

# Creating Community through the Use of a Class Wiki

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**Abstract.** This study examines the use of a class wiki in a course offered to incoming freshmen at a college in central Pennsylvania. The wiki was used to supplement instruction in a classroom-based course. The study shows that the wiki was helpful in building community among incoming students, and also helped them to grow academically in the course. The class wiki also helped foster positive feelings toward the course as well as students' first semester at the college.

**Keywords:** Wiki, classroom, community building.

## 1 Literature Review

### 1.1 The Development of Wikis

As we move further into the age of online user created content, wiki pages have evolved as the most user-friendly software in the field. Wiki pages are the simplest online collaboration forums in existence. The first wiki, titled WikiWikiWeb, was created by Ward Cunningham in 1994 [1]. Since that time, dozens of variations of this first site have developed. The concept of wikis revolves around members of the wiki having the power to edit, and frequently re-edit and add to, the content of the site. The formal definition of a wiki is "a collection or network of Web pages containing information that can potentially be edited by any participant" [2]. Wikis have evolved from informal information-sharing sites, to being used as educational learning and collaboration sites, even as online encyclopedias as seen in the case of Wikipedia.

Wikis have significantly altered the World Wide Web landscape. In a few short years, "the internet has been transformed from a place primarily to retrieve information to a network for advancing and exchanging it, inviting more open participation, interaction, and creative expression" [3]. With this fundamental change to the Internet, it has become a priority to develop information and ideas past their initial state. Thus, online content creators have gradually shifted from working alone to working with others [3].

Although in their earlier stages wikis were classified as "new media" and typically utilized in journalism classes only, they have become commonplace in diverse academic settings and are now frequently included as components of many core classes [4]. Wikis have become increasingly accessible to anyone with Internet access. No

additional software is needed beyond a modern Internet browser, a username, and a password to the wiki site desired [1].

## 1.2 Wikis in Education

Wikis have become an integral part of education, especially in secondary and higher education. For some time, there has been a push in higher education to increase active learning practices, an opportunity presented and fostered by wikis. The Constructivist theory, which has become more widely referenced since the birth of wiki learning, claims that “knowledge is actively constructed, not passively absorbed from textbooks and lectures” [5]. Also assumed in this theory is that two students may come to different conclusions about the same topic. Wikis thrive upon varied points of view, and assist in the compilation of these perspectives into a cohesive agreement.

With the use of wikis in education, students gain a heightened sense of responsibility for their learning process. The role of the teacher slowly diminishes as the students learn through their own writing and the written thoughts of others in the class [1]. The students foster their own growth; a unique result of wikis in education is when two or more students help each other reach an unexpected conclusion. The process is often referred to as “collective cognition,” and can best be understood as two or more people reaching a conclusion that neither one could have reached on his or her own [6]. Most significantly, the educational wiki has eliminated the concept of each student as an autonomous learner, and created a sense of camaraderie in the classroom [4].

Class blogs permit students to practice writing, as well as develop an understanding of others’ ideas, while addressing the content of the course [7]. Students become used to hearing others’ ideas and opinions, allowing for more open-minded and well rounded discussion. The course content is therefore thoroughly explored. Students no longer write for themselves and their teacher alone, but rather “for and *with* their peers” [8]. The melding of each student’s educational and personal background helps them to feel as if their own perspectives are important, and cause their learning to take on more meaning because it is connected more closely to their own experiences [3]. With this type of writing, formality is rarely taken seriously, and more importance is placed upon brainstorming as a group, and peer review. Wikis in the classroom cause students to work as an editorial team and can help students overcome shyness or uncertainty about their opinions [4]. A major characteristic of the wiki atmosphere is the opportunity for students to express themselves [3]. This also encourages students to experience new forms of media while learning [9].

Students entering a new academic environment tend to feel apprehensive about their standing in the classroom and are “uniquely ignorant of their new surroundings and expectations” [3]. They may feel particularly reluctant to engage in their classroom education for fear of making a mistake or giving an impression of ignorance. In the wiki setting, students have a safe zone to take risks, increasing their chances of intellectual engagement with one another and the material. Wiki use also tends to combat “stultified prose,” or writing completely lacking inspiration and style [3].

The role of the teacher or professor is lessened with the use of a wiki. For teachers, wiki use can make the learning environment much more complex [6]. Teachers are responsible for keeping up with the wiki contributions, and monitoring student progression with little input. The professor “has become more clearly a coparticipant rather than a leader” [1]. In addition, face-to-face interaction between student and

teacher may be decreased depending upon the prominence of the wiki in the class requirements. As the teacher becomes more of a guide than a leader, students learn to constructively criticize each other. They become less dependent on the teacher to foster discussion [8].

