

Toss the Text – An Experiment in Replacing the Traditional Textbook with a WIKI.

Rick Weible, Lewis College of business, Marshall University, Huntington West Virginia, 304-696-2673, Weible@marshall.edu

Abstract

Web 2.0 technologies can be likened to the two edged sword - it can cut both ways. We live in a time when rapid advances in technology provide extraordinary opportunities to enhance the entire educational process. Yet if we fail in embracing and understanding these technologies, we may well be cut asunder. This paper explores an attempt to allow students to write the textbook using wiki pages. This was the author's first attempt at tossing the textbook. The successes, failures and lessons learned are discussed.

Introduction

The current model of education with the professor at the lectern as the sole source of knowledge, as the expert imparting his great wisdom and learning to the class is coming to an end. This approach, which has been used for centuries, is becoming outdated. Many foresee a future where technology will enable the process of sharing the wisdom of humankind without the stifling structure of our current educational model.

A child, full of creativity and hope, exhibits the boundless energy of youth, excitement for life, curiosity, thirst for knowledge and natural inquisitive nature. Simple things foster learning, discovery, and exploration at an individual pace. Here, the fascination with a kitten, puppy, worm or bug, the interest in trucks, dinosaurs, or Barbie dolls can be used to lead investigation into language, mathematics, the physical and life sciences and beyond.

In a recent study, college freshmen ranked high school more difficult their first year of college. They spent hours on Facebook, twitter and with other social media while they completed fewer than twenty pages of writing per college class.

The challenge today is translating social media obsession into classroom engagement. Web 2.0 technologies may be the answer in this process.

The term wiki comes from a Hawaiian word for fast. Ward Cunningham is attributed with developing the first wiki in 1994, and he called it the WikiWikiWeb (Wikipedia- wiki). A wiki is website that allows the creation and editing of webpages from a web browser. It uses a

simplified WYSIWYG, (What You See Is What You Get) text editor, within the browser to create, modify or delete page contents. A single page in a wiki is referred to as they “wiki page” and a collection of wiki pages is called the wiki.

In the future, we will find ways to use technology to allow each individual to learn and explore the wonders of Earth and the universe and exciting and enabling ways. The need to train workers for the Industrial Revolution, with its required conformity for work at the factory, is rapidly coming to a close. In the information age and beyond, our educational processes need to dramatically change. Today the need is for lifelong learning, creativity and exploring how to adapt to an every changing technology environment.

This research attempts to examine how current technologies can be used to reform the current model of education. While this is not a dramatic or bold step forward, it is an attempt to move in the direction of technology supported collaborative learning. I must attribute the inspiration for this experiment to Dr. Ali Nazemi of Roanoke College. During the 2010 SEINFORMS annual conference, he presented a paper discussing his attempts of replacing the textbook in a Principles of Information Systems course with a wiki. This paper discusses the attempt to replace a textbook in a senior level Strategic Management Information Systems course.

A wiki is a great tool for collaborative work. It allows multiple users to collaboratively create and modify one or more documents. It provides a centralized repository for document storage. In one sense, a wiki could be considered one of the first applications of cloud computing. A wiki editor eliminates the need for an individual user to learn HTML coding. A wiki may contain links to other websites, and generally has most of the capabilities found in Web 1.0 websites.

For a brief video tutorial on how wikis work and some of their capabilities, visit YouTube and search for common craft’s “Wiki's in Plain English” For more information, and a list of free wikis, see the “Teaching, Learning and Collaboration” wiki site, <http://weible.wetpaint.com/page/Wiki+sites>.

Literature Review

There is a growing body of literature exploring the use of wikis in higher education. Much of this interest has been generated as a result of the work of Michael Wesch, associate professor of cultural anthropology at Kansas State University. Dr. Wesch was named the Carnegie/CASE national professor for the year 2008 for Doctoral and Research Universities. His YouTube videos have receive millions of views.

One of Dr. Wesch innovations was the creation of a study guide wiki.

