ISSN: 2348-3083
An International Peer Reviewed
SCHOLARLY RESEARCH JOURNAL FOR HUMANITY SCIENCE & ENGLISH LANGUAGE

FUTURE TEACHER WITH WEB2.0

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Abstract

With the advancement of technology, educators are showing an increased interest in ICT and internet for their teaching and learning. Web 2.0 Technology is the power full tool which has shifted the education system from traditional teaching concepts to student centred teaching environment. Day by day these applications are being very common and developed to increase the usage flexibility of web technology. Web 2.0 offered to modern teaching and learning system with effective activities and social interactions. To access the information complex computer technical knowledge or design technology is not essential. Web2.0 provides such a platform where educators write about their own experiences and ideas related to a course topic and can be used to develop learning communities for teacher preparation to improve student engagement. This paper will discuss about the Web 2.0 - a new approach of ICT in teacher education with their undefined characteristics.

Keywords *- Teacher Education, , Social Interaction, Teacher preparation.*

Introduction

Information age is other name given to the 21st century which has developed with social and technological innovations in all areas of life. WWW is the newer advancement of this information age. The internet technology doest not require any complex computer expertise hence it is gaining an increased popularity among individuals and institutions for communication. Earlier the shift from information society to knowledge society depends not only on the use but also the access of the information .But for future society creative thinking and action matters a lot than how much knowledge one has got (Resnick, 2002). For creative

society, information and communication technologies must be a part of teacher education or teaching training institute.

Web being the part of ICT serve as a mode where sharing of knowledge and interaction is possible without no boundaries of time and place. Distance education mode is one of the examples which have incorporated online learning. Face to face interaction has been replaced by computer assisted interactions which can be synchronous or a synchronous. Asynchronous setting is beneficial as it develops the thinking skills where one does not need to respond immediately (Golan, 2010) . Web 2.0 helps in constructing collaborative environment.

What is Web 2.0?

Today web has grown to that extent which fosters productivity, enhances contribution and increases the strength of publication. Technology has ripe so that photographs can be edited, formulas can be created in spreadsheets, and presentations can be done through multimedia in a single umbrella i.e. Web.

Web 2.0 is the name given to 2nd generation of web based technologies with specific tools such as online communities, wikis, forums, blogs, chat room, etc. technology which combines it form the basis of online social networking.

Web2.0 is also known as Read Write Web. An individual is not just being able to download data but can edit also. Web2.0 is best considered as the publishing platform as by using the complex languages ie HTML, Java Script etc one can publish or write their content. 'Web 2.0' offers a wide spectra of technologies that allow users to both access and contribute to website content and web enabled events. Few of the application are blogs, wikis, podcasts, online video sharing (eg, *YouTube*), and online social networking tools (eg, *Facebook,*). Proactive participation, community-based governance, hyper connectivity, and collaboration are main features of Web 2.0 through users sharing information, knowledge, ideas, and opinions (Pratibha ; Smita; Gokhale,2009).

Why Web 2.0 Than Web 1.0 ?

The web service which supports computer to computer interaction over the internet. The web was developed by Sir Tim Berners Lee at CERN in 1989 in Geneva, Switzerland.

Web 1.0:

Web 1.0 was 1st revised software and used before 1999.The era of web 1.0 is Read Only era where hyper linking and book marking of the web pages can be done. Here users are only the recipient of the information as flow of communication is not possible between consumer and producers. Even the mails were sent through HTML format. Static websites are the example of the web which were generated during the "dot com evolution". Web 1.0 is related to 3 R's i.e. Reading, Receiving and Researching.

Web 2.0 :

This term was coined by Tim O Reilly in 2004, who describes it as Read write web. Here flow of communication is possible as user can comment or edit or respond to the information available on the net. The web 2.0 leads to the effective collaboration and communication.3 R's have been replaced 3 C's i.e. Contributing, Collaborating and Creating.

Following are the services under the umbrella of Web2.0

Wiki's

A "wiki" is a collection of Web pages designed to enable anyone with access to contribute or modify content, using a simplified mark-up language. One of the best known wikis is Wikipedia. Wikis can be used in education to facilitate knowledge systems powered by students (Raman,Ryan, & Olfinan, 2005).

Blog

A blog (weblog) is a service provider usually maintained by an individual with regular commentary entries, event, descriptions, or other material such as graphics or video. One example of the use of blogs in education is the use of question blogging, a type of blog that answers questions collaboratively among the teachers and students. There are many ways that students benefit when using blogs.

Podcasts

A podcast is a digital media file, usually digital audio or video that is freely available for download from the Internet using software that can handle RSS feeds. There are kinds of podcasts. An audio podcast is usually an MP3 file and is the most common type of podcast. Enhanced podcasts can have images to go along with the audio. Podcasts can be used in online courses as a method of delivering course content to students. Instructors can create podcasts that contain the "lecture" part of an IS class. Podcasts are a great tool with which to supplement classroom lectures, but cautions that they are used by some students to skip class and lectures, so appropriate checks and balances need to be built into instructional approaches.

