# DOING ACADEMIC ASSIGNMENTS: WHETHER TO USE A WIKI OR AN ALTERNATIVE PLATFORM

Paula Hodgson

Dean A. F. Gui

Dora Wong

The University of Hong Kong

The Hong Kong Polytechnic University

The Hong Kong Polytechnic University

#### **ABSTRACT**

Using a wiki in a group project can be a valuable experience, particularly when students are able to learn about collaboration between group members. Because they are not given a defined structure, students can flexibly design content with multimodality through the use of a wiki. However, students commonly experience some form of technical difficulty when using a wiki. A pilot study of two courses explored what preferred applications students used when preparing group wiki-based projects in one course, and it examined why some students preferred to use platforms other than a wiki in the other course. Results from the end-of-course survey suggest that while students were aware of features available in wikis, they preferred to use web tools that they were already familiar with to develop web-based products. Many students remarked that there was a lack of technical preparation for this learning platform, or they did not see the value in continuing to use wikis after completing the course. Also, some indicated that they favoured email applications such as Hotmail for collaboration and feedback purposes. Suggestions are offered to educators on how to improve student reception of wikis and other Web 2.0 e-learning tools.

KEYWORDS: wiki, e-skills, collaboration

## 1. INTRODUCTION

Doing a group project is one of the most common assessment activities in universities in Hong Kong. However, group assignments can potentially turn into the methodical but humdrum process of forming groups, working individually, stitching together collected resources, editing and submitting for grading. However, Web 2.0 applications such as a wiki can potentially reshape this process. Among all the platforms available in Web 2.0, why do educators consider using a wiki in the teaching and learning context?

There are a number of features in a wiki, such as creating and editing content, creating and linking to new pages within the wiki, adding links to known websites, and inserting photos, and audio and video files; the latest version is displayed, while previous versions are logged. As a wiki does not have a determined template, this can provide great flexibility to authors in how they structure the content (Lundin 2008). It means that authors can create writing using hyperlinked text structures with multimodal compositions in the web environment (McPherson 2006). More importantly, authors can interact and communicate between collaborators and build up key group skills during the process (Luce-Kapler 2007). Synergetic contributions from collaborators enable knowledge creation through such a constructivist environment (Davidson 2008; Grant 2006; Lamb and Johnson 2007; Siegle 2008). Recursive edition and communication between collaborators may allow the shaping of a collective knowledge (McPherson 2006; Watson and Harper 2008). Use of a wiki by students for doing assignments can potentially reshape the process. Kessler and Bikowski (2010) report that 'students valued the collaborative nature of the wiki activity even though it was unfamiliar' (p.51).

Despite this potential, how ready are students to make use of it? Technology permeates schools and universities in Hong Kong, and many students are exposed to technical devices such as mobile phones and handheld digital or computer games. The majority are also familiar with social networking platforms such as Facebook, using email for communication and Word for composing written assignments. Can students manage another set of technical skills during their university study? As a pilot study, this paper will explore

two cases in a university in Hong Kong, studying student experiences in using a wiki and alternatives in preparing for group assignments.

## 2. BACKGROUND OF THE STUDY

This paper investigates two courses: 'English for Management', run in 2009, and 'English for Technical and Web-based Writing', run in 2010, in the Hong Kong Polytechnic University with all non-native speakers (NNS). The courses were delivered through the university-wide platform WebCT, with no built-in wiki. Therefore, the two teachers needed to create a link from WebCT to PBworks, an open platform to allow individuals and groups to do web-based collaborative work. This meant that students had to log on to PBworks whenever they did any tasks through this platform.

The course 'English for Management' (EM) was for final-year students, offering them the opportunity to develop linguistic proficiency so that they could function independently at the managerial level in an organization. In one assignment, they were placed in teams of three to four to produce a group business plan in which production of the wiki-based report accounted for 30 percent and an oral presentation accounted for a further 15 percent of the total mark. The purpose of the group project was to facilitate analytical thinking through the SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis of a hotel. It focused on the English communication skills required to handle the kinds of discourse encountered in higher-level professional contexts. PBworks was introduced in the class in week 8, when these students were introduced to the concept of a business plan and the lecturer showed the students the technical steps needed to use a wiki. Afterwards, they could work with it whenever they made any progress on the report.

