

Case Study University of Washington Bothell, US

This case study was conducted upon [Martha Groom's and Andreas Brockhaus' Educause presentation](#) and information obtained from the resources as detailed at the end of this document.

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1 Setting

1.1 Name: University of Washington Bothell, US

1.2 Course: (Environmental) History and Globalization (BIS303, Autumn 2006) and Conservation and Sustainable Development (BIS 459, Spring 2007)

1.3 Subject area: _____

1.4 Sources: Blogs Calendar Demos / Use cases FAQs
 Forum posts Guides & Manuals Knowledge Base
 Mailing list News Wikis Other:

2. Course description

- HE (higher education)
 K12 (primary & secondary education)
 VET/FET (vocational education and training / further education and training)
 Other, namely: _____

2.1 Description:

This case study features two courses that were given by [Martha Groom](#) involving [Wikipedia](#). The two courses were (Environmental) History and Globalization (BIS303, Autumn 2006) and Conservation and Sustainable Development (BIS 459, Spring 2007). As part of the courses students were given an assignment and supposed to research Wikipedia and write articles for submission.

Following Groom, the structure of the traditional term paper can limit its educational value. To make the students' assignment more meaningful, the students at the two courses published their papers in Wikipedia.

The reasoning of using Wikipedia for students' term paper assignments were driven by the following questions:

- How to make a term paper a larger learning experience (rather than a limited academic exercise)
- How to provide authentic peer review
- How to connect and engage an external community

- How to make a term paper benefit a wider community
- How to motivate students to do their best work
- How to have students think more deeply about the issue of creating knowledge
 - Go beyond just thinking about the paper topic

The result of those two pilot courses showed that with one exception, students in both courses felt this was a valuable experience, superior to the typical term paper

Regarding the students' contributions 1 article was deleted within 24 hours of posting, another 4 articles were deleted after discussion, material merged into existing articles, and intervention was required for 1 article. Also some discussion comments from Wikipedia community were delivered rudely, as also sometimes is the case within FLOSS.

Overall however there was no persistent difficulties in navigating Wikipedia or in publication to Wikipedia for any student

Not all went out just perfect and some areas of improvement concerned:

- Too much choice led to some poor postings (which were deleted)
- Timing -- Publishing once at the end of course
 - May be better to publish in stages
 - Posting deadline with at least one week left to course
- Students needed extra guidance to create high quality articles in encyclopedia style
- More instructor time required to shepherd students through entire process

What students said:

- *“This assignment felt so **Real!** I had not thought that anything I wrote was worth others reading before, but now I think what I contributed was useful, and I’m glad other people can gain from my research.”*
- *“Although I was really scared by this assignment, I really appreciate a chance to write something that might help someone else beyond myself.”*

3. Course activities

- Self-Studying
- Project based activities
- Group work
- Other, namely: Term paper

3.1 Description:

For the first course in autumn 2006 students were given a term paper assignment with the objective to large edit or to write a new Wikipedia article with a minimum of 1500 words. During the second course in spring 2007 the objective was for students to create a wikipedia article or sub-article as a collaborative group work among students.

The improvement from the first to the second pilot was a more specific guidance and stricter oversight on selection of projects and to focus on collaborative projects that allowed greater student oversight.

4 Involved content

- Instructional materials
- Course learning materials
- General readings
- Other, namely: Wikipedia

4.1 Description:

Reviewing [one of the Wikipedia contributions](#), that were made as part of the course in autumn 2006, the content / information used to write the Wikipedia article consisted of printed literature and web sources, such as [BBC](#) or [Annual Reviews](#).

5 Purpose used / developed for

- Reading and self studying
- Problem solving
- Publication of information

5.1 Description:

The reason to let students contribute to Wikipedia was to provide some meaning to the college-level term paper, which typically has an audience of one (the professor) before ending its career in a recycling bin. Groom hoped that assigning students the task of creating a Wikipedia entry would make the effort more meaningful, since students were writing for what might be a wider audience and with the intention of providing a general public benefit. She also suggested that the project would be a good introduction to the academic world, which focuses on the production and dissemination of knowledge.

