Social Media and Collaboration: The Wiki’s Effectiveness as a Classroom Tool

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Abstract

This article explores the potential of the wiki as a study tool for undergraduate courses. The wiki’s origins are discussed, in addition to how it fits within the broader understanding of social media. The wiki’s appropriateness as a study tool for undergraduates is explored. This article uses examples of how the wiki was successfully integrated into specific business communication courses with encouraging results for student learning and collaboration. Suggestions and implications for future use of the wiki within undergraduate classrooms, are discussed.

Introduction and Rationale

Sellnow, Limperos, Frisby, Sellnow, Spence and Downs (2015) have asserted that communication pedagogy should “look beyond simply attempting to transfer classroom experiences into an online environment” and instead “the affordances of new technologies in creating an immersive environment ought to be examined… as they relate directly to learning outcome achievement” (p. 422–423). It is no coincidence that these scholars also single out several current technologies, including the wiki, as particularly promising. With its name
stemming from the Hawaiian word for “very quick,” the wiki was named to emphasize the fluidity and extensive potential for fast online collaboration that sets it apart from other web-tools (Richmond, Spence & Fuller, 2011). This has certainly proven to be an accurate choice of nomenclature, as the wiki is renowned for how it allows users, including students, not only to input their own knowledge and information on various subjects online, but also to edit their contributions and the contributions of others. As a result, the wiki is a valuable resource for creating the desired immersive environment in public relations courses.

The collaboration aspect of the wiki is the key factor in differentiating it from other existing forms of social media. It simultaneously offers unique pedagogical potential in its ability to encourage students to learn in a more complex way than traditional paper handouts or outlining (Palomo-Duarte, Dodero, Garcia-Dominguez, Neira-Ayuso, Sales-Montes, Medina-Bulo, Palomo-Lozano, Castro-Cabera, Rodriguez-Posada, & Balderas, 2013) or in the more content delivery style of online bulletin boards and existing classroom technologies (Bruns & Humphreys, 2005; Richmond, Spence & Fuller, 2011).

Wikis allow students a more collaborative use of social media than other currently popular forms including Twitter or Facebook. At the same time, the wiki’s collaborative aspect is what classifies it as a social media tool, bringing individuals together in an online space for a shared purpose. Thus, the wiki serves as a pioneering example of Web 2.0, or websites where “the value (is) facilitated by the software, but (is) co-created by and for the community of connected users,” connecting the wiki to “new platforms like YouTube, Facebook, and Twitter” (O’Reilly & Battelle, 2009, p. 1). The social aspect of the wiki, while perhaps not at the forefront, is nevertheless key to its existence and makes it a unique site for voices and information to come together online.

**Social Media in the Classroom**

Social media has been emphasized as unique among classroom learning tools for not being typically subject to conventional forms of quality control; instead it relies on system generated, user generated, and other generated cues to evaluate the included information (Lachlan & Spence, 2007; Lachlan, Spence, Edwards, Reno, & Edwards, 2014; Tong, Spence et al, 2013; Van Der Heide, Langwell & Walther, 2008, Westerman, Spence & Van Der Heide, 2012; 2014). As Spence, Lachlan, Spates, and Lin (2013) have articulated, “social media provides a platform for users to create content, but also to discuss that content in a collaborative effort to produce higher quality content, and to arrive at a shared understanding of that content” (p. 1255).
The combination of higher quality content and an increased understanding of material help to showcase the appropriateness of forms of social media, the wiki in particular, as pedagogical tools for public relations courses. Social media such as the wiki work to simultaneously engage the current generation of college students while resulting in more refined information to aid the students’ understanding of classroom material. Because of this, the wiki is a standout tool in social media outlets to translate into an academic setting.

Although the social media aspect of the wiki is tantamount to its ultimate success, the overall open nature of the wiki page is not without its flaws, and in some cases, the ability to edit other people’s work has inevitably lead to some instances of conflict between multiple contributors (Ebersbach & Glaser, 2004). However, the benefits of integrating the still-developing technology far outweigh any possible costs. With careful classroom management, these issues could be avoided or minimized by the instructor establishing guidelines for handling these conflicts ahead of time.

Benefits of the Wiki in the Classroom

As Ebersbach and Glaser (2004) noted, the wiki page can have a positive effect on feelings of group membership, because “working on a common project does have a highly integrative function. Participants will identify with the piece of work they produce and also with the group it emerged from… one of the main emancipatory features of media usage” (Ebersbach & Glaser, 2004, pg 5). The wiki is seen as a new writing tool that promotes a more process-centered, collaborative, and democratized space. Where other social writing platforms offer some ability to modify content, wikis stand out for how they allow users to quickly add and change content right from the browser window.

