use of Wikipedia, health professional educators can be more effective by embracing Wikipedia editing as a teaching technology.
• Creating Wikipedia editing assignments in health professions schools ensures patients read higher quality online information, enhances student literature searching and writing skills, and provides a large social good (Sean, 2017).

Objectives
• Describe Wikipedia as a health information source for patients, providers and health educators.
• Understand the larger WP ecosystem that includes Wikiprojects, Translators Without Borders, and Wikipedia Zero.
• Understand how students are taught how to research, write and edit Wikipedia articles and how this activity can be a scholarly project even after medical school.
Design: Instructional methods and materials used:
1. Wikiproject website and dashboard created for the course by Wikiproject staff.
2. Students are recruited in their 4th year of medical school. (6 to 10 students)
3. 4-week timeline is developed with due dates for assignments including weekly conference calls with faculty and students for progress updates.
4. Students and faculty use Slack to stay in touch on questions or issues that may arise.
5. Students use their COM issued laptops for the course.
6. Medical librarians and faculty provides instruction on proper references and a refresher session on information resources for editing articles.
7. Meeting with Dr. Azzam (via Zoom) on first day of class to orient students to purpose of course.
8. Last day of class students provide a presentation on final article edits.
9. Innovation's strengths and limitations: Limitation- We do not have enough data yet on the effectiveness of the class as we are now into year two of the class. Strength- Students love the flexibility as they can travel to interviews while working on their assigned article for editing. Strength- Students can follow and even edit a favorite topic even after the class is over. Feasibility and generalizability: Should this course prove to be successful it can be shared with all health professions programs who would be interested in joining in the Wikiproject program. It is easily transferable and has virtually no costs associated with it.

Please see the chart below which shows the number of students and articles edited and number of world views that have participated in the Wikiproject Medicine program.

Discussion/Dissemination
• The negative stigma behind Wikipedia has been changing, but many still shun Wikipedia.
• This work reduces this stigma by demonstrating the value of Wikipedia-editing assignments to students, faculty members, and readers of Wikipedia’s health related content.
• Since the first UCF pilot in October 2017 the course has become increasingly popular with 4th year students as evidenced by increased enrollment for FY 2019- (Spring 2019- 13 students, Fall 2019 -15 students).

Example – UCF 2018 Results

Wikiproject Institutional Affiliations

UCF University of Central Florida, College of Medicine

Results

<table>
<thead>
<tr>
<th>School</th>
<th>Fall 2018</th>
<th>Spring 2019</th>
<th>Fall 2019</th>
<th>Spring 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>UCF</td>
<td>15</td>
<td>12</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>Boston Medical College</td>
<td>10</td>
<td>9</td>
<td>13</td>
<td>10</td>
</tr>
<tr>
<td>University of Florida</td>
<td>10</td>
<td>11</td>
<td>17</td>
<td>15</td>
</tr>
<tr>
<td>University of Central Florida</td>
<td>10</td>
<td>11</td>
<td>13</td>
<td>14</td>
</tr>
</tbody>
</table>

The above work sponsored in part by a grant from the William and Flora Hewlett Foundation.

The above work prepared in part by a grant from the William and Flora Hewlett Foundation.

Join the movement! To start visit https://wikilinks.org/