

INNOVATIVE TEACHING LEARNING THROUGH WEB TOOLS

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ABSTRACT

Today's students are 'digital natives' and make increasing use of Web 2.0 technologies in their daily lives. Web 1.0 was read-only where Internet users went online to find information. It was similar to going to the library to find books. Web 2.0 tools can be used to teach curriculum content, store data, create/edit video, edit photos, collaborate and so much more. Web 3.0 tools can be used to develop virtual realities in an intelligent way of classroom teaching. There is now a multitude of Web-based tools available that can allow students and teachers to organize their favorite bookmarks, write online documents, and share information with others through social software like blogs and wikis. This paper discusses the comparison of these web tools and some important uses of web tools with its benefits and barriers in the teaching-learning process.

KEYWORDS: *Web Based tools, Teaching-Learning*

INTRODUCTION

Today's students are 'digital natives' (Prensky, 2007), and make increasing use of Web 2.0 technologies in their daily lives. The vast majority of educators, on the other hand, still have little or no experience with these new tools. Teachers and instructors need to understand what opportunities Web 2.0 tools provide for teaching and learning, what kinds of barriers they may encounter when using them, and how to effectively implement the new tools in their teaching. As new technology tools are launched, educators will have the opportunity to integrate these new tools into the courses to enhance instruction. Wikis, etudes, and other educational web tools may be employed to increase its effectiveness.

Web Generation

Web 1.0 was read-only where Internet users went online to find information. It was similar to going to the library to find books. With Web 2.0, which is read/write, people have become active participants and content creators. They not only find information on the Internet, but they also create and share content (Thompson, 2007). Web 2.0 technologies – such as blogs, wikis, podcasting, social bookmarking, and social networking sites – have allowed users to easily publish content online and to connect and network with other people from all over the world who have similar interests. The use of tags particularly enables us to collectively categorize and find content easily. In a nutshell, Web 2.0 could be characterized by openness, user participation, knowledge sharing, social networking and collaboration and user-created content. (Richardson, 2009).

As educators, the use of Web 2.0 tools is transforming our work, and more specifically the way we support students in the classroom. As schools bring more technology into their classrooms, teachers, will in turn, strive to put more

technology in their students' hands. Web 2.0 Tools are online software programs that allow users to do a number of different things. They can be used to teach curriculum content, store data, create/edit video, edit photos, collaborate and so much more. These programs are often free and are used by teachers, students, and sometimes parents, both in and out of the classroom, on a pretty regular basis.

The use of Web 2.0 Tools to support instruction is vital. We use these tools is going to make a critical difference in how we measure our students' success and how they are supported to meet 21st-century skill sets. Embracing the use of tech integration in our daily work beyond word processing and power point presentations is still new to many educators. Instructors should keep in mind that Web 2.0 it does not guarantee more effective learning and teaching. Simply adding Web 2.0 tools to our traditional teaching practice cannot realize the potential benefits Web 2.0. New technologies can help us improve our teaching and learning only when they are used effectively with clear goals and proper methods (Senthilkumar, 2015). The effective use of new technologies requires innovation in teaching methods.

Educational Web Tools

Educational Web Tools (EWT) just like any Web 2.0 content are characterized by open communication, freedom to share and re-use content and dynamic interactivity among users of varying technical abilities around the globe (Vijayakumari,2014). There is now a multitude of Web-based tools available that can allow students and teachers to organize their favorite bookmarks, write online documents, and share information with others through social software like blogs and wikis. These tools can positively impact teaching and learning, and the implications are significant.

The use of Educational Web Tools can be an ideal avenue for lifelong learning because it maintains an interactive and collaborative learning. This provides students' learning experiences appropriate to this digital age. Additionally, these web tool usages allow students to gain educational experiences that go beyond the four corners of the classroom. This type of innovation is very helpful and pertinent to universities worldwide that are in the stage of advancing their curriculum. The following table-1, explains the detailed structure of comparative analysis of Web tools in Teaching.

Table 1: Comparative Analysis of Web Tools in Teaching

No.	Contents	Web 1.0	Web 2.0	Web 3.0
1.	Ability to Connect	The Hypertext / CGI Web. (The basics)	The Community Web (for people: apps/ sites)	The Semantic Web (For Intelligent Machines)
2.	Activity by	Brain & Eyes	Brain, Eyes, Ears, Voice & Heart	Brain, Eyes, Ears, Voice, Heart, Arms & Legs
3.	Communication	One way	Two Way	Group & Collaborative
4.	Connect through	Information	People	Knowledge
5.	Experiences	Pushed Web, Text/ flash graphics	Wikis, Video, Blogs, Podcasts, Shading & 2 D	3 D Portals, Avatar & Multi-user virtual environment (MUVes)
6.	Information	Sharing	Interaction	Immersion
7.	Invented by	Tim Berners Lee	Tim O' Reilly	Sir Tim Berners Lee
8.	Pages	Static	Dynamic Contents	Ubiquitous intelligent
9.	Software	Web of HTTP	HTTP 1.1 & JavaScript	HTTP 1.1 & Avatars & Virtual Worlds
10.	Understanding	Eco-System	Participation	Self & intelligently
11.	Users	Millions	Billions	Trillions
12.	Utility	The Web	The Social Web	The Semantic Web
13.	Web	Read-only	Read and Write	Read, Write & Execute
14.	Workload	Individual Publish	Social Networks	Intelligent Search Engines
15.	Year	1996	2006	2016

