

# Editing Wikipedia as part of teaching public health?

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By [Felix Stein](#)

When the 2014 Ebola epidemic in West Africa struck, millions of concerned citizens from around the world wanted to read up on the disease. While many of them turned to the [CDC Ebola portal](#) and the [WHO Ebola fact sheet](#), a staggering 17m readers a month consulted the [Ebola page on Wikipedia](#).<sup>[i]</sup> Confronted with this sudden rise in its readership, Wikipedia editors made a concerted effort to improve their Ebola articles and to translate them into over 100 languages. The entries ended up being viewed more than 89m times in 2014 alone.<sup>[ii]</sup>

This is only one of the examples that may convince academics and activists in public health to re-consider their engagement with Wikipedia. This post will argue that the website has become such an important source of medical information that it should no longer be ignored by the public health community. It then asks how best to incorporate Wikipedia editing into public health teaching, by drawing on recent experiences in the [Masters of Public Health](#) at the University of Edinburgh. We certainly have not found the perfect way of teaching with Wikipedia yet, and are still waiting for student feedback. However, we hope that a brief description of this year's teaching efforts will already be useful for teachers and activists who find Wikipedia intriguing and consider incorporating it into their own courses.

# Too big to ignore

Wikipedia is the world's largest freely accessible encyclopedia. Run out of "Wikimedia", a comparatively small non-profit, headquartered in San Francisco, the site features over 49m articles and is visited over 15bn times a month.<sup>[iii]</sup> This kind of online traffic means that it consistently ranks among the top ten most visited websites on the planet.<sup>[iv]</sup> With over 10m monthly edits, Wikipedia's overall growth remains staggering.<sup>[v]</sup> You can see and hear (!) some of these edits in real time by [clicking on this link](#). While articles in the English language dominate Wikipedia's content (there are over 5.7m of them and they are viewed over 7bn times a month<sup>[vi]</sup>), the site now features entries in over 300 different languages.

Wikipedia's role for public health should not be underestimated. With over 164k medical articles in over 255 languages, its medical content is read more than 10m times a day.<sup>[vii]</sup> If the general public frequently resorts to it for healthcare information, so do over 90% of medical students as well as most physicians.<sup>[viii]</sup> As a free resource, Wikipedia's medical content has become particularly important in low- and middle-income countries, especially for health issues such as stillbirths, which affect their populations disproportionately<sup>[ix]</sup>. To bypass persisting problems of slow and expensive internet access, several offline versions of the site have been developed, including a [Wikipedia based medical app](#). Like it or not, Wikipedia's size and growth have established it as one of the most used sources of medical information in the world.<sup>[x]</sup>



Source: <https://pixabay.com/en/wikipedia-books-encyclopedia-1802614/>

## A first port of call

While the website's importance for public health is hard to contest, concerns about the quality of its entries persist, particularly in medical circles. For authoring and editing Wikipedia's entries, the site mostly relies on volunteers from around the world, who can remain anonymous, with only their IP address being recorded. Without a single responsible author or editor and without formal peer review by experts, responsibility for published information is often hard to pin down. Attempts at personal and corporate self-promotion as well as "vandalism" i.e. deliberately deleting or deteriorating articles, are recurring problems,<sup>[xi]</sup> as are unresolved editorial disputes.<sup>[xii]</sup> In addition, the constantly changing nature of Wikipedia entries and its multitude of authors and editors make it hard to reference the site for academic purposes.<sup>[xiii]</sup>

In response to these problems, Wikipedia has gradually put in place a series of safeguards that ensure some editorial oversight, whilst still attempting to harness the power of world-wide volunteer editing. It has established referencing standards that determine whether or not an edit is acceptable (notoriously, [the Daily Mail does not count as a legitimate source of information](#)). An internal classification system ranks articles according to their quality and importance as well as authors in terms of the frequency and quality of past edits. Articles of great social importance can no longer be directly edited by just anyone. Instead, their edits require special approval from experienced editors. Hundreds of teams of regular contributors, known as "[WikiProjects](#)" work together as groups to improve specific sets of content, while computer programmes known as "[bots](#)" automatically pick up inappropriate edits and revert poorly edited pages back to their previous state.

In the field of medicine and public health, editorial oversight is particularly stringent. Medical articles have [higher referencing requirements](#) than average entries, meaning that authors cannot simply cite newspapers or research articles if they want to make their edits stick. Instead, they need to reference review articles published in reputable medical journals, textbooks by established publishers and guidelines from respected international medical bodies. Moreover, entries that describe health conditions of global significance, such as the [page on Ebola](#) for example, cannot directly be edited by newcomers or unregistered users. Instead, new authors will find that all their proposed edits will have to pass review by more experienced editors before they are made public. In the field of health, reviewing editors will often come from a group of contributors known as "[WikiProject Medicine](#)", dedicated to improving Wikipedia's medical content. Their team currently counts [over 80 active members](#). An independent non-profit organisation based in New York called "[WikiProject Med](#)" further expands Wikipedia's medical content. Past and present institutional collaborations, for example [with Cancer Research UK](#) and [with the British medical charity Cochrane](#) have also made it possible to develop the site's medical information in a more systematic fashion.

