How Web 2.0 enhances collaborative teaching: the experience of Canossa Primary School

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Introduction

The world would be substantially slowed down, if not stopped, if the Internet breaks down. This very important technology was invented quite some years ago, made expansively prevalent in the world in the nineties last century, and is now striding into the era of Web 2.0. It has penetrated deeply and spread its influence widely in every aspect of our life.

Education, on the other hand, is a long-laid cornerstone of our society, providing us with people of quality, skills and intelligibility. The changing societal environment, innovations in life and the general traits of students require the educators' adaption to them, so as to carry on with their mission.

In this new generation of technology, how could Web 2.0 be used to enhance the teaching, in particular, the collaboration of the teachers? A conference was held by the Faculty of Education in the University of Hong Kong, sharing the experience of how Web 2.0 has been utilized to provide a platform for teachers to collaborate. This paper will introduce the technology, its advantages, and the experience of a local school using the technology among teachers.

Web 2.0 and Collaborative teaching

Web 2.0 lacks a precise definition. Instead, it refers to a set of related principles on using the internet, and it does not have a clear and hard boundary (O'Reilly, 2005). A short answer to many asking what it is would be to make a reference to a group of technologies

which have been deeply associated with this term, i.e. blogs, wikis, podcasts, RSS feeds (Anderson, 2010). From these tools one is able to see that with those technologies the Web is more socially connected where people are able to add in and edit the information on them (Anderson, 2010). Web 2.0 also allows people to create, publish, exchange, share, and cooperate on information and knowledge in a new way of communication and collaboration (O'Reilly, 2005).

Collaborative teaching refers to teaching involving teachers from different disciplines. There have been research findings that indicate its helpfulness to effective learning (Thousand, Villa, & Nevin, 2006; Chu, Chow, Tse, & Kuhlthau, 2008). There are numerous advantages using the collaborative teaching method. According to Thousand et al. (2006), when teachers work together in their planning and teaching, they are much better prepared to meet the needs of students with different backgrounds. At the same time, a study conducted by Schwab Learning of the Charles and Helen Schwab Foundation (2003) discovered that teachers working in team would increase overall student achievement, fewer disruptive problems, less paperwork, more students qualifying for gifted and talented education services, and less referrals for behavioural problems.

Chu (2009) found that, the collaborative teaching method, particularly in teaching through inquiry projects, enhanced the effectiveness in teaching and student's various dimensions of learning, including reading and writing abilities, IT, research and presentation skills. Improvement in other aspects such as independence and self-confidence can also be seen.

These two trends, one in the information technology field and one in the education field, can supplement each other and work closely to amplify the effect of teaching. This paper will now turn to discuss the benefit of using Web 2.0 to collaboration at work in general and in teaching specifically.

The trend of using Web 2.0 for collaboration

At workplace
Collaboration is increasing important in this world of high inter-connectedness. It is an ability that is required to be competitive and efficient at work. Advancement in technology has shortened the time needed for communication and the social distance between co-workers. In the future, we might not need to meet physically, nor do we need to work in an office with all our colleagues, perhaps not even in one single place. Rather, the trend is that we have to be more flexible in collaboration. However, as Schaffers, Kristensen, Slagter and Loh (2007) points out, the current technologies are not yet suitable to enable that.

This is where Web 2.0 comes in and bridges the gap. As Schaffers and others (2007) suggest, the role of Web 2.0 technologies in these scenarios is to enable transition from the established thinking in terms of collaboration at work and from the current rigid

workplace IT infrastructure to more flexible forms of collaboration utilizing personal networking and community style of communication. Web 2.0 and other applications enabling human networking will support the new generation of professionals' working style.

In survey on Web 2.0 usage patterns, business executives respond that they are using Web 2.0 technologies to encourage collaboration inside the company (Bughin and Manyika, 2007). Thus, the trend to use Web 2.0 for collaboration is supported by both theories and current business practice.