The motivation for letting students engage at wikipedia and contributing to it was:

- Writing a Wikipedia article can be a more sophisticated learning experience:
- Enhances quality of research and writing
- Enhances student understanding of the research process

- Highlights importance of using verifiable and credible sources
- Increases pride in work
- Encourages collaborative model of knowledge creation

Thus with students engaging at Wikipedia they gained a perspective on the value of credible sources, and complete citations. Also peer review became a more purposeful effort; with good critiques being more highly valued than bad ones.

The results of the two courses also showed that students invested more in their work, felt greater ownership, and experienced greater returns for their efforts with the result of generally better written Wikipedia contributions than the typical term papers.

6 Developed by

- Lecturer / staff
- Educational body / group
- Tutor
- Students
- Other: Wikipedia contributors

6.1 Description:

Part of the nature of Wikipedia is that anyone can edit the content from someone else and so was the case for the contributions of the students.

Getting familiar with the fact that content is being edited on the fly, by people one never met before, and getting used to constant revisions by regular contributors was a part of the experience. Students posting material to the site would also learn to stop viewing their work as “sacrosanct.”

But this Wikipedia characteristic of peer editing also led to a further challenge with some Wikipedia editors didn't find some of the students' articles relevant enough to warrant their own topics; meanwhile [other contributions](#) were seen to be of sufficient quality and relevance. Some students' contributions were [either deleted or merged with existing articles](#). That reality is in part a function of Wikipedia's vast breadth, which already covers virtually any topic in which there is sufficient public knowledge.

7 Access to content

- General Public
- Internally
- Only for core group

7.1 Description:

As common for Wikipedia all content is publicly available.

8 Right to edit content

- General Public
- Internally
- Only for core group

8.1 Description:

As common for Wikipedia all content can be edited.

9 Involved roles

- Learner
- Support provider
- Content creator
- Peer
- Mentor
- Other, namely: _____

9.1 Description:

During the course students were not only acting as learner, but also adopted roles such as active investigator and [researcher](#) , as [editor](#), or [collaborator with peers](#).

10 Use of prior learning

- No (rather not)
- Yes

10.1 Description:

Due to the nature of the class work (writing a term paper) prior learning outcomes that could be used seemed to be limited to resources created by Wikipedia users that help contributors to learn how to compile a professional Wikipedia article and how to use the involved technology.

A brief review of the ongoing students' discourse at the projects'

11 Connection to further content

- No

Yes

11.1 Description:

Yes, as common for Wikipedia.

12 Involves peer-review

No

Yes

12.1 Description:

Peer review is one of the characteristics of Wikipedia and therefore also student contributions were reviewed by [classmates](#) and [others](#)

13 Learner assessment

No

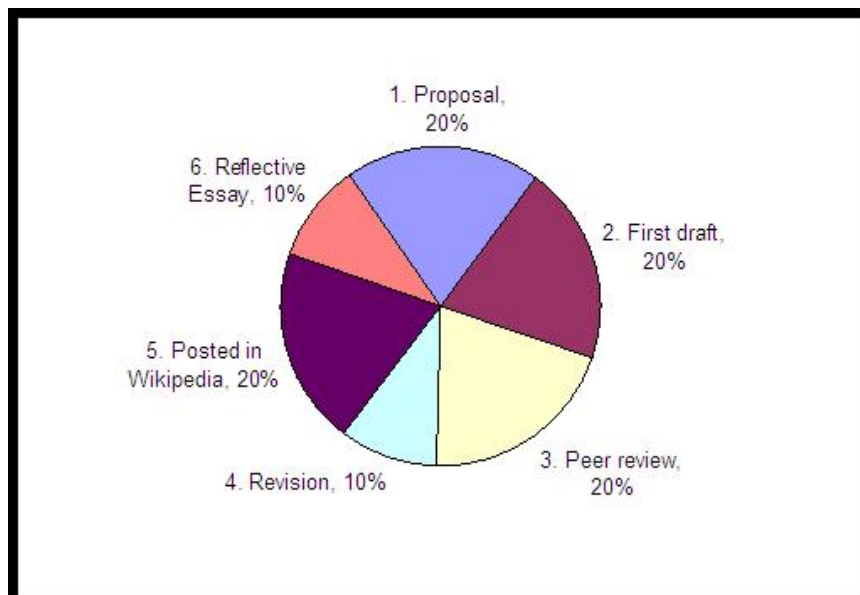
Yes

13.1 Description:

Students work was assessed as well [by Wikipedia users](#), as it was on a class level to officially grade the students' work.