These editorial advances seem to bear fruit: Wikipedia's better medical articles often feature over a hundred references.<sup>[xiv]</sup> Its entries on pharmacology and mental health mostly match those of standard pharmacology textbooks<sup>[xv]</sup> and of centrally edited online resources,<sup>[xvi]</sup> while its entry on [Dengue Fever](#) has famously passed peer review in a major medical journal<sup>[xvii]</sup>. Wikipedia still lacks the consistency and clarity in authorship that peer-reviewed academic journals provide.<sup>[xviii]</sup> However, the structures that are currently in place mean that it can be trusted enough to serve as a first port of call for basic medical information. This may convince public health scholars and activists that if they were to edit Wikipedia, such edits would not be offset by potentially false or incomplete articles elsewhere on the site.

## Should public health students edit Wikipedia?

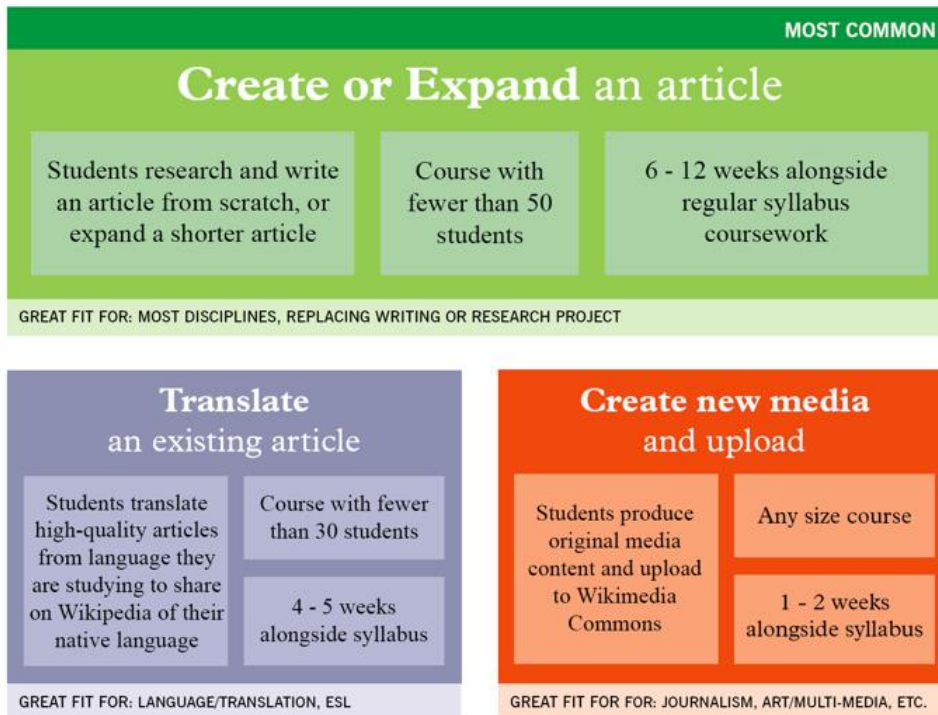
If Wikipedia is now too big to ignore, and if its medical content is good enough to engage with, then how exactly can public health scholars work with the site? Apart from editing it themselves, they may want to ask their students to do the same as part of coursework.

Including Wikipedia into teaching in this way promises a series of immediate pedagogical and wider social benefits. The exercise familiarises students with existing publishing standards in the online world. It forces them to think about what does and does not make for a reliable source, who qualifies as an expert on a subject, and how medical knowledge should or should not be created and disseminated.<sup>[xix]</sup> Writing on Wikipedia requires students to adopt a sober and fact-oriented tone, which stands in contrast to the argumentative style of essays or policy papers that they otherwise compose. It allows them to develop a new way of writing, one in which they are forced to communicate complex and highly specialised knowledge in an accessible manner. At the same time, editing Wikipedia

enables students to improve the health literacy of the general public.<sup>[xx]</sup> They can thereby make pay-walled knowledge available to a much wider audience and combat the rise of purposefully misleading online information (*viz.* “fake news”). If edits are structured in the right way, they can even remedy existing biases in public knowledge by adding more information on [under-represented groups or topics](#).