The course 'English for Technical and Web-based Writing' (ETWW) was attended by first-year students. The purpose was to help them to understand the genre of technical writing, to develop linguistic skills to write precisely and concisely and to work creatively with basic technical skills in desktop publishing and web design. One of the assignments was an individual project that accounted for 30 percent of the total mark. The content of each individual website had to include a CV, motto or mission statement, a pastime, credentials and proofs. The purpose of the page was to showcase individual attributes and strengths to potential employers. Although this was an individual assignment, students were given the opportunity to provide peer comments in class, so that individuals could make revisions. With their assignments, students were given the option of publishing their work via PBworks, PolyU MyWeb (a personal website for university students), other web-hosting public domain sites, such as wix.com, which provides design templates, whatever method they were most comfortable with using or were more familiar with for website publication, whether that was on- or off-line.

## 3. PERCEIVED VALUE OF USING WIKI

Both courses primarily aimed at assisting students to develop linguistic proficiency, however, they were expected to develop some form of technical competence for their future careers. A survey was conducted to examine their experiences of the assignment and perceived value of using a wiki, with ten questions in a five-point Likert scale (5 = 'strongly agree', 1 = 'strongly disagree') and four open-ended questions (see Appendix). A total of 41 students responded voluntarily at the end of the courses. Results of the survey show that questions 1, 3, 6, 7 and 8 received the highest rating from students in the EM and ETWW courses (see Table 1):

Courses		'EM' <i>N</i> =26		'ETWW' N=15	
No.	Question items	Mean	S.D.	Mean	S.D.
1	Seeing an example of the required assignment standard in the wiki site is useful.	3.23	0.86	3.47	1.06
3	The review group was able to provide feedback that was useful for revising the final work.	3.46	0.81	3.40	0.91

 $Table\ 1.\ Five\ highest\ response\ ratings\ from\ student\ survey\ for\ both\ EM\ and\ ETWW\ courses$ 

6	The group can easily make changes to the *business plan/professional website using a wiki.	3.12	0.91	3.33	0.62
7	It is convenient for me to read the most current version and make comments on the *business plan/professional website in a wiki.	3.31	0.79	3.60	0.63
8	It would be useful if I could read other *business plans/professional websites once our group has submitted its business plan/professional website.	3.50	0.81	3.87	0.83

<sup>\*</sup>Business plan for EM course and professional website for ETWW course

As assessment is perceived to be highly important by university students, they like to seek opportunities to learn how they can succeed in academic performance. Scoring the highest of the means of the ten items, students on both courses perceived the usefulness of reading peer work after submission (item 8); these students also perceived the importance of knowing the standard, i.e. the expectations (item 1) and the value of learning from peer feedback (item 3). Technical convenience such as reading the latest version and editing when using a wiki were perceived to be relatively important (items 6 and 7).

However, despite the flexibility of being able to create and structure multimodal content, a wiki did not score as highly as other methods on the two courses for producing creative and attractive web content (item 2) and ease of use compared with Microsoft Word or .pdf format (item 4). In addition, when they worked closely with their teammates, they found out more about the strengths of their team members through direct communications and interactions between members than by reading through their CVs in the wiki (item 5). Furthermore, using a wiki as an e-portfolio for documenting learning experiences (item 9) and presenting a personal academic profile (item 10) scored lower among the items. Opinions were further elaborated on in questions with open comments.

# 4. EXPERIENCES OF USING A WIKI AND ALTERNATIVE PLATFORMS

All business plans were created in PBworks in the EM course. When working in groups, students were assigned different roles and responsibilities. In this case, group members carried out an initial search of information, performed the SWOT analysis and processed quantitative information. When working in PBworks for group projects, there was a mix of experiences, depending on roles and preferences in the group tasks: three reported that they created the content, 16 uploaded files, seven edited content, and nine added friends or shared with friends. Table 2 shows the tools preferred by students when preparing for the assignment.

