Teaching and Learning Focus

Should we accept Wikipedia references in student assignments?

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Do you accept assignment citations of Wikipedia entries as credible sources? Many of us have observed our students increasingly using the Wikipedia for assignment references in recent years. Yet, in a recent global Web search using the keyphrase 'Wikipedia is wrong' 46,000 responses were returned, highlighting widespread concerns and debate surrounding the accuracy and credibility of the hugely popular free Wikipedia online encyclopedia. In this article, I offer a viewpoint that, I hope, will initiate a conversation within the Faculty on this important teaching and learning issue.

The Wikipedia is widely marketed as a successful online encyclopedia. As evidence of its success, the Wikipedia, established in 2001, now provides more than 1.8 million entries (articles) written in over 200 languages. According to Alexa, a well-known Web traffic information site, Wikipedia is the 17th most visited Web site, with more than 5% of internet users accessing it every day. However, source popularity has never been the measure of knowledge quality.

Whether Wikipedia knowledge is 'accurate enough' to be accepted as a reputable, high quality source for student assignment work is an important question for academics in the Faculty to consider. To understand the issues involved, let's take a look at Wikipedia's model for knowledge synthesis. For reasons of brevity, a simplified model is outlined.

Wikipedia is based on 'wiki' collaborative technology and a collaborative 'democratic' process where any internet-connected member of the global population may create, edit and delete articles, with equal value afforded to each action and contributor. Importantly, articles may be edited by anyone and such edits may be challenged by anyone. Indeed, challenged edits frequently revert to earlier versions as decided (after a period of discussion) by an army of volunteer administrators elected mainly on the basis of sufficient numbers of prior Wikipedia contributions, rather than topic expertise or contribution quality. To date, Wikipedia has attracted over 10,000 volunteer contributors, most of whom are not domain experts. A neutral point of view (NPOV) is the pivotal principle on which edited entries are accepted, reverted or deleted, however the application of this principle is tenuous and subjective. The above model surely raises alarm bells regarding the accuracy and credibility of knowledge represented in Wikipedia articles.

The complex non-elitist model of knowledge synthesis and capture employed by Wikipedia to develop reference entries is quite different to traditional encyclopedic processes and scholastic knowledge production processes. First, there is no special status attributed to experts (increasingly derided by a significant segment of the population as 'elitists') and their expertise, as is the case with Encyclopædia Britannica. Second, there is no systematic citation of relevant high quality knowledge sources used even when an article apparently draws on such sources. Third, there is no application of traditional discipline-based research methods in order to synthesise knowledge. Fourth, there is a lack of expert-based quality assurance checks and balances such as a double blind peer review process where peers are domain and research experts and reviews are organised and supervised by esteemed experts (eg, associate editors of journals). Fifth, content is dynamic, although current plans include the periodic freezing of content as stable encyclopedia editions. Finally, there is a lack of accountability of authorship as contributors can post anonymously.

Not surprisingly, reports abound of Wikipedia inaccuracies, critical reviews, blog critiques, and unfavourable comparative evaluations. In a recent infamous incident, Wikipedia published a false article, edited by a prankster, nominating journalist John Seigenthaler Sr. as a suspect in the assassination of Robert Kennedy and President John F. Kennedy. The defamatory article remained in Wikipedia for four months until Seigenthaler convinced Wikipedia's founder, Jimmy Wales, to remove it. Unfortunately, such Wikipedia hoaxes are increasing. In a different type of incident, Thomas Vander Wal, who developed the term 'folksonomy', experienced considerable difficulty having his definition accepted for Wikipedia.

On the other hand, Wikipedia articles have been found by several studies to be relatively accurate. A recent assessment(2) of a small number of encyclopedic entries, as reported in Nature, found that Wikipedia is almost as accurate as Encyclopædia Britannica. However, the assessment also noted Wikipedia's confusing and erratic aspects.
Such weaknesses have been excused by observing that encyclopedias are mere starting points for those seeking knowledge and that links to more specific online knowledge sources are provided in Wikipedia articles for readers seeking more knowledge on the topic. Yet, students tend to cite Wikipedia entries rather than knowledge found in linked sources. A recent article in BBC Focus magazine reported a comparative study of the accuracy of four online encyclopedias for articles on Avian Flu, Robert Stephenson, and Planetesimal. The study found Wikipedia to be marginally more accurate than the other online encyclopedias, including Encyclopedia Britannica. The additional accuracy was attributed to greater currency due to the dynamic nature of Wikipedia.

Despite such favourable studies, the Wikipedia approach, while counting the value of crowd wisdom and currency among its advantages, appears to have critical flaws that lead to a fundamental lack of accuracy and credibility. Key weaknesses include:

1. mistrust of expertise and experts;
2. lack of accountability via contributor anonymity;
3. low levels of expert contribution;
4. anyone may contribute, regardless of motive;
5. subjective, complex and unfair entry/edit acceptance process;
6. lack of rigorous use of existing knowledge; and
7. simplistic entries of high school standard.

Wikipedia has several improvements underway, however, including a mechanism for expert review of article accuracy. However, incentives for experts to review articles are still not offered. Meanwhile a new competitor in the marketplace has appeared – Digital Universe[3] – which pays experts (termed ‘Stewards’) for their expertise.

In conclusion, the online encyclopedia space is moving quickly. Many of our students have already jumped on board, citing Wikipedia sources in their assignments. We must decide whether we will accept such sources as credible, and for this reason among others, a debate is needed.

References
(1) http://en.wikipedia.org/


(3) http://www.digitaluniverse.net/