Integration of social media into the classroom may not always be viewed as a seamless process, and for some, it may seem quite daunting. Instructors may have specific concerns regarding the use of wikis in the classroom, as students have often turned to wiki websites, Wikipedia in particular, as sources of quick information for academic work in undergraduate courses. These worries are unnecessary, as setting up a wiki can be simpler than developing assignments for other forms of writing. Web 2.0 has allowed for a lowered entry point at which students can begin the writing process through anecdotes and has encouraged both individual and collaborative learning. Students become responsible for creating course content, rather than simply receiving it. The wiki web-tool has a history of being adopted for use in various academic settings, as several universities have already integrated wiki-based web pages for various projects, such as library websites (Chawner & Lewis, 2006). The adaptability of the wiki is yet another great strength.
that can be used as Bruns and Humphreys (2005) demonstrated in their efforts to implement a wiki-based project in teaching a new media technologies course. The wiki lends itself to teaching, research, and administration purposes (Bruns & Humphreys, 2005), each of which can be further adapted as instructor and administrator’s familiarity with the wiki format quickly increases.

Although the outcomes and benefits of creating and integrating wiki style websites in the college curriculum are still under exploration, Duffy and Bruns (2006) have evaluated the educational potential for social networking adaptive technologies such as the wiki, RSS feeds, and blogs. Within their results, Duffy and Bruns (2006) emphasize the wiki’s usefulness as a group note-taking tool; “wikis can be used for students to add summaries of their thoughts from the prescribed readings, building a collaborative annotated bibliography” (p. 5). Not only does this research continue to emphasize the beneficial, social nature of the wiki as a classroom tool, but also this finding is in line with Hazari, North, and Moreland’s (2009) exploration of the wiki’s pedagogical value, asserting that “there needs to be a shift from instructor-delivered teaching, to student-facilitated learning where peer groups play as important a role as a teacher in a traditional (face-to-face) classroom environment,” (p. 195). The wiki, then, bridges the integration of social media with an opportunity for this type of student-facilitated learning by allowing students to collaborate together through the sharing of information and collaborative online work (Richmond, Spence & Fuller, 2011).

It should be noted the wiki has the potential to be useful as a tool for post-graduate education as well, particularly as the wiki’s allowance for asynchronously timed work helps students with varying schedules to work at the times that fit for them individually without the chance of duplicating another’s work through miscommunication from working alone. Wikis provide the opportunity for writers and editors to become co-participants as opposed to individual writers on any given piece of writing.

It is important to keep in mind that although the current generation of college-aged students is, on the whole, more tech-savvy than previous generations, the wiki format may come with a steeper learning curve than expected for some students. Therefore, a tutorial lesson may be necessary when explaining the wiki-based project. Students, however, have been shown to adapt quickly to the technological environment of the wiki (Bruns & Humphreys, 2005), and this again showcases the important role of the instructor when integrating any classroom technology or teaching method (Spence & Lachlan, 2005), particularly a social networking tool such as the wiki.
Although the wiki itself remains a relatively new tool for integration in higher education, there are substantial benefits to its use, such as allowing for collaborative online note taking. The wiki is a tool for group authorship, and the end result of a wiki-based project should be stronger than that of a single student working alone. As students already commonly take notes during class time, the existence of a collaborative wiki would only work to supplement that information, leading to a more thorough understanding of course material.

The wiki is a social media tool uniquely suited for use within the classroom. Its allowance for students to work together yet separately makes it a fit for traditional, online, and hybrid courses. It allows students to work collaboratively on single sections of a project, or independently on different aspects of one project, such as creating a resource pool or set of notes. The wiki translates across course content and undergraduate and graduate levels of education.

In essence, the wiki bridges the gap between social media and the classroom in a unique and valuable way, allowing for the social aspect that engages students along with a well-designed information and learning-based format.

In a study on using the wiki as a note taking tool, Richmond, Spence, and Fuller (2011), found that test scores increased when classes were required to use a wiki for collaborative note taking. For their first experiment, 20 students enrolled in a business communication class at a private college acted as participants. In this first experiment, the business communication students were not informed about the required use of the wiki or the existence of the wiki for the first unit of the class, and were then administered the midterm exam. For the second unit, students were assigned to groups of 5 and required to take class notes during class and then post those notes on the class wiki. Students were instructed to only post notes pertaining directly to class content. Each student was required to post for one class period, but was encouraged to contribute any time after subsequent class periods’ notes were updated. Exam scores for the midterm and non-cumulative final were then compared. Results indicated a significant improvement on the final exam score. This improvement was attributed to the use of the wiki.

