A Case Study of a Course Including Wikipedia Editing Activity for Undergraduate Students

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Abstract: Editing Wikipedia can increase participants' understandings of subjects, while making valuable contributions to the information society. In this study, we designed an online course for undergraduate students that included a Wikipedia editing activity. The result of a content analysis of the term papers revealed that the suggestions made by the e-mentor and the teacher were highly supportive for the students in our case study, and it is important for Japanese students to check Wikipedia in English before making their edits in Japanese.

Keywords: Wikipedia, Online Course, Project Based Learning, Information Ethics

Introduction

Wikipedia is an online, user-written encyclopedia. It is supported by 286 languages and is the seventh most visited website in the world. According to Knight & Pryke(2012), 75% of academics and students use Wikipedia at British universities.

In some universities, project-based learning activities that include Wikipedia editing have been designed. Moy *et al.*(2011) conducted a project for graduate students studying chemistry. They reported that having the students edit Wikipedia had some effects on their acquisition of scientific knowledge and their abilities to communicate with general audiences. In another study, Chiang *et al.*(2012) showed that students could learn from Wikipedia editing processes.

In this study, we focused on methods to facilitate undergraduate students editing Wikipedia in Japanese. We designed an online course that required students to edit Wikipedia in Japanese, and we conducted this course twice in two years. We call Wikipedia in Japanese 'Wikipedia' in this paper. The purpose of this study is to examine ways to support students in editing Wikipedia throughout the university's courses.

1. The Objective of Research

1.1 The Design of the Course

This online course was conducted at a university in 2011 and 2012. A teacher and an e-mentor supported the students. Thirty students participated in the activity in 2011 and 36 students participated in 2012. The course was focused on information society and information ethics. Some lectures that were related to these topics were provided at the beginning of the semester. The students were required to take on-demand lectures and submit reports using Learning Management System(LMS).

In the middle of the semester, the teacher also provided a program to facilitate students' participation in social media. In this program, they had to use Social Networking Service (SNS) such as Twitter, Facebook and Q&A communities. At the end of the semester, we conducted the project that included Wikipedia editing activities.

1.2 Wikipedia Editing Activities

In order to help students develop general research skills and Wikipedia editing skills, we taught the following research points and three core policies of Wikipedia as shown below

- (1) Neutral point of view
- (2) Verifiability
- (3) No original research (Wikipedia: Core content policies)

"No original research" means that the editors should show appropriate resources or references when they edit Wikipedia. These policies are useful to teach the basics of research skills at a university. During the first lecture of the project, we presented three purposes of this project described below.

- (A) Contribute to the information society by editing Wikipedia
- (B) Learn basic research methods
- (C) Acquire communication skills using the Internet

We provided a Bulletin Board System(BBS) on the LMS to facilitate discussion in the class. The students were asked to report and discuss their proposals for edits to Wikipedia on the BBS every week. They could choose any topic related to information society or information ethics. Moreover, they could choose whether they would make their edits on Wikipedia in Japanese or only propose them on the local BBS. The teachers and e-mentor gave feedback about the contents, style, and format of their proposal. After the e-mentor approved the proposals, the students could edit Wikipedia. For the term paper, they had to write about the process of editing Wikipedia or making the proposals, including what they learned through the activity.

The course was changed slightly in 2012. The first change was the number of lessons for the Wikipedia editing activity. The lessons were increased from five to seven. Second, we changed the method of providing feedback, and we encouraged the students to check Wikipedia of English in 2012. This is because the contents in English had relatively high possibilities than in Japanese.

2. Research Methods and Resources

In this study, we examined the students' edit on Wikipedia or their proposals on the BBS. In addition, we examined the term papers, and considered the ways to support the students who want to edit Wikipedia.

3. Results

3.1 Editing Wikipedia

Table1: The number of students who edited Wikipedia or posted only in BBS

Year	Edited Wikipedia in Japanese	Only proposal on BBS	The number of students
2011	16	14	30
2012	19	17	36

Table 1 shows the numbers of students who edited Wikipedia in Japanese or posted only on the local BBS. As previously mentioned, they could select whether they edited Wikipedia or only proposes an edit on the BBS. About half of the students edited Wikipedia, and there are no differences between the two years.

3.2 Comments from the Students

We examined the students' comments in the term papers. 16 students (53.3%) referred to the advice given by the e-mentor or teacher in 2011, and 23 students (63.9%) mentioned this in 2012. This result suggests that the students considered the feedback from the e-mentor or teacher to be useful, as shown in comment A. 10 students referred to Wikipedia in English as shown in comment B from 2012.

Other student commented that comparing Wikipedia in Japanese and English helped them to decide on content, as shown comment C.

- Comment A: I learned it was difficult to represent the fact clearly. I posted proposals on the BBS, but the e-mentor suggested that explanations such as "recent year" and "many papers" are too vague, and suggested "You should write more concretely." So, I revised it.
- Comment B: By comparing Japanese and English, I had more opportunities to study different opinions.
- Comment C: A piece of content in Japanese only included Japanese case, but Wikipedia in English had many cases throughout the world. Therefore, I first translated the English Wikipedia contents. If I didn't check Wikipedia in English, I felt that I couldn't try to edit at topic in Japanese.

About 80% (8 out of 10) of the students who referred to Wikipedia in English edited Wikipedia in Japanese. Though 42.1% (8 out of 19) of the students who edited Wikipedia in Japanese mentioned Wikipedia in English in their term papers, only 11.8% (2 out of 17) of the students who only posted proposals on the local BBS referred the contents of Wikipedia in English. In order to examine the difference, we should focus on that Wikipedia topics are written by many people. Therefore, to identify how to write or decide proposals, we should review at the point of view of 'the wisdom of crowds(Surowiecki 2005)'.

4. Conclusion and Future Work

In this study, we designed an online course that included Wikipedia editing activity for undergraduate students. As a result of conducting this course for two years, about half of the students actually edited Wikipedia. Feedback comments provided by the e-mentor and teacher affected the students in a positive way. In particular, having students check Wikipedia in English was useful for the Japanese students in our case study. The next step in our project is to consider the effects of the activities and to check the students' contributions to the Wikipedia community after the completion of the course.

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