

Writing for Wikipedia as a learning task in the school's information literacy instruction

Introduction

In this presentation, we report findings of a pilot study where students of an upper secondary school wrote Wikipedia articles as a group assignment. Our aim was to investigate whether and how writing articles for Wikipedia, based on independently found information, serves the goals of information literacy instruction. We also wanted to find out how an authentic learning task, such as writing articles to be published on a public forum such as Wikipedia, influence students' conception of their learning task, as well as their approach to it.

Wikipedia is based on the voluntary participation of a large global community committed to write, rewrite and update its contents. In school assignments it has, however, been regarded as an unreliable information source (e.g., Achterman 2005, Morrissette 2008) which students are advised not to use. An alternative viewpoint is to regard Wikipedia as a public wiki where students may participate in collaborative knowledge construction. In information literacy (IL) instruction this means that the focus is turned from information seeking and consumption to writing and responsible use of information on a public forum. Wikipedia has explicit guidelines of the accepted practice in writing, using sources and citing them. In school assignments, these guidelines form the framework which students have to consider and reflect on. Open publication of articles furthermore makes the requirements authentic (real world vs. school based norms) which may be an important motivational factor in the learning process (Every, Garcia & Young 2010, Forte & Bruckman 2010). Writing for Wikipedia also has potential in helping students to understand Wikipedia as an information source, how its contents are created and how to critically evaluate the information it offers.

Research Questions

1. How do students' approach and experience school assignments with the goal of collaboratively producing texts to be published on Wikipedia?
2. How does writing texts for Wikipedia based on independently found information serve the goals of information literacy instruction?

This study was conducted as a pilot study. In addition to the research questions, another important goal of the study was to learn about the process in order to be able to formulate more focused research questions for the main study. Further, we wanted to test how suitable our data collection methods were in a classroom environment.

Data collection and analysis

Data was collected during two eight-week courses in an upper secondary school in the City of Tampere, Finland, during Spring term 2010. Ten students participated in the first course in Geography and sixteen students in the second one in Biology. The students were organized into eleven project groups.

In the first course, we collected basic data of students by a pre-questionnaire, observed the weekly meetings in the PC class, and interviewed the groups at the end of the course. In the second course,

we replaced observation by interviews; each group was interviewed twice during a classroom session. The interviews focused on what the students had achieved so far in their project, what they were currently working on, and what they were planning to do next. The teachers were interviewed both before and after the courses.

Recorded interviews were transcribed and exposed to a conventional content analysis, as were the observation journals. Published Wikipedia articles were split into sentences and mapped to sources cited by students to see how information had been processed. The text was analyzed through a sentence-by-sentence plagiarism checking procedure.

Summary of the findings

Influence of Wikipedia

The students reported that the prospect of publishing their articles on Wikipedia influenced their work in several ways. They were careful to mark their citations in a correct manner, and verify the facts they presented. One group admitted that if only the teacher had read the article, they would not have been marked citations so conscientiously. To assess reliability some students compared information from different sources. Writing style was important as they perceived that anyone could read their texts in Wikipedia. The language needed to be fluent, correct, and sound reliable. The analysis of articles sentence-by-sentence revealed that, although the share of copy-pasted sentences exceeded 10 percent in two groups, there was no indication of copy-pasting in the texts by six of the eleven groups.

Collaboration

The findings revealed a diversity in the way students approached and implemented collaboration: 1) a shared goal and working together, 2) shared goal but working separately, and 3) no shared goal and no collaboration.

The amount and level of group work also varied at different stages of the process. The general trend was that planning the task was done collaboratively, but information seeking separately. Choosing information sources for the article was done collaboratively but writing the text was divided although following a mutual plan. Finishing the article and transferring it to Wikipedia was done slightly more often separately.

Students' learning experiences

Students reported several positive aspects of the Wikipedia project. Writing for a public forum felt more meaningful (albeit more challenging) than writing traditional papers. The students gained a deep understanding of their topic from reading and comparing information from several sources. They reported learning how to search, evaluate, and use information in an appropriate way, and how to publish on Wikipedia. One student had learnt a new way of acquiring and processing information: a new way to learn. Many students also valued the independent choice of topic, and information sources. However, quite many students worried that reading the standard textbook would better have prepared them for the maturity exam. Some students also experienced the publication in Wikipedia as stressful.

