

E- learning on Web Generations Itinerary

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Abstract

Internet and especially web as one of the basic building blocks of modern society leading us from teacher- centered learning to more student- centered learning. Absolutely this global phenomenon can restructure organizations, promote collaboration and increase democratic participation of citizens and enhance the development in social integration. Traditional Web generation like Yahoo uses a pre-defined classification of Information like category and sub category. On the other hand new generation allows user create free classification/ arrangement of information. Subsequently different generation of web have played different role in education. The objective of the present paper is to study web generations in teaching- learning.

Keywords: E-learning, Web Generations, Education.

1. Introduction

E-learning refers to the use of electronic media and information and communication technologies (ICT) in education. It is broadly synonymous with multimedia learning, technology-enhanced learning (TEL), computer-based instruction(CBI), computer-based training (CBT), computer-assisted instruction or computer-aided instruction (CAI), internet-based training (IBT), web-based training (WBT), online education, virtual education, virtual learning environments (VLE) (which are also called learning platforms), mobile-learning, and digital educational collaboration. These alternative names emphasize a particular aspect, component or delivery method. "E" should refer to "everything, everyone, engaging, easy". Web is a system of interlinked hypertext documents accessed via the Internet. With a web browser, one can view web pages that may contain text, images, videos, and other multimedia and navigate between. The use of Web Services puts more focus again on Service-based Infrastructures.

2. Web1.0

Hyperlinking is the foundation of the web. As users add new content, and new sites, it is bound in to the structure of the web by other users discovering the content and linking to it. Much as synapses form in the brain, with associations becoming stronger through repetition or intensity, the web of connections grows organically as an output of the collective activity of all web users. Web1 users could only view webpages but not contribute to the content of the webpages. Content creators were few in Web 1.0 with the vast majority of users simply acting as consumers of content." Technically, Web 1.0 webpage's information is closed to external editing. Thus, information is not dynamic, being updated only by the webmaster. Economically, revenue generated from the web was made by concentrating on the most visited webpages, the head and software's cycle releases. Technologically, Web 1.0 concentrated on presenting, not creating so that user-generated content was not available. Yahoo was the first great internet success story, was born as a catalog, or directory of links, an aggregation of the best work of thousands, then millions of web users. While Yahoo! has since moved into the business of creating many types of content, its role as a portal to the collective work of the net's users remains the core of its value.

3. First Generation of e-Learning

This generation presents the very idea of placing learning content online. This includes not only text but also images, audio, video and animations. It also represents the idea of programmed learning. This is the idea that computers can present us with content and activities in a sequence determined by our choices and by the results of online interactions, such as tests and quizzes. We have never wandered far from this foundational idea, not even in the 21st century. And it continues to be the point of departure for all subsequent developments in the field of online learning

The personal computer became a tool anyone could use to create and store their own content. Commercial software came into existence, including both operating systems and application programs such as spreadsheets, word processors, and database tools. Content could be created in novel ways - the 'mail merge' program, for example, would allow you to print the same letter multiple times, but each with a different name and address drawn from a database

The key characteristics of E- learning 1.0 are: Technology driven, Linear-sequential logic (i.e. organized, Instructor-in-control, Evaluation based on content memorization, repetitive practice and "passing the test, Engagement through visual animation (e.g. bells and whistles), Separates theory and practice and Separate systems for learning and knowledge capture / dissemination.

4. Web2.0

The term Web 2.0 was never clearly defined, but most people in the Web industry would agree that Web 2.0 focuses on several major themes, including social

networking, folksonomies, lightweight collaboration, social bookmarking, and media sharing.

- Web 2.0 websites allow users to do more than just retrieve information. They provide the user with more user-interface, software and storage facilities, all through their browser. Web 2.0 is sometimes described as the 'web as a platform' but it is probably more accurate to see it as networking being applied to data (or perhaps data being applied to networking). The core technology of web 2.0 is social software such as MySpace, Twitter, Linked In, Facebook, and Google+. Social software essentially is the migration of some of your personal data - like your mailing list - to a content management system on the web. These systems then leverage that data to create networks. So you can now do things online - like send the same message to many friends - that you could previously only do with specialized applications. The key features of Web 2.0 include:
- Folksonomy: Categorization of content by users adding one-word descriptions "tags" to facilitate searching, without dependence on pre-made categories. Traditional Web like Yahoo Directory uses a pre-defined classification of Information like category & sub category. But Web 2.0 without sticking to the existing framework of classification, allows user create free classification of information. This is also known as social tagging.
- Rich User Experience: Traditional web offered static page but Web 2.0 present dynamic user experience
- User as Contributor: In tradition web the information model was One Way. On the other hand Web 2.0 user also contributes to the content by means of Evaluation, Review & Commenting. But in web 2.0 the niche product is not sold directly but offered as a service on demand basis and income is generated as monthly fee and pay per consumption. The typical example is sales force CRM services and Google Apps
- User Participation users participate in content sourcing. This is also known as Crowd sourcing. The typical examples are Wikipedia & You Tube.
- Basic Trust: In traditional web the contents are protected under Intellectual Property Rights but on the other hand, in web 2.0 the contents are made available to share, reuse, redistribute and edit. The typical examples Wikipedia & Creative Common
- Dispersion: In traditional web, the contents were delivered as direct site to home. But in web 2.0 the content delivery uses multiple channel include file sharing & permalinks.