Students learn several lessons when wikis are used in the classroom. Primarily, they become more willing to relinquish ownership of their ideas. They grow accustomed to the communal portal of ideas in a wiki [8]. In addition, students are aware that their writing is public and easily accessible, persuading them to be much more careful to follow copyright laws and reference their work. And finally, students gain a greater sense of confidence with their peers. If they disagree with a statement or idea, they need to move beyond simple discussion in the classroom to making a conscious decision to edit the content on the page [8]. Students become more comfortable disagreeing publicly with each other, and are more likely to prepare their arguments with support.

### 1.3 Nature of Wiki Communication

Wikis consist of editable Web pages, allowing for the inclusion of podcasts, streaming video, pictures and texts. Administrators of wiki sites may publicly open the site, allowing for contributions from anyone on the Internet, while others may lock the pages against editing by anyone except site members. The essence of wikis is often significantly less formal than other forms of writing. For students, wiki writing encourages expressive writing in place of stilted, academic writing [4]. In general, contrary to some articles that are finalized before being posted online, wikis provide a “communal environment for developing ideas” and can be changed even after they are posted [1].

Typical information published on a wiki site is not comprised of large, formal blocks of text [1], but rather documents a complete thought process from start to finish through a series of shorter posts. Wikis provide the space necessary for users to post their ideas at the moment they occur, and over time, several writers will collaborate and come to some conclusion. The flexible and informal nature of the wiki site empowers the contributors to decide on the structure, content and organization of the wiki.

### 1.4 Communicating Using Wikis

The casual nature of the wiki allows for more relaxed, draft-style writing, and the chance to self-edit as well as give feedback to other authors’ contributions. Particularly, wikis aim to “let students add to and re-envision their ideas, and to structure these discussions by choosing *what* pages to create and *where* to create and link them” [1]. A key element of the wiki is the focus on the process of writing rather than the final product [8]. Social interaction sites, such as wikis, are often seen as tools that people can use to empower themselves, as well as more fully engage in topics [10].

The flexibility and usability of wikis has increased their popularity within educational systems and businesses, among other fields [2]. Wiki communication fosters a more discussion-based sharing of ideas, “allowing participants [...] to be authors and readers at the same time, and to better understand the respective other point-of-view and background” [2]. This is especially important in business and classroom environments, where diverse perspectives must be taken into consideration.

The principle of wiki collaboration is that the larger the user base, the more developed and constructive the discussion will become. Wikis thrive on the concept that many people can contribute and edit the content of others leading to the formation of a conclusion from several different points of view [8].

## 2 The Wiki

The instructor set up a wiki, using wetpaint.com, for a class of First Year Students prior to their arrival on campus for their first semester. Wetpaint.com is a free site that allows users to create and host their own wiki. Students were given access to the wiki, and the instructor assigned a privilege level to all students. The instructor, who also served as the moderator of the site, allowed the students to not just post comments on the site, but also to alter the content and structure of the site. Students were given the freedom to change the layout of the site, as well as add or delete items on the site as they saw fit. See *Figure 1* for a picture of the wiki. Prior to the start of classes the instructor encouraged students to post pictures, and fill out a profile on the site. All students but one, of the 15 enrolled in the course, posted a picture of themselves, and all 15 filled out a profile. It should be noted, that although students were given the power to alter the layout and design of the site, none of them engaged in this activity. It could be that, as first year students, they were hesitant to change things the instructor put on the page, and didn't want to offend the instructor in any way by altering content, even though the professor encouraged students to change the layout and design of the site.

The instructor created nine separate pages on the site where students could post their thoughts about a variety of different topics. These pages included; a *Wednesday*