Richmond, et al. (2011) also completed a second experiment using two public relations/advertising classes. One class was provided with and was required to use a wiki, the second class was the control and did not use a wiki. Students in the experimental condition were placed into groups of 5 students and required to take class notes and then post those notes to the wiki. Each student was required to post for one class period, but again was encouraged to contribute any time after subsequent class periods’ notes were updated. Exam scores were compared for the two
classes, and students in the class with the wiki performed significantly better than students in the class without the wiki requirement.

The authors suggested that, from a systems perspective, the principal of holism emerges in classrooms that use wikis (Richmond et al., 2011). Through the use of the class wiki, and the inherent social interaction, education is not just transmission and transaction but is collaborative in nature. Through the social aspect of the wiki, a class becomes a group and produces synergy; the ability of a group to outperform even its best individual member. The use of the wiki creates an aspect of teamwork that should produce an overall better set of classroom notes than if each person was creating their classroom notes individually. The wiki format and its facilitation of social collaboration is one that engages the current generation of college students in a way that appeals to their norms and as noted, has direct relevance to skills required for the field of public relations. The collaboration inherent in a wiki leads to a greater feeling of investment for students, as they seek to improve the notes not only for themselves, but out of a sense of loyalty to their classmates.

One limitation of the Richmond et al., (2001), experiment was that many of the students only posted when required, and therefore, some students were not as involved in the social or collaborative aspects of the wiki until later in the semester. In order to improve upon this and learn more about the advances of the wiki in the college classroom, the wiki as a means of collaborative note taking was introduced into three other classes. The incorporation of a wiki into business communication courses and the implications for student learning are reviewed below.

The Activity: Integrating the wiki into the classroom

Two business communication classes at a large public university were used to further examine the collaborative and social nature of the wiki. One specific unit was made the focus of the experiment, this unit had a public relations focus. In order to use the wiki in the classroom to engage students with the content, the instructor randomly assigned two students to each chapter in the textbook at the start of the semester. These two students then had two to three days to work together to create a general outline or overview of the chapter being studied during a particular week. These students were instructed to outline the chapter and to include a basic framework onto which their classmates could then add their ideas and comments about the chapter. Each member of the class was required to edit the wiki each week.

After the preliminary framework was created for a particular chapter, the rest of the class was instructed to “fill in the blanks.” Students were encouraged to add to the wiki any information they felt would help them as they prepared for class discussions, activities,
quizzes, and tests. It was the responsibility of other students in the class to flesh out the chapter using materials from the rest of the textbook chapter, lectures and discussions, and outside information, such as material from other courses and internship or job experience. They were encouraged to edit for grammar, add content, provide anecdotes, link to outside materials, and include commentary or examples related to the required readings.

Moreover, students were not given minimum requirements for length of the wiki for each chapter, instructions on how to complete the outline, nor were they given examples. The classes were instructed to make the wiki “their own” and were allowed to let it develop naturally. All of the history and edit features were activated in the wiki. With these settings in place, each edit made was identified with a specific student, and this allowed the students to hold each other accountable and put social pressure on students who were not participating to the level that the majority of the class had identified as acceptable.

**Testing the wiki’s effectiveness**

To test the outcome of the wiki, exam scores from the unit were compared by the same professor to unit scores from the previous semester. The instructor and materials remained consistent; the changes were the students and the presence of the required wiki. A one-sample t-test was used to compare student exam scores for the unit, from the previous semester and the semester under examination using the wiki (the exam was worth 50 points). For the previous semester’s class, which did not implement the wiki, the class mean for the unit exam was 38.1 (SD=4.06) and the unit exam mean for the class with the wiki was 41.1 (SD=3.55).¹ The data suggests that the presence of the wiki had a statistically significant impact on student test scores for the unit focusing on public relations.

It is well known that the creation of a collaborative environment among students in the college classroom setting has been an ongoing challenge for instructors and students alike. The introduction of a wiki into the classroom curriculum afforded students the opportunity to learn not only from the text and classroom lectures but also from each other’s broader educational experiences including previous classes, internships, jobs, and life experiences.

**Initial Responses to the wiki project**

When the idea of the wiki was first introduced in the classroom, students had mixed responses to it. One student said he felt like he “would be doing the homework for everyone else in the

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¹ \( t = 2.544, p<.05 \).
class.” And asked, “How are we supposed to learn the class material if others are putting the notes together for us?” During the first week of creating and writing the wiki, students were somewhat hesitant to add information that was not directly from the textbook. Questions arose from the class such as, “What are we supposed to add beyond what is in the chapter? How do we make this a document that is reflective of what we, as a class, know?” The wiki, as a result, looked a bit like any individual student’s notes from the class. Students were not wholly engaged at this point in the process of creating and modifying a wiki, as no one in the class had created a wiki in the past. That said, as the students gained experience in creating and editing content, the synergistic quality of the activity took on an identifiable, collaborative form.