Table 2: Preferred e-tools used for constructing a business plan on the EM course

Tools used	Microsoft Word	Microsoft Excel	Email	MSN
No. of students	17	3	8	1
Reasons for use	Being familiar with it; checking spelling; having more formatting options	Managing budget data		

When students were asked whether they would use a wiki to record their academic performance, very few indicated positively: 'I like to show others my work, and PBworks may be useful'; 'possibly I will use a wiki as it is easier picking some "shining" works to the interviewer when I attend an interview in the future'. However, as a wiki is not built into WebCT, it caused some inconvenience; as stated by one student, 'It is inconvenient checking if there is any updated file, unless I log in to PBworks. Even though there is notification through emails, it is troublesome for me to log in to PBworks'. Besides, some students stated that they encountered difficulties using a wiki, and a number of them commented that 'I think the interface of a wiki is not user-friendly'; 'I am not familiar with its functions and it is not popular among my friends and group mates'; 'the format of the displayed version may be different from the original version that I typed in the edit box. I will not use a wiki as it is time-consuming to change the format or layout afterwards'.

On the other hand, students building professional websites had options to produce their individual assignments in a variety of publishing formats in the ETWW course. Table 3 shows these results.

Table 3. Student preference for publishing tools used to build ETWW course websites

	wix.com	PBworks	MyWeb	Microsoft	Microsoft	Adobe	Dreamweaver
				Publisher	Word	Illustrator	
No. of students	6	2	2	2	2	1	2

Students chose to use the public-domain resources from wix.com for this assignment because there were a variety of attractive templates that they could choose from, it was easy to make modifications, including content and appearance, and editing instructions were clear. There was no problem for them to insert digital images, video and music clips, and to hyperlink websites. Of the two who used PBworks, one continued to use it even when the course had finished because they had acquired 'the ability to edit and enhance the existing content in the wiki'; the other student was not in favour of the idea without further explanation. However, some students using alternative platforms stated that they did not see the value of becoming proficient in using the wiki in the future: students were not receptive to using a wiki during the course: 'it is not necessary for me once the course has finished'; students were used to using Hotmail for sharing files and doing editing between members.

Overall, only a few students were reasonably savvy in using technology in the two courses; the majority of students was less confident. Generally, students were overwhelmingly inclined to use applications that they were already familiar with or alternatives that they could learn easily without being taxed too heavily while learning the technical aspects of the language courses. However, despite students being exposed to different digital devices, there is low usage of wikis among other Web 2.0 applications by students (Kennedy et al. 2008). Furthermore, Secundo and Grippa (2010) notice that 'virtually all the respondents experienced technical difficulties with using the new technology...some of them had difficulties doing simple tasks and did not know where to start or how to create page content' (p.2623). A student of the study stated that 'I'm not a "technology person" and I am weak at creating websites. This website has changed my attitude towards website creation. I used to think that I will learn how to make a website only if I learn about programming. This thought has to be overthrown. I believe that everyone can create their own websites by self-learning through wix.com'. Ease of use is a crucial determining factor for students venturing to adopt such technology.