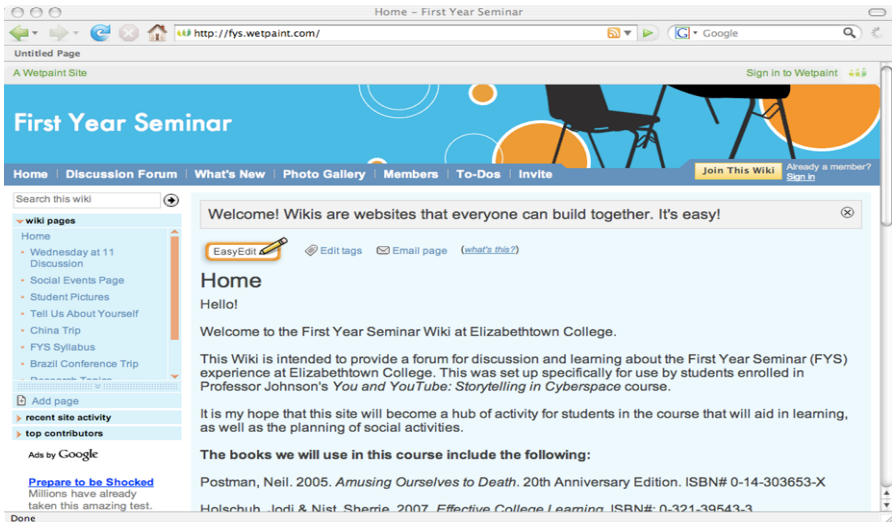


Fig. 1. First Year Seminar Wiki Homepage

at 11 discussion page, social events page, student pictures page, tell us about yourself page, syllabus page, research topics page, class blogs page, YouTube video page, and majors page.

On the *Wednesday at 11 page* students posted their reaction to weekly colloquium events that they are required to attend as first year students. While this page was meant to generate discussion about the different speakers who did presentations, this did not happen. In all cases, students posted brief reactions to the speakers, and did not comment on other students' posts. The *student pictures page* was used by several of the students to post candid photos of themselves. The *tell us about yourself page* was used by nine students, who wrote about how old they were, where they were from, and what they were interested in. During the course of the semester, each student had to write a research paper for the course. The *research topics page* was a place for students to write a brief description of their research topic so that others in the class could see it (since no two students could do the same topic). This page was heavily used. All students posted their topics, and then the instructor commented on each topic. Students then commented back to the instructor. The *class blogs page* was a place for students to post a link to their blogs. As a requirement of the course, each student had to create their own blog (using blogger.com) and then post to their personal blog at least three times per week. The *YouTube video page* was a place for students to post their favorite YouTube videos. All students posted at least one video. The *majors page* was a place for each student to post his or her major, and all students posted their major on this site. The *social events page*, which was supposed to be a place for students to plan social events, was not used.

Two pages were created by the instructor during the course of the semester to highlight different conferences the instructor attended. Those pages included the following; a *China trip page*, and a *Brazil conference trip page*. On both of these pages, the instructor uploaded pictures and a "travelogue" of sorts that chronicled the conference experiences.

### 3 Research Questions

*Was the class wiki effective in helping students build community prior to arriving on campus?*

The class wiki was initially set up by the instructor to help students get to know one another before they arrived on campus. In this study, the class wiki is defined as the site (<http://fys.wetpaint.com>) created by the instructor. Students were asked a series of questions about community building (building relationships with others in the course) on a 5 point Likert scale.

*Did the class wiki contribute to a positive experience in the course?*

The wiki was also built as a way to contribute to a more positive experience in the classroom based portion of the course, but was this achieved? As Smith [3] points out students new to the academic experience are often afraid to show that they don't know or understand material. The class wiki could be a way to bridge this gap, and lead to more positive feelings about the course. Students were asked a series of questions about their experience in the course and asked to rate the experience on a 5-point Likert scale.

*Did the class wiki contribute to a positive experience in the students' first semester?*

The aim of this research question is to find out if any positive impacts of the wiki in the classroom could also be extended to the students' college experience as a whole during their first semester.

While the wiki was built to enhance students' experiences in the course, the wiki could also contribute to a positive experience during the students' first semester at the College. Students were asked questions about their overall experience at the college, and responses were measured on a 5-point Likert scale.

## 4 Methodology

Fifteen students from a small college in central Pennsylvania participated in the study. There was a 100% response rate. The students were part of a First Year Seminar course called *You and YouTube: Storytelling in Cyberspace*. Thirteen were female and two were male. The students were from a variety of different majors that included everything from business, to communications, to education. Students answered 21 questions about their experience using the class wiki. Prior to taking the course 87% of the students reported never contributing to a wiki, and 40% reported never viewing a wiki.

## 5 Results

Using a 5-point Likert scale (1=Strongly Disagree and 5=Strongly Agree) students agreed ( $M = 3.80$ ,  $SD = .68$ ) that the course was enhanced through the use of the class wiki, and also agreed ( $M = 4.13$ ,  $SD = .64$ ) that it helped build community (in other words helped them to get to know other students in the course). When asked if the wiki was helpful prior to arriving on campus they also agreed ( $M = 4.27$ ,  $SD = .70$ ). Students agreed that the next time the course is offered the wiki should be used ( $M = 4.33$ ,  $SD = .62$ ). They also agreed that a wiki would be a useful tool in other courses they take at the college ( $M = 3.8$ ,  $SD = .74$ ).

