

Building Knowledge Online: Master Students' Use and Evaluation of Wiki and Forum

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Abstract: In two Master classes (N = 40), wiki and forum were used to share resources, give and receive feedback, and collaborate on a glossary. Online surveys sent to students quantified the use of different wiki features. Mid-term, end-of-term, and 1-year follow-up survey data show which elements were used most at what point in time. Use of materials, especially of the collaboratively built glossary, was still active one year after the class had ended. In sum, the knowledge built online during class was evaluated positively by students and was used well beyond the class itself.

Introduction

A *wiki* is a social computing system that consists of a hyper-linked set of web pages. Wikis are essentially collaborative: Everybody can edit pages and add new ones, with no need for special software or knowledge of HTML. Changes on wiki pages are shown instantly. As Godwin-Jones (2003, p. 15) put it: "The goal of Wiki sites is to become a shared repository of knowledge, with the knowledge base growing over time". Wiki pages are always available for further discussion and refinement (Bruns & Humphreys, 2005). As students themselves generate the knowledge structure of concepts and ideas and the relation between them, they develop expertise on the subject matter (Jonassen, Beissner, & Yacci, 1993). A *forum* is an online discussion platform that is built in hierarchical threads, organized according to topics. Forums facilitate exchange (Godwin-Jonas, 2003) because they provide a lasting documentation of all contributions in the order they were posted. Both wiki and forum allow for active learning: Students can create knowledge and go back to that rather than only read or listen. This paper addresses how students use what they have created and to what extent they go back to it.

Feature Description

In two master classes I used wikis (one for each class) to enable students to upload material and to provide material myself. Among the materials that I uploaded were: reading assignments, central questions that guided students through their reading assignments, exercise material from classroom meetings, current journal articles, a mindmap software, and links to other websites. In the Methods class, students provided written commentaries (i.e., peer reviews) on other students' work. The reviews include positive and negative feedback, suggestions for further improvement, and answers to open questions. A forum, linked to the wiki, enabled each student to write peer reviews twice during the term. In the Social Cognition class, students worked on a class glossary to establish a large pool of definitions, explanations, and summaries of empirical studies. Keywords within one entry could again be linked to other glossary entries.

Research Questions

1. Do students actually use and appreciate wiki elements such as the glossary?
2. Is a wiki a sustainable investment of time and effort, i.e., do students use the wiki beyond the class itself?
3. How do students evaluate wiki, forum, and peer review?

Method

Of 23 participants in the Social Cognition class, many commented on their use of the wiki around mid-term (n = 21), at the end of term (n = 21), and 1 year after the class had ended (n = 22). They chose what they had used from a list of all wiki materials. Multiple choices were possible, i.e., students could choose as many elements from the list as applied to them. Of 29 participants in the Methods class, n = 19 commented on their attitude towards wiki, forum, and peer review 1.5 years after the class had ended.

Results

Figure 1 shows which wiki elements were used by students of the Social Cognition class at which point in time. The exercise material, the glossary, and the current articles were used throughout the semester and even beyond the class itself. One year after the class, the glossary that students had created together was still used by a third of the participants.

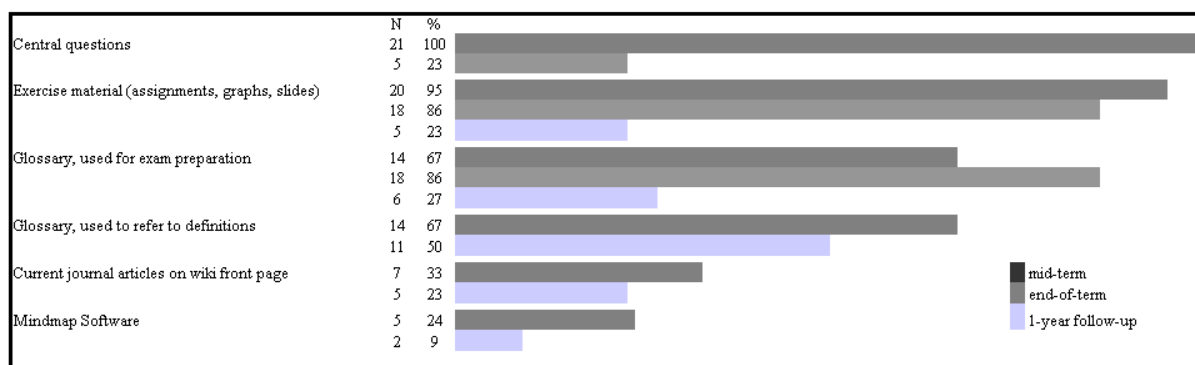


Figure 1. Use of Wiki Materials in and beyond a Social Cognition Class.

Mean ratings of students' evaluations were $M = 5.18$ for the wiki, $M = 4.68$ for the forum, and $M = 4.86$ for the peer review assignment. Figure 2 shows how the grades assigned to wiki, forum, and peer reviews were distributed. While the wiki was evaluated unequivocally positive, peer reviews and forum were seen more ambiguously.

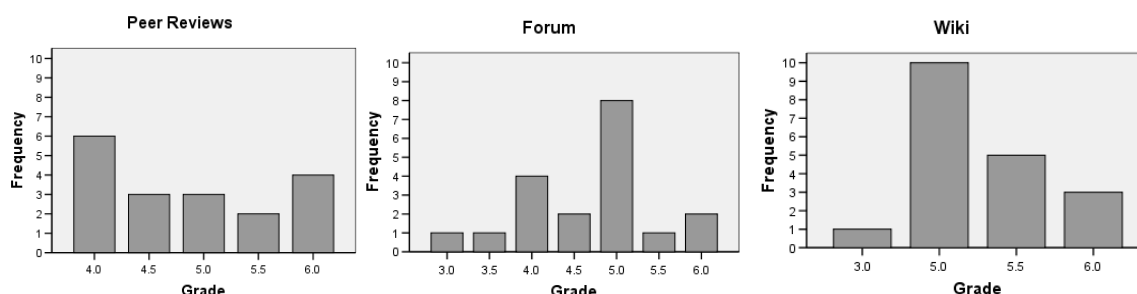


Figure 2. Student evaluations. 6 = very good.

Discussion

Students used the wiki elements well. Some elements (central questions, exercise material, glossary) were used by all participants throughout the class. Popularity of some elements changed over time. This is in line with the changing needs of the students: The central questions were meant to guide students through their reading assignments during the term, whereas the glossary is a means of long-term documentation that students can use for future classes or their own future research projects. I was pleased that the glossary, built in a collaborative effort by all students, was still "active" one year after the class. To me as the instructor, it is also very helpful that students still relate to exercise material and journal articles available on the wiki – if I had not provided the material online, I would probably have received many requests to send them via email. Thus, wikis are also efficient and time-saving for instructors. Students evaluated the class wikis very positively. Forum and peer reviews were seen more controversial, but nevertheless positively. Analysis of the written comments showed as the main critiques that one's own contributions to the forum were difficult to correct/change once posted, and that peer reviews sometimes became redundant.

From these surveys among Master students I conclude that wiki and forum are helpful tools that build knowledge online, enable a lasting documentation of knowledge that students use well beyond the end of the class, and save time and energy that the instructor can then put to better use.

References

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