## 5. CONCLUSION

The majority of university students are familiar with Microsoft Word, because they are expected to be competent in using the software to write academic assignments. However, the web environment provides an alternative multimodal option that can reshape the process of doing assignments, such as building versions for individual work or allowing transparent collaboration in group assignments. Using a wiki can allow contributors to create, edit and share with peer groups and friends, and publish their work to potential employers, according to the survey results from students on the two courses in this pilot study. Despite much potential to promote collaboration in group assignments, many students were negative about continuing the wiki, either because they lacked the skills or because they had found an alternative platform that was more user-friendly and allowed them to present content more creatively. Nevertheless, students should become familiar with how to use the technology, whether a wiki or an alternative platform, early in the course. Students should be provided with good orientation when integrating a wiki for learning. Even if an alternative platform is selected, students should be made more explicitly aware of the value of adoption. Second, educators should allow multiple learning opportunities for students to experiment with technology so that they have time to learn the e-skills, build confidence and become proficient in it before educators set assessment tasks in which students are required to exhibit their academic ability on the course. Third, learning from peer feedback can enable students to internalize the academic standards (Gibbs 2006). Therefore, peer feedback should be arranged in the process, because this can promote peer learning and students themselves can build internalized evaluative competence (Hodgson and Wong 2009). Finally, the option of sharing peer work should be made available after submission regardless of the platform used, because this can maximize the learning moment, as indicated by the high interest reported in this case. Further research should explore what e-skills are needed by university students as they prepare for future careers.

#### 6. REFERENCES

Davidson, M. (2008). Using focus groups to learn about my wiki. Computers in Libraries, 28(1), 16-21.

Gibbs, G. (2006). How assessment frames student learning. In C. Bryan and K. Clegg (eds), *Innovative Assessment in Higher Education*. London and New York: Routledge.

Grant, L. (2006). Using wikis in school: a case study. Retrieved from

http://www.futurelab.org.uk/resources/publications reports articles/discussion papers/Discussion Paper258/

Hodgson, P. and Wong, D. (2009). Developing professional skills in journalism through blogs. *Assessment and Evaluation in Higher Education*, 34(6), 1–15.

Kennedy, G., Judd, T., Churchward, A., Gray, K. and Krause, K. (2008). First year students' experiences with technology: Are they really digital natives? *Educational Technology*, 24(1), 108–22.

Kessler, G. and Bikowski, D. (2010). Developing collaborative autonomous learning abilities in computer mediated language learning: attention to meaning among students in wiki space. *Computer Assisted Language Learning*, 23(1), 41–58.

Lamb, A. and Johnson, L. (2007). An information skills workout: wikis and collaborative writing. *Teacher Librarian*, 34(5), 57–9.

Luce-Kapler, R. (2007). Radical change and wikis: teaching new literacies. *Journal of Adolescent and Adult Literacy*, 51(3), 214–23.

Lundin, R.W. (2008). Teaching with wikis: toward a networked pedagogy. Computers and Composition, 25(4), 432–48.

McPherson, K. (2006). Wikis and student writing. Teacher Librarian, 34(2), 70-2.

Secundo, G. and Grippa, F. (2010). Designing, managing and assessing a Web 2.0 learning community to enhance inquiry based learning. *International Journal of Web Based Communities*, 6, 164–82.

Siegle, D. (2008). Working with wikis. Gifted Child Today, 31(1), 14-17.

Watson, K. and Harper, C. (2008). Supporting knowledge creation: using wikis for group collaboration. *Research Bulletin*, 2008, Issue 3. Retrieved from

http://www.educause.edu/ir/library/pdf/ecar\_so/erb/ERB0803.pdf. doi:www.educause.edu/ecar\_so/erb/ERB0803.pdf.

## 7. APPENDIX

1	Seeing an example of the required assignment standard in the wiki site is useful.
2	It is more creative to present the *business plan/professional website using a wiki.
3	The review group was able to provide feedback that was useful for revising the final work.
4	The *business plan/professional website can be organized better using a wiki than MS Word or .pdf format.
5	The use of a wiki allows me to know more about the strengths of my groupmates because I can read their CVs in the wiki.
6	The group can easily make changes to the *business plan/professional website using a wiki.
7	It is convenient for me to read the most current version and make comments on the *business plan/professional website in a wiki.
8	It would be useful if I could read other *business plans/professional websites once our group has submitted its business plan/professional website.
9	I prefer to use a wiki to build my e-portfolio of learning for university study.
10	I think that it is useful for me to present my academic profile in a wiki.

<sup>\*</sup> Business plan for EM course and professional website for ETWW course