Teaching and spinning a “Web” of meaning

Introduction

Teachers instructing in online or virtual environments have qualities similar to teachers in face to face environments. Terry Anderson (2004) identifies three qualities of an e-teacher: 1) must be an excellent teacher; 2) must have sufficient technical skills; and 3) must have resilience, innovation and perseverance. Through the evolution of the Internet, we are beginning to see that these qualities are even more significant for teachers to possess, in order to successfully teach in virtual educational environments.

We also see principles for teaching in online environments different from those used in face to face settings. Janet Trieschman (2007) identifies six online teaching principles in the article, Teaching Principles Compared: Online Vs. Face to Face Teaching.

As teachers and educators it is important for us to understand the shift from Web 1.0 to Web 2.0. The Web is shifting from a static environment (Web 1.0) where we are recipients of information to a collaborative environment (Web 2.0) where we are active participants of content creation (Delich, 2005). A Web 2.0 blog created by Chris Smith helps us to better understand this transformation occurring in teaching and learning.

This module will assist in the understanding of teaching in virtual educational environments as a result of the Web shift. The module is divided into three main sections including: Traditional Online Environments, Modern Online Environments and Future Online Environments. Each of the three sections represent specific periods of online teaching resulting in changes to technology, methodology and pedagogy. The key objectives that will be answered for each section are:

1. What does it mean to teach in an online environment?
2. What are the characteristics of effective online teachers?
3. How does teaching compare between traditional and virtual environments.
Web 1.0/2.0/3.0

Traditional Online Environments Web 1.0

Web 1.0 is the realm of the earliest online teaching environments. Look back to the past at www.youtube.com/watch?v=6_X04XwrUY8&feature=related. What preceded today’s online teaching and learning began with various definitions of online course. In many cases, an online course was primarily written content with attached quizzes or tests. For an activity that reflects this approach, see http://www.jobsetc.ca/toolbox/quizzes/mi_quiz.do?lang=e

Most courses were skill based, reflecting a traditional approach (teacher centered/directed) within an online environment. Institutions such as SIAST developed programs around mastery based learning redesigned to accommodate individual learning pace. Computer use was viewed as more important than the process of learning. Researchers such as Hurn (2005) illustrate the need to move beyond "point and click" planning instructional design to focus on learning, not on hardware, and to take web-based pedagogy beyond these earlier approaches.

Tallent et. al (2006) reviewed the literature on online teaching and learning and provide some common features of Web 1.0 instructors as noted from that review:

1. Vygotsky (1978) noted a lack of instructor guidance in the earliest blended and hybrid online courses.

2. Hammer (1997) and Schauble (1990) noted the lack and imperative of timely instructor feedback.
3. Hansen & Gladfelter (1996) concluded that online pedagogy was not natural for all instructors.

4. Some instructors failed to recognize the importance of feelings and emotions - the non verbal aspects of teaching (Knupfer, Gram, & Larsen, 1997).

5. Instructor lack of organization was problematic for students in an online environment (Cooper, 1999).

6. Instructor convenience sometimes overshadowed learner need in the earlier environments (Faux & Black-Hughes, 2002).

7. Instructors need to participate in online discussions to facilitate student interaction (Tallent, et. al, 2006).

Anderson (2004) illustrated two models of online learning: Community of Learning Model and Independent Study Model. While the community model is a virtual classroom based on existing campus classrooms, the independent model is geared to students who work at their own pace without the benefit of collaborative interaction. Institutions such as the University of Athabasca offer online courses based on both models, thus retaining some of the content-based skill progression of the past, along with the opportunity for group and social interaction in an online environment.

What we have learned from the traditional environment that preceded today's online teaching should assist the modern and future teacher in planning for the most successful learning experience for students. The paradigm shift impacting education, and in particular online teaching, must retain focus on what is truly important. "The critical aspects of learning (brain compatible classroom, learning styles, multiple intelligences, and emotional intelligence...) don't vary from online or classroom" (Siemens, 2002).

This is the Web 2.0 Zone

To get you into the zone, here are a few comparisons that lead from 1.0 to 2.0.

- Web 1.0 was about reading, Web 2.0 is about writing
- Web 1.0 was about companies, Web 2.0 is about communities
- Web 1.0 was about client-server, Web 2.0 is about peer to peer
- Web 1.0 was about HTML, Web 2.0 is about XML
- Web 1.0 was about home pages, Web 2.0 is about blogs

The idea of moving toward a more constructivist view of teaching and learning has helped shape modern online instruction. Letting the learner take charge of his or her learning makes the experience more meaningful and insightful. Web 2.0 is the future of education. This outstanding article by Steve Hargadon describes Web 2.0, explains the major trends underlying Web 2.0 and proposes strategies and what we as educators need to do to transform our teaching into Web 2.0 compliant instruction. Another article titled, New Times Demand New Ways of Learning, explains the importance of moving from traditional instructional methods towards a more constructivist approach. Similarly, this online article...
by Reeves, Herrington and Oliver (2002) provides an overview of what are termed “authentic activities and online education”.