<u>In education</u>
Good education requires innovation and breakthrough in the teaching methods and materials, to keep abreast with time and with the changing general characteristic and quality of students. Thus, collaboration among teachers is very important, in which they can brainstorm, share and co-create teaching materials or new methods of teaching.

Thus, the education field would benefit from the development and application of Web 2.0 no less than the business field. As Higgins (2009) states, Web 2.0 tools are creating a massive change in power and practice in the education field and they are very suitable tools for group of staff members to work on a project together.

An overview of selected Web 2.0 tools

The commonly known tools of Web 2.0 include blog, wiki and other online social platforms.

A blog is a weblog regulated and maintained exclusively by a blogger who writes the blog posts. Others can comment on the blog posts and interaction is encouraged. According to Sari, Schaffers, Kristensen and Löh (2007), a blog can be used for project coordination and work collaboration.

Wiki is a site allowing visitors to add, remove, edit and change content, usually without the need for registration (Sari, Schaffers, Kristensen and Löh, 2007). Wikipedia is a good example of how wiki is used to collaborate the work of different people.

Online social networks are websites where members can store information about themselves, typically in the form of profiles, and make links to other members they know, thus creating a network of personal connections, like Facebook and Twitter (Sari, Schaffers, Kristensen and Löh, 2007).

The experience of using Google Sites in Canossa Primary School, Hong Kong

Canossa Primary School presented at the conference held by the Faculty of Education of the University of Hong Kong on October 9, 2010 about the use of Google Sites for teachers to collaborate. The reasons for using Google Sites are:

1) Same as other wiki, Google Sites is free and hence many people choose Google Sites for collaborative works (Chu, 2009). As long as teachers can go online they can add new information to the Sites at anytime. Thus, it is very convenient for them to record their thoughts on how to improve their teaching methods or materials at any instance.

2) Teachers' information technology literacy might vary a lot. The use of Google Sites would reduce the knowledge gap because the colleagues with more IT skills could share on the Sites while the less skilled ones can learn from them through the Sites.

3) It is a very convenient way for the teachers to share their teaching resources, as it improves the efficiency and effectiveness of communication. It quickens the sharing of thoughts and resources, and greatly enhances their teaching capabilities. This is consistent with previous studies indicating that Wiki helps knowledge building and management (Chu, 2008).

4) As the maintenance of the Sites needs the involvement of the teachers, they need to contribute to and check with the Sites often and closely for updates. This increases the chance of communication and collaboration and makes compromise or consensus on the scope or method of teaching easier to reach.

The teachers at the school enjoy working on the Google Sites a lot and find it useful. One of them said working on the Google Sites, which also involves and requires creativity, help them relax and at the same time assist them in teaching. There was another instance in that a teacher wanted to learn how to put youtube links onto the powerpoint slides. He was assisted by another teacher who detailed the steps and post a step-by-step teaching manual on the Google Sites. These show that this Web 2.0 tool does help teachers enhance their teaching quality, and to use it is enjoyable.

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Figure 1: The home page of the school's google Sites

Figure 1 shows the home page of the Google Sites. It consists of pages about various forms in the school that contain the various useful teaching resources for teachers to download and share. It also has a page detailing the syllabus of all the different forms.

Figure 2: The page containing teaching resources

Figure 2 shows the IT resources and links that are shared on the Google Sites for our colleagues to use or learn from when they encounter difficulties in the information technologies.

Figure 3: The video posted by one teacher teaching another how to catch youtube video

Figure 3 shows how the teachers teach each other using the Sites how to catch youtube video and put them into the powerpoint slides. It is a step by step manual that all our colleagues can gain access to.

Conclusion

Web 2.0 is becoming more important in our era and the trend of using it for collaboration at work is getting more popular. It helps increase work efficiency and effectiveness. Education is a field where such tools can be used. This can be very well demonstrated by the experience of Canossa Primary School in Hong Kong using the Google Sites. The various advantages of using the interactive means of Web 2.0 are seen in the school and the use of Web 2.0 tools and the other potential benefits of it are good subject matters for further research.

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