## 7 things you should know about...

# Wikipedia

### Scenario

Elliot is writing a paper on avian flu for a graduate course in public health. Plenty of books and journal articles mention avian flu, but Elliot turns to other sources-most of them online—for current information about the disease. recent infections, and efforts to understand the virus and prevent a potentially devastating outbreak. One of those sources is Wikipedia, an online encyclopedia that lets users not only read articles but add to or edit them. The Wikipedia article on avian flu is moderately detailed but also provides a useful list of source citations and links to other resources including more than a dozen other Wikipedia entries on individual subtypes of the virus that causes avian flu, plus links to articles that discuss influenza generally, past pandemics, and similar illnesses. For each topic, Elliot is careful to consult primary sources to verify information he finds in Wikipedia and to develop a broader context for understanding the relevant issues.

As his paper develops, Elliot finds that he keeps returning to Wikipedia. In some instances, information about newly reported infections appears in Wikipedia even before it shows up on sites such as those of the World Health Organization and the Centers for Disease Control and Prevention. Through his research, Elliot identifies several factual errors in the Wikipedia article, and he goes to the site to correct those. Elliot also pores over the entries in Wikipedia's Discussion tab, where he finds comments from contributors to the article describing why they made (or undid) specific changes to the article. Other comments pose open questions to the community of users suggesting changes or seeking explanations about the reasons behind certain edits. Reading the user comments in the Discussion tab gives Elliot insights into the biases-some acknowledged and some not-of certain contributors, allowing him to develop a more nuanced understanding of collaborative knowledge creation.

Toward the end of the term, Elliot goes again to Wikipedia and makes a number of changes to the article on avian flu. He has come to see the structure as problematic for readers who know nothing about the topic, and he feels that a new section on the public-health aspects would benefit the article considerably. Although other contributors quickly make edits to his new section, the comments in the Discussion tab are generally positive, applauding Elliot's edits as overdue improvements to the article.

#### What is it?

Wikipedia is a free online encyclopedia that anyone can add to or edit. The site was launched in early 2001 and has since grown to include millions of articles in dozens of languages. Despite concerns about the quality of openly editable information, Wikipedia has become one of the most popular online resources—statistics put Wikipedia as the eighth most-visited Web site in the United States, behind sites such as Yahoo, Google, MySpace, and eBay. Article topics range from the very broad to the highly specific, and the site offers tools to organize information into various content areas—such as "academic disciplines" and "glossaries"—with numerous topic breakdowns within each category. Each article contains any number of links to other Wikipedia articles or to external resources.

### Who's doing it?

Use of the site is pervasive, both within and outside the academic community. Wikipedia has become a primary research tool of college students—many students begin researching a topic at Google, and Wikipedia articles are often one of the first search results. At the same time, faculty and researchers increasingly turn to the site, though perhaps with a more critical eye. At some institutions, steps have been taken to limit the use of the site—after several students repeated the same inaccurate data from a Wikipedia article, the history department at Middlebury College banned Wikipedia citations in papers or on tests. Meanwhile, some academics have embraced the site as an educational tool. Faculty at Oberlin College and Columbia University, among others, have created assignments in which students create or edit Wikipedia articles to learn how to write neutral, expository text and to experience the process of peer review and revision.

### How does it work?

Through keyword searches, users locate and read articles, access photos and other graphics, and follow hyperlinks to resources related to the topic at hand. On certain Wikipedia pages, flags indicate if an article is out-of-date, for example, or contains no references, alerting users that the content might be less trustworthy than material on unflagged pages. The site also invites anyone to be a contributor. Although Wikipedia encourages contributors to create accounts, registration is not required. Users can edit or create entire articles, make changes to individual sections of articles, change the structure of an article, add images or links—all with the



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understanding that everything in Wikipedia can be changed by other users. The exceptions are articles that are "protected," a status assigned to entries that are targets of vandalism (intentionally posting inaccurate or defamatory information) or that frequently spawn ongoing disagreements among contributors. Pages that fall under protection include "Al Gore" and "Darfur conflict," but topics including "Mark Twain," "frog," and "Chevrolet" are also protected. Wikipedia users with administrator rights have the authority to assign or remove protection status, delete pages, and block individual users from editing articles. Protected (and semi-protected) pages require users to meet certain conditions to make edits. To change a semi-protected page, for example, a user must have been registered for at least four days.