Discussion

The findings show that writing for a public forum such as Wikipedia reflected several core elements of information literacy instruction. The students worked conscientiously on their task, were careful to mark citations in a correct manner, made an effort to find reliable information, evaluated information sources, and carefully compared information to other sources to ensure its reliability. They also paid attention to the writing style of the text to make it appropriate as a Wikipedia text.

Students' experiences showed that writing on Wikipedia served both learning goals in subject contents and IL-related skills. Difficulties in finding a balance between these two goals have been reported in earlier studies. Many learning experiences related to Wikipedia suggest that students might have got a deeper understanding of it as an information source. This is important since students search Wikipedia often. Does the experience of the participatory writing on Wikipedia help to find criteria to assess Wikipedia articles, and expand this knowledge to other information sources remains an open question.

The assignment supported independent information seeking, as well as team work. Students shared and discussed information, and collaborated in producing and publishing text. However, the findings also revealed a diversity in the amount and level of collaboration. The observed diversity in collaboration raises many questions: Why different groups adopt varying strategies – if any - in collaborative knowledge construction? In what phases of information searching, assessing and use working together is productive; where coordinated work of individuals is more beneficial?

The findings also revealed clashes with the traditional school curriculum as the course fell outside the curriculum plan for the upper secondary school where much focus is centered on the maturation exam. This caused stress among some of the students, who felt that the course consumed time that instead could have been spent preparing for the exam. This also illustrates the slow transformation of traditional structures, such as school curricula. They present learning goals for new literacies and independent learning side by side with subject content goals. However, school practice does not give an equal value for these learning goals.

The pilot study was useful in further refining our research questions and methods. We found that we will need to fine-tune the interview questions to be more specific in the main study, as some of the students' replies remained fairly unspecific. The need to acknowledge and further understand the mechanisms behind the variety of ways to approach groups work also needs to be elaborated. We realized the benefits of using questionnaires for some of the questions, including group work approach and general information habits. The main study will also include psychometric measures of the students' sense of identity, personality as well as approaches to studying, which will further deepen our understanding of the students' attitudes and behaviour.

The main study

We will collect data for the main study during April-May 2011, and expect to report findings from the preliminary analysis of this data at the conference.

References

Achterman, D. (2005). Surviving Wikipedia. Improving Student Search Habits through Information Literacy and Teacher Collaboration. *Knowledge Quest* 33(5): 38-40. [URL: <http://aasl.metapress.com/content/h8l2588408383h47/fulltext.pdf> cited March 28, 2011]

Emigh, W. and Herring, S. (2005). Collaborative Authoring on the Web: A Genre Analysis of Online Encyclopedias. Proceedings of the Thirty-Eighth Hawai'i International Conference on System Sciences (HICSS-38). Los Alamitos: IEEE Press. [URL: <http://robertoigarza.files.wordpress.com/2008/10/art-collaborative-authoring-on-the-web-emigh-2005.pdf>; cited January 12, 2011]

Every, V., Garcia, G. & Young, M. (2010). A Qualitative Study of Public Wiki Use in a Teacher Education Program. In: D. Gibson & B. Dodge (Eds.), Proceedings of Society for Information Technology & Teacher Education International Conference 2010, pp. 55-62. Chesapeake, VA: AACE. [URL: <http://homepages.uconn.edu/~vje01002/finalSITEpaperVEvery.pdf>; cited January 13, 2011]

Forte, Andrea and Amy Bruckman. (2010) Writing, citing, and participatory media: wikis as learning environments in the high school classroom. *International Journal of Learning and Media*, 1(4), 23-44.

Morrisette, R. (2008). What Do they Know? A Strategy For Assessing Critical Literacy. *Knowledge Quest* 35(5): 14-17. [URL: <http://aasl.metapress.com/content/q28646108l4vp324/> Cited March 30, 2011]