Please follow the simple activities below to become acquainted with today’s technology tools.

(1) **Blogs**: According to Wikipedia, “A blog (an abridgment of the term web log) is a website, usually maintained by an individual, with regular entries of commentary, descriptions of events, or other material such as graphics or video. Entries are commonly displayed in reverse chronological order. "Blog" can also be used as a verb, meaning to maintain or add content to a blog.”

- Nelson Dordelly has created this wonderful blog about our module, *Teaching in an Online Environment*. In particular I would recommend the Readings listed on the right hand side of the blog, they contain many excellent links to additional resources. Please use this link to view it.
- To view a variety of blogs, click on these links. Blog Zerk: Crazy About Blogs, Blogs Canada.

(2) **Wikis**: Wikis, or upgraded webpages, are an essential tool for online education today. Click here for a definition and background knowledge on wikis. [http://en.wikipedia.org/wiki/Wiki](http://en.wikipedia.org/wiki/Wiki)

- Please click on the following link to see some more.

(3) **Screencasts**: Screencasts are quickly becoming very popular in the world of Web 2.0. Screencasts are recorded on video but only contain “shots” or “images” of the information. Wikipedia has a great description of screencasts. Please click on this link to view the description.

- The YouTube video titled *Moonlight’s sample screencast* is a very good example of a screencast. [http://www.youtube.com/watch?v=qRSO7p0HAlw](http://www.youtube.com/watch?v=qRSO7p0HAlw)
- I have created a screencast of the *Community and School of Hope Project* in Itimpi, Zambia, using Jing (which is one of the applications that we will be using in this course). I captured a simple Powerpoint presentation and added audio.

(4) **Podcasts**: One of the most intriguing tools on the web are podcasts. They do require some accessories and bit more knowledge of a computer and the web. Wikipedia also describes a podcasts. Click here to become learn more.

- The easiest most familiar way to describe a podcast would be to refer you to *YouTube*. Feel free to browse through the many of thousands of videos. [http://www.youtube.com/](http://www.youtube.com/)
Teaching in Future Online Environments

In previous sections of this module we looked at aspects of teaching from the beginning of online instruction (Web 1.0) to modern day online teaching (Web 2.0). This section will focus on teaching in future online or virtual environments.

What is Web 3.0?

What will online teaching look like in the future?

Although difficult to understand exactly what online teaching might look like in the future, we will begin by looking at a course designed by Elizabeth Losh (2007) titled, Digital Rhetoric: Social Media and Persuasive Games. This course uses many Web 2.0 tools like blogs and wikis but also incorporates virtual environments (Web 3.0).

It is important for us to first try and comprehend the term Web 3.0. Garry Hayes (2006) provides a clear graphical illustration shown below.
Immersive Social Spaces

**MMORPGs** (Massive Multiplayer Online Role Playing Games) such as Second Life and River City have created enough interest in education to result in a name change that does not include the term "game". The new term that represents these non game-specific, virtual worlds is **MUVE** (Multi-User Virtual Environment). A research project at the London Knowledge Lab titled, *Learning From Online Worlds: Teaching In Second Life* concluded in May 2008. The aim of this research project was to, "develop theoretical accounts of learning in immersive social spaces and, based on these findings, to develop and test practical recommendations for teaching" (Carr, Oliver & Burn, 2007). A full project description can be viewed at: [http://learningfromsocialworlds.wordpress.com/project-description/](http://learningfromsocialworlds.wordpress.com/project-description/)

A draft report, *Learning to Teach in Second Life* (Carr, 2007) has been released by the project. This report provides a summary of findings from sessions taught in Second Life.

**Summary**

This is the language of the web! We have already moved, in less than 15 years, from Web 1.0 to Web 2.0 and already are experimenting and opening up new possibilities in Web 3.0. For this module, the discussion forum question will provide an opportunity for you to post a response, in our blog, to the following question:

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Isaac Asimov stated in the early 1930’s........
“It is change, continuing change, inevitable change, that is the dominant factor in society today. No sensible decision can be made any longer without taking into account not only the world as it is, but the world as it will be.”

Regarding the potential online education environment of the future, what characteristics and skills do you believe will be required by educators of the future?