A Discussion tab for each article provides a venue for users to discuss that article, its history and structure, and ways to improve it. Many articles (or sections of articles) are inherently contentious, and the Discussion tab is a place where users can have a sidebar conversation about why certain edits to the article have been made or what information might expand an article's value without expressing a bias. The Discussion tab serves to fill a gap that necessarily exists given that contributors are disconnected from one another.

### Why is it significant?

Wikipedia puts control into the hands of users, who decide what topics are covered and at what depth. An emergent term or an obscure idea not found in a dictionary or a traditional encyclopedia can easily show up in Wikipedia, and the length of an article indicates community interest in the topic. For any wiki to be worthwhile, the community of participants must work on a foundation of trust and openness; Wikipedia is an example of what can be accomplished by a disparate group of individuals, with a shared interest in a topic, working on such a foundation. Wikipedia offers extremely timely and always changing information—the site can reflect the current scholarship on a topic or, as in the case of the 2004 Indian Ocean tsunami, can present a nearly up-to-the-minute account of an unfolding event.

In higher education, wikis have been put to use in courses ranging from humanities to science to business. With Wikipedia, students can take part in a collaborative process of creating and revising content in a global context, moving the opportunities for learning beyond the walls of the classroom or the university. An important part of academic training is seeing how knowledge is created and understanding that it is dynamic, evolving over time based on the contributions of many individuals. Wikipedia provides a considerable measure of transparency about the provenance of information, allowing students to witness and take part in this evolution.

### What are the downsides?

Traditional encyclopedias undergo stringent review. Wikipedia forgoes the review requirement in favor of timeliness and the ability to include anyone who wants to contribute. As a result, every article is only as good as those who have taken the time to write or edit it, and quality across the site is uneven. Topic selection and coverage more accurately reflect community interest than academic value. In some cases, for example, single episodes of popular sitcoms are the subjects of Wikipedia entries, and the article on J. R. R. Tolkien's fictional Middle-earth is longer than the articles for many real nations. Although Wikipedia's ability to evolve as information changes is beneficial on one level, it also means that even if an article is deemed reliable, citing it as a source is problematic because it could change at any time.

### Where is it going?

Unlike any medium that preceded it, the Internet facilitates usercreated content, and Wikipedia demonstrates that such content has the potential to be substantive and valuable to the community at large. Due at least in part to the success of Wikipedia, numerous other wiki-based projects have appeared, reflecting burgeoning demand among creators and consumers for user-created content. At the same time, even as Wikipedia's content and usage grow, organizers of the site continue to address questions about accuracy and neutrality. Concerns about the quality of content prompted Larry Sanger, one of Wikipedia's cofounders, to launch Citizendium, designed, according to the site, to "improve on the Wikipedia model by adding 'gentle expert oversight' and requiring contributors to use their real names."

### What are the implications for teaching and learning?

Wikipedia blurs the line between consumption and creation of knowledge, giving motivated students the opportunity not only to use but also to generate knowledge and see themselves as members of a community of learners. Wikipedia offers students an opportunity to hone their research skills—by evaluating its content against other information sources—and to engage in a global community of collaborative content development. Students can see how knowledge is created, participate in that process, and understand when their comprehension of a topic is sufficient to make a valuable contribution. Some learning theorists contend that content creation and analysis is a necessary component of learning. Wikipedia can encourage students to analyze what they read, ask questions, and engage in reflective, creative learning.