For the first course in autumn 2006 60% of the course grade was based upon the students' work at Wikipedia, and for the second course in spring 2007 40% course grade.

The students work within Wikipedia was assessed by the criteria as illustrated at the image below.



14 Existent support system

- No
 Yes

14.1 Description:

Support is provided in class by the teacher and through one-on-one help and through the [Wikipedia community](#).

Since students seemed to be new to Wikipedia they initially needed extra help shifting voice from “essay” to “encyclopedia entry”. Thus initial support focused on the following aspects:

- Technology issues
 - Requires some wiki markup language
 - Understanding Wikipedia components
 - History
 - Revisions
 - Discussion forums
 - Creating accounts
 - Restrictions for new accounts
- Technology solutions
 - Students had to complete tutorial at <http://en.wikipedia.org/wiki/Wikipedia:Tutorial>
 - Sandbox provides practice spaces
 - In-class training session and handouts
 - One-on-one help
- Copyright
- Referencing
- Linking to internal and external sources
- Finding topics to add to Wikipedia

15 Similarities to FLOSS cases

- FLOSS case number(s):

15.1 Description:

Looking at the similarities to FLOSS case one must take into account the environment these pilots took place at: Wikipedia. Wikipedia itself might be one of the closest examples of a successful FLOSS-like project, but maybe not of a FLOSS-like learning environment. Similarities to FLOSS start with cultural manifestations and go up to the collaborative production process.

Therefore we initially will briefly describe the similarities between Wikipedia and the FLOSS model, before looking separately at the pilot courses from Washington Bothell.

As for the FLOSS case Wikipedia stands for some freedoms, like:

- Freedom to access information from the commons
- Freedom to analyse and edit the information
- Freedom to co-operate
- Freedom to synthesis new information and contribute it to the commons

The most obvious link between Wikipedia and the FLOSS model might lays in the [commons-based peer production](#) model that both follow. Development is tracked through versioning systems allowing users to understand what changed over time and also why it changed, with discussions on changes being displayed at a separate discussion space. Though having some hierarchies in place Wikipedia explicitly invites newcomers to become active participants, a trend that can be also seen at the web at large but also in educational approaches.

The case of Washington Bothell shows a blended type of learning environment, with students' engagement within the classroom and within Wikipedia. This is something one can also find within FLOSS, e.g. the Ubuntu local teams or the Ubuntu developer meetings, where participants meet up not only at the web, but also in the real world.

16 Borders, limitations and differences to FLOSS cases

Description:

Unlike FLOSS projects Wikipedia uses a quite centralized and even more basic environment. [FLOSS environments](#) are on the other hand dispersing environments where members engage at various spaces and that involve a large set of communication and collaboration tools. Wikipedia on the other hands attempts to centralize all communication and collaboration on its wiki space.

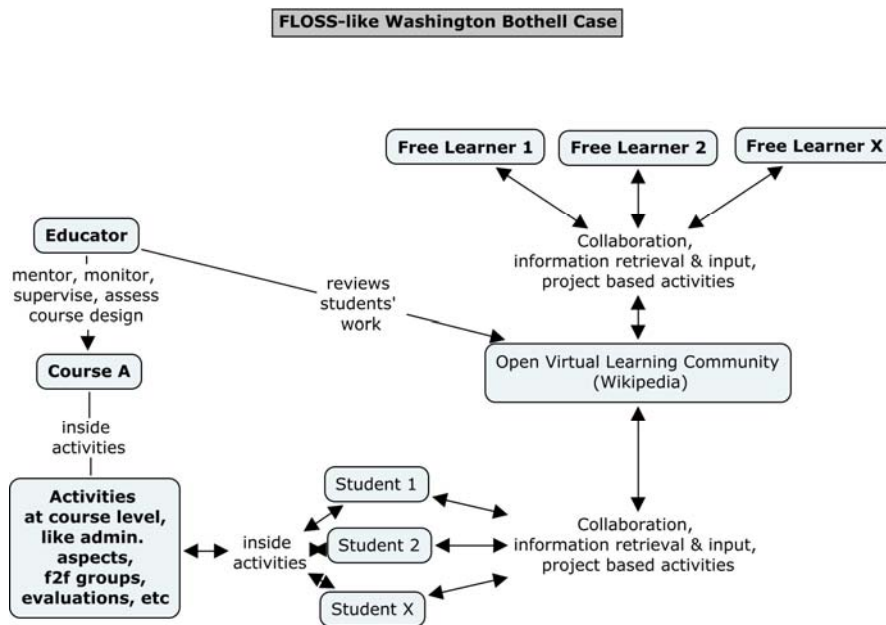
Though working on a Wikipedia article might take part as a form of collaborative project based work, and might involves some problem solving tasks, it can't be compared with its FLOSS counterparts. On the one hand FLOSS projects do have typically a roadmap, a feature list that is partly derived from users' needs and feedback, and established teams that are assigned to a broad range of tasks and sub-projects. On the other hand "solving problems" is a driving force within FLOSS with solved problems being an important learning resource (see also the FLOSS support model), and being an important part for product requirement definition process, which ultimately leads to a continuous improvement cycle.