Podcasts can be used to provide introductory material before lectures, or, more commonly, to record lectures and allow students to listen to the lectures again, either because they were unable to attend, or to reinforce their learning. Pod casts can be used to make lectures redundant while still supplying presentations of learning material by lecturers.

Social Networks:

A social network is a social structure made of nodes, generally individuals or organizations, which are connected by one or more specific types of interdependency (Social Networks, 2009). Facebook, with more than 200 million active users. Facebook, 2009), and MySpace are the two largest social networks.Twitter is a combined social network and micro-blog service that enables its users to send and read messages known as *tweets.*

Collaborative Sites

These allow users in different locations to collaboratively edit the same document at the same time. As yet most of these services do not allow for synchronous voice or video communication, so the useof third party synchronous communication systems are often needed to co-ordinate editing activity. Examples are Google Docs & Spreadsheets (for text documents and spreadsheets), and Gliffy (for diagrams). There are over 600 such applications.

Media-sharing services

These services store user-contributed media, and allow users to search for and display content. Besides being a showcase for creative endeavour, these services can form valuable

educational resources. Compelling examples include YouTube (movies), iTunes (podcasts), Flickr (photos), Slideshare (presentations), DeviantArt (art work) and Scribd (documents).

Virtual Worlds

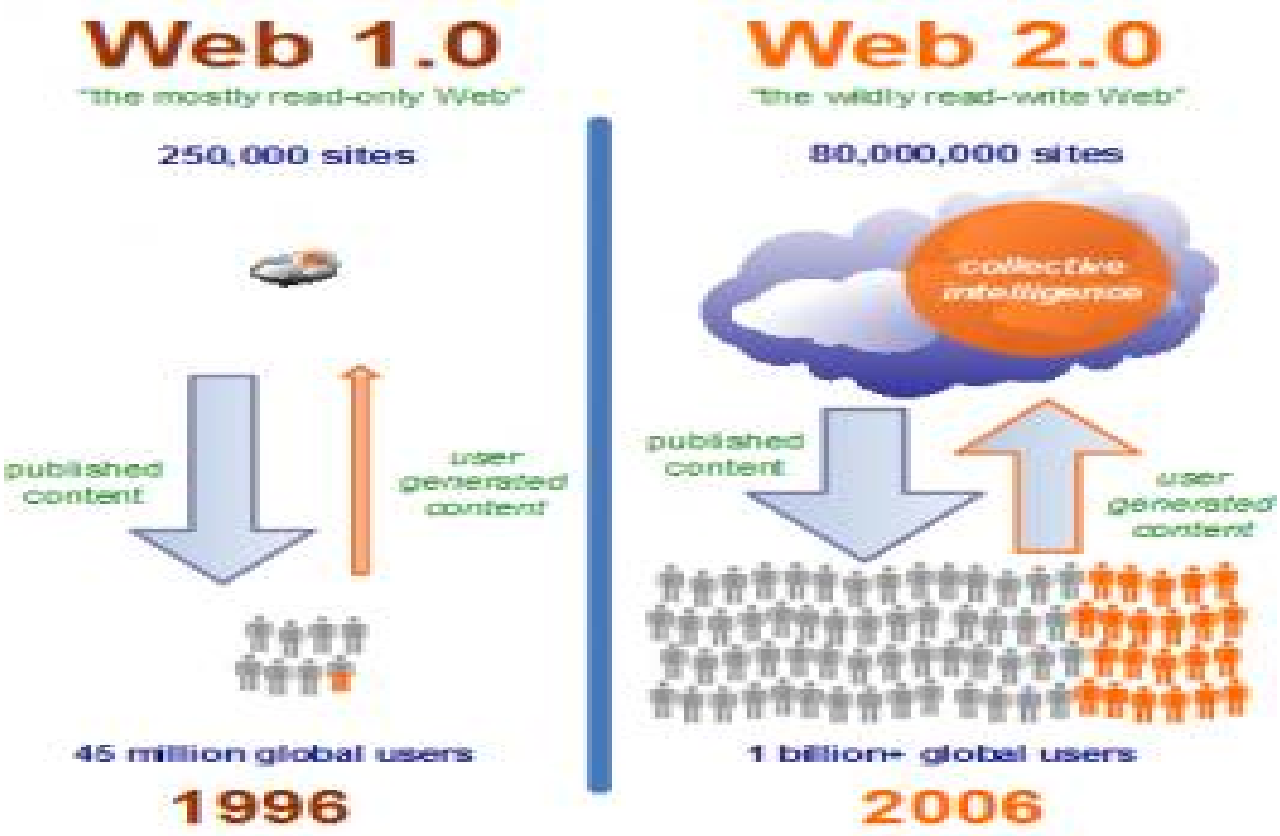
A Virtual World is a computer simulated environment that enables users to interact with each other without geographical confines. Each user is represented by an avatar.

