

Researching Student Contributions to the Read-Write Web: Ethics and Consent in a Public Place

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This article examines the research ethics implications of data collection from public participatory websites. Through social networking sites, wikis, blogs, discussion boards and other tools, educators can allow students to engage with their learning in a public online place. Researching educational practice in these spaces carries new ethical challenges. When students modify content created by other Wikipedia users, who are the research participants? Is it possible to anonymise direct quotes from participatory sites when they are indexed by Google? Is consent to participate in research implied by contributing to a public website? These notions of participation, consent and anonymity will be examined through a case study of higher education student contributions to Wikipedia.

Introduction

The role of students on the Web is increasingly moving from viewer to contributor. As the debate in the research literature moves towards assessing student outcomes from involvement with the participatory web (Gray, Thompson, Sheard, Clerehan, & Hamilton, 2010), there is a need for consideration of how notions of consent, anonymity and participation may be different in public online spaces.

Internet research ethics and Education research ethics have independently been investigated in the literature. This article argues for the need to consider both branches of research ethics simultaneously, and illustrates this with a case study of student contributions to Wikipedia and findings from the literature.

Background

In 2010, around 70 students were enrolled in Deakin University's *Associate Degree of Arts, Business and Sciences*. These students were the first to undertake this two-year preparatory course designed to equip underprepared students for higher education. Across the course, an embedded, contextualised approach is taken to the development of academic skills, a strategy that is supported by meta-study evidence (Hattie, Biggs, & Purdie, 1996). For the Associate Degree team, academic skills is a broad term that incorporates reading and writing, as well as numeracy, scientific literacy and the use of Information and Communication Technology (ICT). This

research study was designed to consider student work in the compulsory Associate Degree unit *E-Literacy for Contemporary Learning*.

One of the academic skills goals of the Associate Degree is to develop students' capability to use and critique online resources. There has been significant debate in the academic and popular literature around the role of Wikipedia in education (Wannemacher, 2009) and *E-Literacy for Contemporary Learning* places a special focus on the site. In addition to instructing students on the potential usefulness and fallibility of Wikipedia, the unit provides students the opportunity to make an academic contribution to the site as an assignment.

The contributions that students made to Wikipedia impressed their marker. Some students had made significant contributions to articles related to their major that were written at a higher level than expected. Students had critiqued course content, used quality sources, and written within the style conventions of the site. A more rigorous evaluation of the students' work was proposed to address the research question "*What contribution can pre-bachelor higher education students make to Wikipedia?*" The design of this study is detailed in the next section.

Methodology

A qualitative multi-case study design (Yin, 2009) was proposed to study the students' contributions to Wikipedia. The choice of qualitative methods was motivated by the pragmatic (Badley, 2003) desire to use the methods most appropriate to the research question; in this case, a holistic understanding of the students' contributions and their context was required, which is best addressed with qualitative methods (Creswell, 2009). In broad terms, each case was to consider a student's contribution to Wikipedia. To fully understand a student's contribution, other data would be required, such as the article they edited, subsequent modifications to their contribution by other editors, and the discussion about their edits. On further specifying the unit of analysis for cases, ethical issues arose which are detailed under the themes of participation, consent and anonymity.

Participation

In order to obtain consent from participants, the specific types of participants needed to be identified. Students who contributed to Wikipedia for their assignment are one group of participants. After students made their contributions, other Wikipedia users, known as editors, made modifications to the students' work. These editors also commented on the students' work and provided them with feedback on their writing and adherence to Wikipedia convention. Editors also wrote the original articles that the students contributed to. Education research has a tradition of involving students, and ethics review boards have conventions for conduct involving such participants. The involvement of editors raises concerns about how they can be uniquely identified for analysis.

Individual editors are difficult to identify for this study, as Wikipedia does not require them to register an account to contribute. If an editor chooses they may edit Wikipedia without an account and have their contribution attributed to their Internet Protocol (IP) address. Uniquely identifying participants is made difficult when multiple users share the same computer or Internet connection because there is a risk

that they may share the same IP address and have all edits assigned to that address. Additionally, many Internet Service Providers (ISPs) dynamically assign IP addresses to users when they connect to the Internet, so a user might not use the same IP address over a number of edits. Communicating with participants who are not logged into Wikipedia and instead are identified by an IP address is very difficult, and uniquely identifying them would be impossible.

Consent

Researching student contributions to Wikipedia introduces consent issues beyond traditional education research. Obtaining consent from students to research their assessed work carries ethical challenges; obtaining consent from anonymous or pseudonymous Wikipedia users introduces logistical challenges. If an editor provides no contact details, their consent is difficult to obtain. Differing philosophies of Internet research ethics place different importance on consent for research on sites like Wikipedia.

Wikipedia's own brief article (Wikipedia, 2010) on ethically researching the site "*Wikipedia:Ethically researching Wikipedia*" states that no consent is required for performing content analysis of articles. As Wikipedians must agree to the terms of the GNU Free Documentation License (Free Software Foundation, 2010), Wikipedia argues that they implicitly provide consent for analysis of their work. In the discussion pages of that article, however, ethics is shown to be an evolving concept that is somewhat contentious. One contributor in the discussion calls for expert ethicists to review the assumption of implied consent.

Although the students in the proposed study were of age to provide consent to participate in the research, the age of other editors on Wikipedia is unknown. IP address editors could potentially be children. If the notion of implied consent relies upon agreement to license contributions, children may not be in a position to provide consent. Education research ethicists may be able to contribute to this emerging ethical issue.

Anonymity

Ensuring anonymity to Wikipedia users when writing about their contributions is difficult. In the hands of a skilled Google user, any direct quote from an article potentially reveals the user account or IP address used to make the contribution, and consequentially, all other contributions made from that account or address. Discussing a short quote from a student's contribution to a non-sensitive topic could reveal their personal information or contributions to sensitive articles.

One attitude to anonymity of participants when researching Wikipedia is that anonymity is waived when contributing to the public web. O'Neil's (2009a) book *Cyberchiefs. Autonomy and Authority in Online Tribes* included a short discussion of an editorial debate, and included the username of one of the editors. This resulted in significant concern from the user, and in response, O'Neil (2009b) has announced that his next printing of the book will avoid mentioning any editors by username.

Even if direct quotes and usernames are omitted from research publications about Wikipedia, other details may endanger participants' anonymity. For the case study design under consideration, given the syllabus documents for this course, a skilled

Wikipedia user could identify which edits were made by students, and who those students are. With the following information and moderate technical skill, students could be identified:

- The topics students were likely to edit
- The assigned readings for the course
- The IP address range of the university's computer laboratories
- The due date of the assignment

This information could be assembled from a potential research publication and publicly available documents.

Conclusions

When educators research student contributions to the public sections of the web, traditional notions of participation, consent and anonymity become fraught. The public nature of these sites broadens participation to include unwitting members of the public. Obtaining consent from these participants can be challenging, and they may not be in a position to provide it. Ensuring the anonymity of participants can be challenging, as seemingly innocuous details can reveal their identity. Ethics review committees and researchers need to be aware of these ethical challenges when education research is conducted on the public Web.

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