Using Wikipedia edits as a tool for teaching can also be challenging: It takes expertise and time to teach students what Wikipedia is, why it matters, what its editorial guidelines are and how to open an editor’s account. Writing is likely going to be marked by trial and error, an exercise that can be frustrating if edits don’t stick. Moreover, the site’s user interface continues to be somewhat clunky and unintuitive, which means that students are initially going to need help on how to use it. Lastly, learning to edit Wikipedia as a group takes a bit of hardware, from functioning computers and a fast internet connection to working projectors, which makes this exercise difficult in some developing country settings.

## An overview of possible Wikipedia assignments:



Source: <https://wikiedu.org/teach-with-wikipedia/>

## Our experience of editing Wikipedia as part of teaching

This year, as part of our Masters of Public Health, we scheduled two one-hour sessions with a small cohort of students, in order to familiarise them with Wikipedia. Since the site only allows a restricted number of new editor accounts to be opened from the same IP address within a 24-hour period, the students were advised to prepare this session beforehand, by opening

editor accounts on their own ([following the steps outlined here](#)). They were also asked to bring their own laptops to class if possible.

During the first session, Ewan McAndrew, the University of Edinburgh's [Wikimedian in Residence](#),<sup>[xxii]</sup> explained to the students what Wikipedia is, why it is relevant, and what its [basic editorial guidelines](#) are. He then showed them how to edit the site, and helped those students who had not yet opened an account to do just that. At the end of this first class, we asked students to identify a public health topic of their choice that they would edit during the next session, as well as some potential sources to reference.

During the second class, Ewan explained Wikipedia further, helped a few more students open editor accounts and we asked everyone to list the topic that they would edit on a flipchart, so as to avoid overlap with the work of others (as that may result in editing conflicts when saving one's work). We then required students to add a minimum of 180 words to the health related page they had chosen. Students were allowed to work in pairs (yet most of them decided to work alone), and were given a few days after the session to complete their edits. To assess these edits, we asked the students to take before-and-after screenshots or pictures of the entry in question and to email those to us. We also tracked their edits online through a web-based tracking tool known as "dashboard" (more on this below).

We do not yet have student feedback on this exercise, so any conclusive assessment of it would be premature. Yet, what can be said already is that the students had visibly little trouble with the technicalities of editing Wikipedia. They managed to open editor accounts, improve existing entries and create new entry sections without needing a lot of help. They also chose interesting and highly relevant topics to work on, which ranged from "obesity" and "smoking" to "chronic respiratory diseases" and "ageing". Lastly, their edits were of very good quality, explaining for example what kind of progress has been made by the [Global Strategy for Women's and](#)



[Children's Health](#) or how best to adhere to treatment as part of [managing Tuberculosis](#).

At the same time, there are aspects of this exercise that we would change for next year. First and foremost, two one-hour sessions were not enough to enable all first-time authors to learn how to edit an entry and to make their edits stick. While the technical aspects of this kind of work can be understood during this time, learning how to write and cite in the style that Wikipedia requires takes some getting used to. Finding the right tone and the right kinds of references is especially important for editing the more highly regulated medical pages. We are currently working on providing students with the kind of feedback that will allow all of them to have their changes accepted. Yet rather than doing this online, after concluding the exercise, it would be easier to spread teaching and face-to-face support over a total of four hours, so as to solve problems in the classroom, rather than via email.

Secondly, it may make for an easier start to provide students with a curated selection of topics to edit, rather than letting them choose at will. This pre-selection allows students to get started by working on easy-to-edit short articles (known as "[stubs](#)") where expansion is sorely needed, rather than the high quality and high-traffic entries, like Ebola where proposed edits often have to pass review before being added to a page. That said, once students have gained confidence from getting their first edits completed correctly there is nothing to stop them from contributing to such high profile pages as well.

Lastly, the most efficient way of tracking student work is to simply sign all of them up to the online tracking tool known as the "[Programs & Events Dashboard](#)" beforehand, and to keep a list that matches their real names to their Wikipedia alias. That way, teachers can omit emailed screenshot confirmations altogether, keep a single record of student edits, and use the [authorship highlighting tool](#) to identify exactly which part of an article was edited, when and by whom.

We hope that this first account of teaching with Wikipedia may be useful for other educators, and that this year's short editing exercise has provided our students an initial idea of how medical information is created, circulated and supervised online. We look forward to repeating the Wikipedia editing exercise in the future.

## Further Resources:

- Editing Wikipedia: [Brochure for general edits](#), [brochure for medical edits](#), [training tutorial for medical edits](#)
- Teaching others how to edit: [Teaching portal](#), [video tutorials](#), [lesson plan](#)
- Contacting your local Wikimedia chapter for information: [Wikimedia UK](#), [info@wikimedia.org.uk](mailto:info@wikimedia.org.uk)

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[xxi] “Wikimedians in Residence” help promote the use and expansion of Wikipedia through training workshops.

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