This avatar may be a generic representation assigned to him or her, somewhat resemble the user (e.g., gender, hair color, etc.), or, in more complex Virtual Worlds, be completely customized according to the user's preferences. Second Life (www.secondlife.com) is one of the Web2.0 virtual world used in foreign countries.

Following Table compares Web1.0 with Web2.0

WEB1.0	WEB2.0
Ofoto	Flickr
Akamai	BitTorrent
Mp3.com	Napster
Britannica Online	Wikipedia
Personal websites	Blogging
Content management system	Wikis

Taxonomy(Directories)	Folksonomy(Tagging)



Source: www.primarytech.global2.vic.edu.au

Teacher 2.0 with Web2.0

Israeli researchers and technologists Shoshani and Hazi (2007) studied the role of the Internet and teacher in enhancing creativity. They preface their study by stating, -

> "The use of the Internet environment for developing higher level learning skills has recently become a prime educational concern. The highest of these skills, creative thinking, has a most significant impact in all aspects of our life. It has always been the

origin of innovation and has yielded most of the physical and intellectual assets from which we benefit today. Hence one of the most important objectives of education at all levels, from kindergarten to higher education, is to encourage creative students to be able to meet the challenges of highly competitive society in our era of rapidly developing science, technologies, design, and the humanities."

Web 2.0 tools comprise novel applications and services that run in a web browser. By invoking the language of software versioning, '2.0' implies that the technology heralds a step change in what we can now do with the web. Web2.0 is entirely different from Web1.0 because of described tools with their distinct characteristics.

User Centred Platform:

Web2.0 gives power to the users where as web1.0 was dominated by the content provided. Web2.0 gives priority to user generated content, ownership and social connectivity.

Active Participation

By Web2.0, advanced internet applications can be run by the browsers. These applications like blogs, wikis, social networking sites have a participative nature which encourage users to add, edit, recreate or rehash content (mashups). Web2.0 is a 2 way process of sharing. Data can flow from provider to viewer and hence Web2.0 is PARTICIPATIVE.

Socially advanced:

Web2.0 services includes synchronous and asynchronous ways for the users to communicate with each other. *Instant Messaging* is an example of synchronous and *Wikis* is the example of asynchronous service.

Accessibility:

Allows data to expose, discover and manipulate in different ways for the purpose of enhancement of knowledge.

Openness:

Data can be chosen or picked according to the needs from any where without any boundaries. Hence Web2.0 applications are modular.

Collabarative:

Web 2.0 services support communication and allow learners to coordinate their activities. With variety of learning tools Web 2.0 supports learning that can be strongly collaborative and more oriented to construct classroom communities.

Independent Learning:

It offers a new way to conduct research for the learners. Web2.0 provides new structures for organising data, new sources as a referenced material, power of authority, and new tools to understand the content which make the student as independent learner.

Enhance Learner's Motivation

Curretnt curriculum is flooded with many digital learning innovations with knowledge platform but lacks learning motivation of a learner. For the same Alexander(2008) cited a need to combine Web2.0 and games to foster learners motivation. De Lucia, Francese, Passero, & Tortora (2009) proposed to use Second Life and integrate in Moodle to set up a virtual school.

Supports constructivism

By the Web2.0 technology knowledge is not only acquired but created also. We can learn and comprehend knowledge through constructing knowledge such as Knowledge Forum (Scardamalia & Bereiter, 2006). The feature of Knowledge Forum is to interact, to participate, to share, and to present data visually. It emphasizes the process of knowledge co-construction.

Conclusion

Web 2.0 provides an excellent platform for collaboration, which can be invaluable in solving problems and making better decisions. With the help of Web 2.0 tools, the real world problems could be presented to students and they could be provided to solve the real world problems and share their contributions via the same platform. Web 2.0 technologies could provide methods to stimulate user participation, facilitate case adaptation. The teachers desiring to perform web reinforced teaching and yet having no learning management system shall enable the participation of the students to the site by the different Web 2.0 applications

that they shall found in the web sites. The applications developed with Web 2.0 applications render the passive Internet users into the users building the content. Web 2.0 implies a new era that liberates Web users from linear, context-binding, and goal-directed information seeking and instead opens doors to easy creation, collaboration, sharing, and remixing of content on the Web for ordinary users. Web 2.0 tools' serving as a model in the process of educating teacher candidates together with caring shall encourage the teacher candidates to use these tools in their teaching experiences as well.

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