Another student took a different approach and said, “I like the idea of everyone working on the chapter together. It gives us the chance to learn from each other. I might think of something that someone else in the class didn’t, and someone else might explain something that I didn’t understand.” With the inclusion of the wiki, students had the opportunity to add their own voice to the online classroom discussion.

Debriefing

The instructor initiated a classroom discussion on how the wiki could be used as a more robust and effective teaching and learning tool. The class talked about how different courses could cover similar material but often from different perspectives, and that many classes built upon previous semester’s course materials. One student pointed out that, “most of the time, we do not connect one class to another. They each exist individually on our schedules. We haven’t been taught to think about how all of our classes relate to each other. This is something completely new for most of us.” As a result of the classroom discussion, over the next couple of weeks, the course wiki began to look significantly different.

Students became more engaged with the material and started to critically analyze how a chapter’s material was relevant to their own lives. One student said, “The wiki is completely different now. It is worth being used in the class. I like how others in the class are talking about their own experiences as part of the wiki. I want to talk to my classmates, and learn more about the classes they are taking. It’s important for me to be in the right career track, and the information I’m learning from the wiki is important for that.”

Instead of a chapter outline and basic information found in the textbook, the wiki began to take on a new life. This revised wiki had information in it that included not only facts
and examples from the textbook but also information students had learned in other college classes and from practical experiences including internships and jobs.

Students began talking about classes they had in common with each other and the topics that they were studying in these courses. One student learned that there were at least three other students in the class who were taking another class together with her. These students began studying together for the other class and also began to bring relevant material, examples, and questions from the other class into this course. At one point, a student said, “We just covered that in another class but it didn’t really make any sense. We talked about it in a different way, but now I see what my other professor was talking about.” The integration of content from one class to another allowed this student to gain a deeper understanding of the material being covered in two classes from two different colleges at the university.

The instructor encouraged students to think about relevant and complementary material from classes they were currently taking or had taken in previous semesters and knowledge they had gained from working with other professionals in their field of study. One student said, “It’s worthwhile to see that the material I am studying in my other class is applicable to what we are doing in this class. It makes so much more sense to have all the information pulled together.” Students discovered that topics being covered in this class dovetailed with topics being addressed in other classes they were currently taking or had taken in previous semesters.

The goal of using the wiki in this class was to expand upon the material being covered during a particular class beyond just the textbook to include students’ knowledge and experiences from other classes and jobs and internships. In opening up the discussion beyond just the material covered in the textbook, students received a broader and richer education on a given topic.

After a few tries, students began adding more complex questions and insightful comments to the weekly wiki. Online video clips and notes from other classes were added to the basic framework, and students challenged each other to add the most relevant and detailed information to the wiki. Classroom discussions became more animated, as many students had taken or were taking similar classes in addition to this class, and the wikis often guided and stimulated the conversations.

The wiki quickly became the ‘go to’ spot for discussions on class topics. Many times, class began with a discussion of a video clip or comment stream that had been posted on the wiki.
Students did not always agree with one another on various topics, and the wiki provided a forum to discuss these differing viewpoints. One student said, “This was a great way to see different points of view without getting into heated classroom discussions. I had time to write out my ideas online.” The wiki also provided an opportunity for students who did not regularly participate verbally in class to feel integrated into the discussion without feeling overly vulnerable.

Integrating a wiki into the course provided both creation of content for the course and collaboration among students. It allowed students to engage with the course material at a deeper level and to better understand how the material related to them on a personal level. Several students remarked that they would like to see wikis used in their other classes. One student said, “The wiki has been one of the best parts of this class. I wish my other professor would move toward a more integrated and collaborative teaching style. Don’t just lecture at us. There’s so much more to a class than the words written on the textbook page and repeated slides on a presentation.”

Conclusion

As is true for any form of media, the wiki has and will go through re-invention (Rogers, 2003), and there is a continuing process which occurs when users make changes to an innovation while adopting it. This process can be seen in the increased use of the wiki for public relations. The use of the wiki as a learning tool and a career preparation skill has positive effects for business communication and public relations classes and units. Although not a dominant form of social media, it is one that appears to have staying power. The benefits for writing improvement and collaboration in the classroom are documented and can be generalized to the field.
The Wiki, Social Media and the Classroom

References