Linked to this; a major difference to FLOSS is the availability of a (learner) support

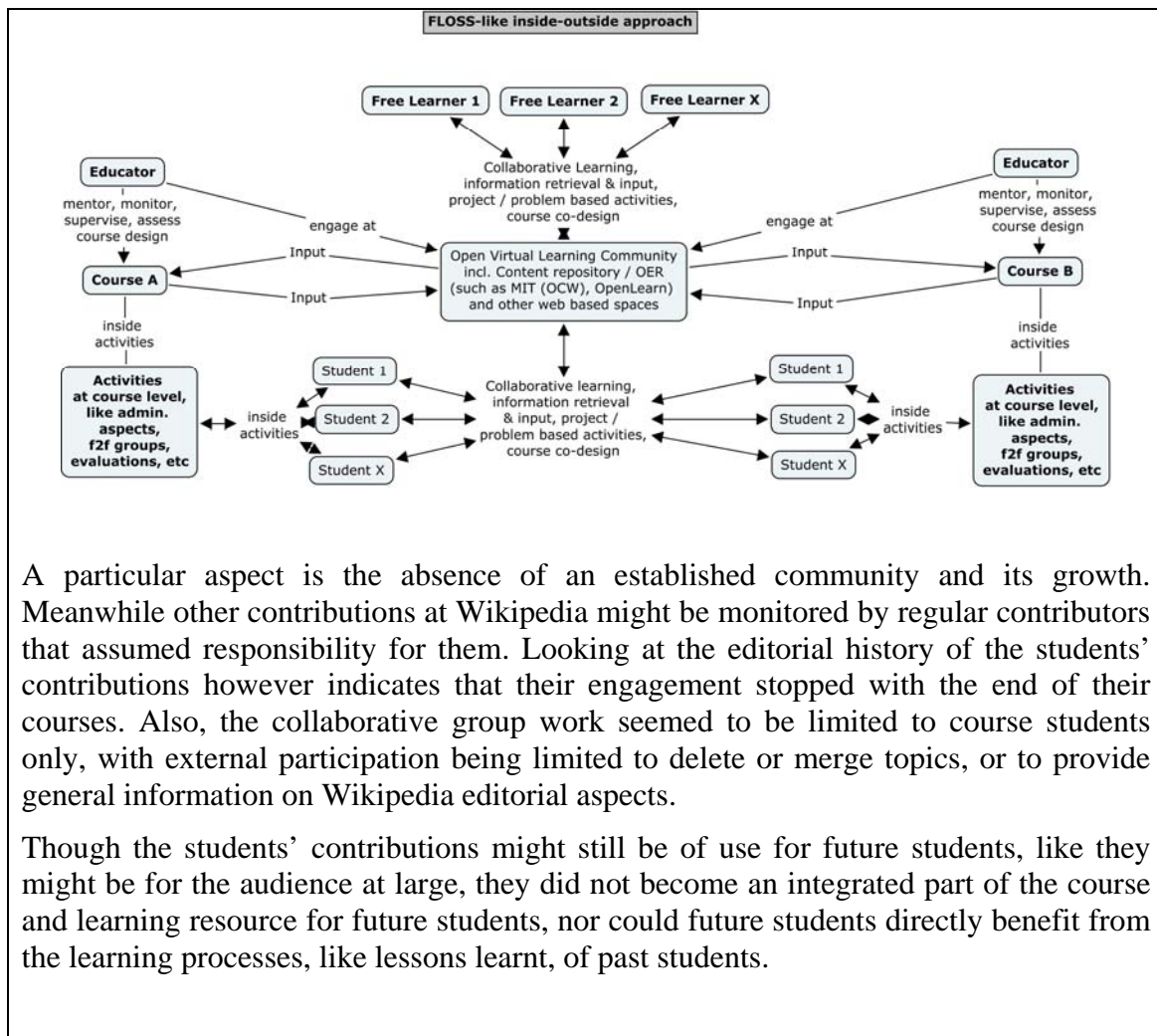
system. Though Wikipedia has a versioning system and discussion pages, much of the collaborative nature that (usually) forum based [FLOSS support system](#) characterise is absent in Wikipedia, or takes place outside of this environment and is therefore 'lost'. Users at Wikipedia either engage at Wikipedia to retrieve information or to submit information, but they do not engage with its content as part of their learning process at Wikipedia. Thus the type of [re-experience](#) of other participants' learning processes and [re-use](#) of content that can be seen in FLOSS is not present in the same way at Wikipedia. Comparing Wikipedia content with FLOSS code only probably leads to the same type of re-use within both: Wikipedia and FLOSS. However, once looking at e.g. the user support system, including user postings, user compiled how-to guides, etc, Wikipedia is quite different to FLOSS