Web Tools in Classroom

In India, normally the Web tools to support us in the classroom teaching and learning process are Glogster, Kidblog, Linoit, LiveBinders, Skype, Storybird, Voice Thread, Wordle, and Wetoku.

Glogster: It is a great creativity site whose tagline is “poster yourself” A ‘glog’ is basically an online poster web page. Students can combine text, pictures, graphics, video, and audio to create an interactive online poster. They can click and drag items out of Glogster’s resources, choose their own backgrounds, pictures, text boxes, videos, web links, and more.

Kidblog: It was designed specifically for elementary and middle school teachers who want to provide each of their students with their own, unique blog. Kidblog’s simple, powerful tools allow students to publish posts and participate in discussions within a secure classroom blogging community. Teachers maintain complete control over student blogs.

Linoit: It is a great service that provides its registered users with virtual ‘stickie’ that can be placed on a canvas or bulletin board area. Both lino students (users) and non-registered teachers (guests) can post stickies on the canvas. The great thing about linoit is that we can use it at three levels: public (open), limited access (passwords) and private (personal).

Live Binders: With these online-binders, we can also upload our documents and easily combine them with our links in a neat and organized way.

Skype: This web tool is an easy solution for teachers to open up their classroom with live video and their students to a world way beyond their campus. With Skype, students can learn from other students, connect with other cultures through live video and expand their knowledge in amazing ways by communicating through their computer with a webcam.

Story Bird: This is a fun and easy-to-use tool for creating short, visual stories. Students can select artwork, drag and organize photos, and add their own text. These creations can then be published on the web with adjustable privacy settings. There is also the option to allow comments, which is perfect for teachers to encourage student collaboration.

Voice Thread: It is a collaborative, multimedia slideshow that allows students to comment on images, documents, and video through text, video, and audio files. Teachers can set up groups and classes as well as moderate comments, embed in blogs, and export to audio files. It is an easy way to differentiate instruction while providing engaging choices to “show” learning, engage in conversation, and think openly and critically about content.

Wordle: It allows us to change the appearance of our word cloud by the shape, font, color, and organization. Teachers and students can generate word clouds that show prominent words in any body of text. Just enter the text, we have gathered from students, or even a URL, to see a summary of what the text is about.

Wetoku: It is a web service that provides a simple platform for interviewing someone via the Internet. Collaborating globally is a must for our students and connecting can be a challenge. It makes doing an interview as easy as filling out some basic information, creating an interview session and then sending the creative interview session’s URL to the interviewee. Once the recording is done, the interviewer can embed the copy of the URL into a blog or website.

We will need a webcam to use this tool.

Benefits & Barriers to using Web Tools in Teaching

The benefits of using Web 2.0 technologies in teaching are (a) interaction, communication and collaboration, (b) knowledge creation, (c) ease of use and flexibility, and (d) writing and technology skills. The EWTs are positively viewed by students and they seem to enhance the level of learning and innovation skills of the students in teacher education courses as well as supplement the conventional face-to-face classroom environment. Therefore, this style of innovative technologies should be encouraged among the faculty members. The barriers will encounter in teaching with Web 2.0 technologies are (a) uneasiness with openness, (b) technical problems, and (c) time.

RECOMMENDATIONS

The following best practices or guidelines were identified for teaching with web 2.0 technologies are; (a) do not introduce too many new technologies to students in one semester; (b) do not use multiple technologies that do the same thing; (c) facilitate collaborative learning; (d) build a sense of community in our classroom first before trying more public collaboration and (e). Provide appropriate instruction, tutorials, examples, and frequent feedback.

CONCLUSIONS

The tools are interactive, they can be used asynchronously, they are collected together as a suite of resources within a virtual platform, and teachers are integrating them seamlessly into their classrooms to extend and deepen the educational environment. In this information age, we can now talk to each other in ways we never imagined. Teachers and administrators face a new challenge; however, as they try to find a way to safely incorporate this technology into the classroom. Web 2.0 technologies are fundamentally reshaping and realigning many aspects of the communication loop: the people with whom teachers, students, and parents communicate; how they communicate; what they communicate about; and where and when they communicate. These ongoing processes bring to the fore exciting opportunities and novel challenges for educators. As students and teachers use these technologies to build communities, the old boundaries between public and private, in their institutions and out of schools, and youth culture is melting away and being redrawn.

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