5. E- Learning 2.0

Web 2.0 technologies provide teachers with new ways to engage students, and even allow student participation on a global level. E-learning 2.0 is a system that developed with the emergence of Web 2.0. From an e-learning 2.0 perspective, conventional e-

learning systems were based on instructional packets, which were delivered to students using assignments. Assignments were evaluated by the teacher. In contrast, the new e-learning places increased emphasis on social learning and use of social software such as blogs, wikis, podcasts and virtual worlds such as Second Life. E-learning 2.0 assumes that knowledge is socially constructed. Learning takes place through conversations about content and grounded interaction about problems and actions.

In addition to virtual classroom environments, social networks have become an important part of E-learning 2.0. Social networks have been used to foster online learning communities around subjects as diverse as test preparation and language education. Mobile Assisted Language Learning (MALL) is the use of handheld computers or cell phones to assist in language learning. The key characteristics of E-learning 2.0: Pedagogy driven, Holographic-fractal; self-organizing, Learner-in-control, Evaluation based on self-assessment, reflective practice and successful application, Engagement through provocation / hooks / ideas, Integrates theory / practice / work / learning in real-time and Integrated learning, knowledge creation and knowledge sharing

By allowing students to use the technology tools of Web 2.0, teachers are giving students the opportunity to share what they learn with peers. Social networking sites have worried many educators (and parents) because they often bring with them outcomes that are not positive: narcissism, gossip, wasted time, 'friending', hurt feelings, ruined reputations, and sometimes unsavory, even dangerous activities".

Web 2.0 calls for major shifts in the way education is provided for students. One of the biggest shifts is the fact that education should be collaboratively constructed. This means that students, in a Web 2.0 classroom, are expected to collaborate with their peers. By making the shift to a Web 2.0 classroom, teachers are creating a more open atmosphere where students are expected to stay engaged and participate in class discussions. In fact, there are many ways for educators to use Web 2.0 technologies in their classrooms.

6. Web 3.0

Definitions of Web 3.0 vary greatly. Some believe its most important features are the Semantic Web and personalization. The Semantic Web has triggered some new developments in knowledge engineering and machine learning, most notably the standardisation of knowledge specifications. Semantic Web as "a web of data that can be processed directly and indirectly by machines. The main purpose of the Semantic Web is driving the evolution of the current Web by enabling users to find, share, and combine information more easily. The semantic web is a vision of information that can be readily interpreted by machines, so machines can perform more of the tedious work involved in finding, combining, and acting upon information on the web. The Semantic Web is a system that enables machines to "understand" and respond to complex human requests based on their meaning. Such an "understanding" requires that the relevant information sources be semantically structured.

References

- [1] Aroyo, L., Dicheva D. (2004). The New Challenges for E-learning: The Educational Semantic Web. In *Educational Technology & Society*, 7(4), pp. 59-69, 2004.
- [2] Kasai, T., Yamaguchi, H., Nagano, K., and Mizoguchi, R. (2004). Development of a System that Provides Teachers with Useful Resources from Various Viewpoints Based on Ontology. In *Proceedings of ED-MEDIA2004*.
- [3] Schweiger, W. (2004). Mythen der Internet-Nutzung — Ursachen und Folgen. In U. Hasebrink, L. Mikos & E. Prommer (Eds.), *Mediennutzung in konvergierenden Medienumgebungen* (pp. 89-113), Verlag Reinhard Fischer: München.
- [4] Wiley, D. A. (2000). Connecting learning objects to instructional design theory: A definition, a metaphor, and a taxonomy. In D. A. Wiley (Ed.), *the Instructional Use of Learning Objects*: Online Version. Retrieved Jul. 21, 2013, from the World Wide Web:
<http://reusability.org/read/chapters/wiley.doc>