One also does not find, likely to be as a consequence of the foregoing facts, the same type of [motivations](#) to contribute to Wikipedia, nor is it a common characteristic that peers helping peers to solve a respective problem.

For the concrete case of the Washington Bothell pilot, the underlying environment and activities might be illustrated as follows:



As outlined at the general differences between Wikipedia and FLOSS(-like) environments the case of Washington Bothell differs from a FLOSS-like learning environment as displayed below in several aspects.



17 Possible areas of improvement

Description:

To make students' projects not only a useful contribution to Wikipedia, but also to help future students within their learning process and to provide them with continuous updated and growing learning resources it could be beneficial to run this course within a more integrate environment (see also FLOSS-like inside / outside approach) and to establish a learning community, which consists of course students, students from other institutions and free learners.

Within such an integrated environment it might also be considered to give students the option of building upon existing projects, or if preferred to create their own projects, or to work on project extensions.

To foster a certain degree of continuity and growth the usage of a well known and frequented space like Wikipedia, or maybe Wikiversity the educational arm of it, is a good starting point. Due to the large number of visitors and contributors this might also help to bring in 'old foxes' (e.g. free learner) into this learning environment and to provide some type of FLOSS-like support and guidance.

To bypass the communication limitation of wikis such an integrated environment might also uses additional collaboration spaces, like forums, or web based spaces as provided

by Google (e.g. Google groups & docs). Using such tools might also be a way [to make learning processes visible and to record them](#), so that they are of use for future students.

Date conducted: 14th of November 2007, by Andreas Meiszner

Links & sources:

Martha J. Groom websites

- <http://faculty.washington.edu/groom>
- <http://www.bothell.washington.edu/IAS/faculty/mgroom.xhtml>

Content at blogs that was used for this case study:

- <http://insidehighered.com/news/2007/10/29/wikipedia>
- <http://arstechnica.com/news.ars/post/20071030-prof-replaces-term-papers-with-wikipedia-contributions.html>
- <http://ideasandthoughts.org/2007/10/30/wikipedia-continues-to-be-the-poster-child-for-shifted-learning>
- http://sethgodin.typepad.com/seths_blog/2007/10/the-wikipedia-g.html

Assignment results at Wikipedia:

Autumn 2006: 34 students published to Wikipedia

- http://en.wikipedia.org/wiki/Deforestation_during_the_Roman_period
- http://en.wikipedia.org/wiki/Americanization_%28of_Native_Americans%29
- http://en.wikipedia.org/wiki/1491:_New_Revelations_of_the_Americas_Before_Columbus

Spring 2007: 14 group projects published to Wikipedia

- http://en.wikipedia.org/wiki/Communal_Wildlife_Conservancies_in_Namibia
- http://en.wikipedia.org/wiki/Akosombo_Dam
- http://en.wikipedia.org/wiki/Renewable_energy_in_Africa

Educause presentation

- http://educause.edu/E07/Program/11073?PRODUCT_CODE=E07/SESS089&ITIN=True