Incorporating Web 2.0 Technologies in the Learning Environment

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The internet has had a profound impact on society. In the two decades since it became widely available, it has changed the way people interact with one another and the environment. People use the internet for everything from banking to shopping to playing games. In education, the internet has long been used for research. More recent development of interactive technologies has led to the proliferation of online learning. According to Allen and Seaman (2013) college online course enrollment showed an annualized growth rate of 17.3% from 2002 to 2011. During the same period total college enrollment increased at an annualized rate of 2.6%. In 2011, students enrolled in at least one online course offering comprised 32.0% of total enrollment; in 2002, this figure was 9.6%. The first online course offering were little more than digital versions of the course material presented in the live brick and mortar classrooms. Current online classrooms offer much more means for student and teacher interaction. New user-created technologies are pushing this collaboration even further. Wikis, blogs, and video hosting platforms, such as YouTube, offer a means for students to have a greater impact on their learning.

Wiki

One Web 2.0 information sharing technology that has gained wide popular acceptance in society is the wiki. A "wiki is a collaborative web site whose content can be edited by visitors to the site," (Parker and Chao, 2007). Perhaps the best example of a wiki is the online encyclopedia, Wikipedia. The power of a wiki is that large numbers of users editing the material increases the odds of accurate information being delivered to the end-user. The drawback is that these odds decrease as the number of users decrease. This can be combatted through the use of moderators.

The major strength of the wiki is that promotes both cooperation and collaboration. Each individual user acts as both an author and an editor. Research shows that "cooperative teams achieve higher levels of thought and retain information longer than students who do their work individually, (Parker and Chao, 2007). Wikis are especially powerful when the users share a common interest or purpose. Each member is able to use their individual strengths to counteract the others weaknesses.

Blogs

Blogs, or weblogs, have existed since the advent of the internet. In its most basic form, a blog is an information sharing tool consisting of a collection of discrete posts, traditionally by a single author, arranged in chronological order. Most learning management systems, such as Blackboard or Schoology, incorporate blogs as part of the learning environment (Hall, 2013). More public blog sites include Wordpress and Blogger. The strength of a blog as a pedagogical tool is that is allows the student means to respond to readings, collaborate with others, and critique the posts of other students.

The biggest drawback of a blog is that they require much interaction to be effective teaching tools. For the student, this means multiple visits and posts to the blog. This can be time-consuming. Students often only post the minimum required times and responses can often be superficial in nature (Hall, 2013). For the instructor, the time commitment is much increased. The instructor must make time to read all blog posts and must offer many more responses than the students.

YouTube

YouTube is the largest of several user-created video sharing websites. It allows users to post videos to a public or private page for viewing by others. The content of YouTube consists

of everything from music videos to video weblogs (vlogs), to instructional videos. YouTube itself is so popular that the name has become a verb. Want to know how to change the headlight in your car? You can YouTube it. What to know how to bake a cake? You can YouTube that too.

The strength of YouTube as learning tool lies in its multi-media nature. It promotes interest, appeals to several learning types, and can convey information quicker than readings or a lecture. A study of English learners in Saudi Arabia found that incorporating YouTube material into a course greatly increased learning among the students (Alwehaibi, 2015). Two tests were given to two groups of learners. The first test was given prior to start of the course; the second test after the course. The first groups went through the existing course, this is the control group. The second group, the experimental group, received the same material but in the YouTube format. The results of the first test were 4.8 for the control group and 2.9 for the experimental group. Scores for the post-test were 20.6 for the control group and 28.9 for the YouTube group. This demonstrates a significant increase in learning in the YouTube group.

Conclusion

Used correctly, Web 2.0 technology can be a powerful pedagogical tool. For my project I plan to use a blog, but I plan to incorporate numerous video and multi-media presentations in the body of my posts. By doing this, I can utilize the strengths of both mediums. The blog is the best way to present information in a more academic format. The use of prose enables me to present complex material. It also allows for feedback from the readers. YouTube allows me to condense some of the information and incorporate video, slideshow, and other multi-media tools. This will give me the ability to shorten the length of the posts, while still conveying the

information. It will also make the posts more interesting to the reader and promote overall

usage.

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