When students were asked if they found the wiki helped them grow socially as a class they also agreed ( $M=3.80$ ,  $SD=.77$ ). In terms of the wiki helping them to grow academically, they found it to be slightly less helpful ( $M = 3.60$ ,  $SD = .63$ ).

In terms of their overall satisfaction with the course, they agreed that they were satisfied ( $M = 4.40$ ,  $SD = .63$ ). When asked if they were satisfied with other courses they took on campus the mean was slightly lower ( $M = 4.07$ ,  $SD = .59$ ). Students did respond that they were satisfied with their first semester at the college ( $M = 4.53$ ,  $SD = .52$ ).

There was a positive correlation between whether students were satisfied with the course and whether they felt the wiki was helpful in allowing the class to grow academically ( $r = .60$ ,  $p = .05$ ).

Students were asked an open-ended question about why they found the class wiki helpful prior to arriving on campus. Some of the responses included the following:

"We got to see some photographs of students who would be in our peer group, which was nice so we felt like we were more familiar with each other by the time we moved in."

“It gave me a chance to get to know other people in our first year seminar class before actually coming to campus. That's why I feel our peer group seemed a lot closer and tight knit than other groups.”

“I got to look at the profile of other students in the class, and get to know them without really even knowing them. It made my first college class ever a lot more comfortable.”

“I was able to put names to faces and begin associating people with their hobbies and talents. It became easier for me to get to know people.”

Students were also asked how the class wiki could have been used more effectively in the course, and while many commented that they didn't feel it could be used more effectively, some did offer suggestions:

“You should have to not only write in it so many times a month, but you should also be required to read and comment on each others. It's good to learn about your classmates.”

“I like that we were required to post reactions to colloquiums on the wiki, but we really didn't use it for any other purpose. Maybe it could have been used for more academic purposes, such as discussions based around class lectures.”

“Possibly more group activities on the wiki.”

“We could have posted discussions on the wiki instead of spending so much time in class on them.”

## 6 Conclusion

In conclusion, the class wiki did help students build a sense of community prior to arriving on campus. Students also reported having a positive experience in the course, as well as a positive experience during their first semester on campus. Future studies could explore the most effective way to deliver content to first year students on wikis, as well as what aspects of educational wikis students find most valuable. Future studies could also explore if the addition of video or audio posts to the site would engage students in the site more than just plain text and still pictures.

The instructor found that the wiki was often a good alternative to sending out a mass email to the class. It was less time consuming to post announcements or changes to the syllabus on the wiki.

The instructor also found that getting students to post on the wiki works best when they are required to do it. When given the option to post, or when left to their own devices, they usually didn't. One notable exception to this was the posting of candid photos.

## References

1. Farabaugh, R.: 'The Isle is Full of Noises': Using Wiki Software to Establish a Discourse Community in a Shakespeare Classroom. *Language Awareness* 16(2), 41–56 (2007)
2. Reinhold, S.: WikiTrails: Augmenting Wiki Structure for Collaborative, Interdisciplinary Learning. In: *WikiSym 2006: Proceedings of the 2006 International Symposium on Wikis*, vol. 48 (2006)

3. Smith, C.: Technologies for Transcending a Focus on Error: Blogs and Democratic Aspirations in First-Year Composition. *Journal of Basic Writing* 27(1), 35–60 (2008)
4. Beeson, P.: Bringing Blogs Into the Classroom: ‘New Media’ Platform Gaining Steam at Universities. In: Rolls, A. (ed.) *New Media*, pp. 120–125. The H.W. Wilson Company, New York (2005)
5. Hamer, J.: Some Experiences With the Contributing Student Approach. *SIGCSE Bulletin* 38, 68 (2006)
6. Lund, A., SmØrdal, O.: Is There a Space For the Teacher in a Wiki? In: *WikiSym 2006: Proceedings of the 2006 International Symposium on Wikis*. ACM Press, New York (2006), <http://portal.acm.org/citation.cfm?id=1149466#>
7. Collaborating and Participating: Blogs, Wikis, and Other Tools You Can Use. *American School Board Journal*, Academic Search Premier database (2008)
8. Guth, S.: Wikis in Education: Is Public Better?, p. 62 (2007), [http://www.wikisym.org/ws2007/\\_publish/Guth\\_WikiSym2007\\_IsPublicBetter.pdf](http://www.wikisym.org/ws2007/_publish/Guth_WikiSym2007_IsPublicBetter.pdf)
9. Fernando, A.: Baby Steps in Web 2.0 Education. *Communication World* 25(3), 8–9 (2008)
10. Singer, J.: Posting for Points: Edublogs in the JMC Curriculum. *Journalism & Mass Communication Educator* 63(1), 10–27 (2008)