Chaka of Walter Sisulu University in South Africa contends that Web 2.0 and the Semantic Web provide an “ideal platform” for collaborative learning. He predicts a groundswell in power as collective intelligence and knowledge is harnessed in e-learning 2.0.

Cobb (2008), Franklin and Van Harmelen (2007) have identified many of the ways Wikis have been used in education:

- Facilitate collective knowledge from diverse experts and contributors
- Enable collaborative management of educational resources
- Serve as knowledge management platforms
- Electronic portfolios
- Foster teamwork, group research projects and course content publication sites
- Enable co-authoring of content
- Serve as virtual forums of content creation
- Promote virtual communities

Mathieu (2008) in a primer to University of Delaware faculty listed other way wikis have been use:

- Wikipedia
- Open Textbooks
- E-Portfolios
- Living Course Website
- Theatre productions

Ruth and Houghton (2009) suggest wikis “foster collaborative, egalitarian learning that is designed to foster group interaction instead of just individual performance.” And they postulate this requires an unfamiliar teaching approach.

Research methodology

A research questionnaire was developed and administered to 15 students taking the course. A full discussion of the questionnaire will be presented in a completed paper.

Research Questions

With all the information available on the internet, is it possible to use publicly available sources to replace the textbook?

Does a wiki work as an appropriate replacement for the textbook?

Can students write their own textbook?

Student Comments and suggestions

Create a very detailed outline of each topic.

Make group or individual assignments for each item.

Grade every topic.

Make assign for discussion leader of any posted resources.

Communication is key to success.

Limit the number of posts per topic.

Do not request reflection on learning.

Student Requirements

Self motivation.

Results Analysis

A complete discussion of the results will be discussed in the completed article.

Discussion and conclusions

Yet to be written.

Resources

Robinson, Ken (2009). The Element: How Finding Your Passion Changes Everything, story of Gillian Lynne? (also see: <http://www.peakexperienceparenting.com/do-you-know-the-story-of-gillian-lynn/> Posted on November 16, 2010)

Weible, Rick, 2009. "Teaching, Learning and Collaboration" wiki site,
<http://weible.wetpaint.com/page/Wiki+sites>

LeFevre, Lee, 2007. "Wiki's in Plain English" http://www.youtube.com/watch?v=-dnL00TdmLY&feature=Playlist&p=35FD01253628453D&playnext=1&playnext_from=PL&index=5,

Published by Common Craft.

Cunningham, Ward and Bo Leuf, 2001. "The Wiki Way: Quick Collaboration on the Web"
Addison-Wesley Professional .

Wesch, Michael, "A Vision of Students Today",
<http://www.youtube.com/watch?v=dGCJ46vyR9o>

Hendron , John G. (2008). RSS for Educators: Blogs, Newsfeeds, Podcasts, and Wikis in the Classroom,

International Society for Technology in Education. ISBN:1564842398 9781564842398

"Wiki's in Plain English" http://www.youtube.com/watch?v=-dnL00TdmLY&feature=Playlist&p=35FD01253628453D&playnext=1&playnext_from=PL&index=5

Chaka, Chaka. (2010). Web-based Education: Concepts, Methodologies, Tools and Applications,
IGI Global, p 1765-1787.

Cobb, J.T. (2008). Learning 2.0 for Associations.
http://blog.missiontolearn.com/files/Learning_2.0_for_Associations_eBook-v1.pdf

Franklin, T. & Van Harmelen, M. (2007). Web 2.0 foe content for learning and teaching in higher education.
http://www.jisc.ac.uk/media/documents/programmes/digital_repositories/web2-content-learning-and-teaching.pdf

Plourde, Mathieu (2008). Wikis in Higher Education, <http://udel.edu/~mathieu/wiki>

Ruth, Alison and Houghton, Luke (2009). The wiki way of learning. Australasian Journal of Educational Technology. Vol. 25 (2), pages 135-52.