

## WEB2.0 Tools in Education

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*Abstract:* - In this paper are presented the applications and the impact of WEB2.0 tools (Wikis, blogs, etc.) in education and the empowerment of educational process. Following, are presented applications that have already implemented and finally questions arise about their better and more efficient application.

*Key-Words:* - E-learning, Blogs, Wikis

### 1 Introduction

Web 2.0 as a term represents a new generation of online services as well as social applications. Participation, feedback, user's active role, the sharing, information flow and community are only some of its positive aspects. And it's not only about technological revolution. Web 2.0 implementation is about giving people a new kind of power and eventually about changing not only the world but also the way the world changes. Wikis and blogs are among the most popular Web 2.0 tools that is why we present them below in order to study their use in education.

Wiki is an Internet tool enhancing communicative and collaborative skills, which everyone can have access to, easily and fast. This tool is a combination of a Web site (without requiring HTML) and a Word file which is why it is so easy to use even if there is lack of technical skills on behalf of the user. A wiki user is far from a simple reader and a passive information consumer. On the contrary this kind of user is both a writer and an editor of the site with the simple use of a web browser proving that the community of wiki users is democratic and collaborative. A weblog is a WEB 2.0 tool which introduces a dynamic and interactive character. The simplest form of a weblog consists of a website with registrations that are published on the Internet with their date. These registrations display in a reverse chronological order. Weblogs are a new internet technology which makes it possible for the user to record his thoughts in a diary form and to publish these thoughts on web pages without the need of programming or HTML coding, whether he is a beginner or not. Except from simple text and links, many blogs incorporate other forms of media, such as image and video.

### 2 Wikis and Blogs in education

Nowadays, internet provides an incredibly useful medium for collaborating and empowering the flow of information. The educationalists have begun to explore the possibilities that wikis, blogs and media-sharing environments could theoretically offer. These tools, may not have been initially designed for educational reasons but turned out to be able to empower students and create new educational opportunities.

#### Wikis

Wikis have already been successfully used in education [1]. In this case, research has proved that both educationalists and learners can be very creative and innovative [2]. The nature of this internet technology leads to fruitful interaction among the learners and individual accountability [4]. Wikis can turn peer interaction and group work in a very easy and natural process. In addition, knowledge sharing is being promoted among a community of learners [5]. This Web 2.0 tool enhance communication and discourages competitiveness among the members of the community of learners [3]. Collaborative learning may be even more enhanced when it takes place in a Community of Practice. Consequently, learning turns out to be a rather collaborative than individual process. "Wikis can serve as a knowledge platform for a community of practice where members of the community can share their knowledge with the group, put up interesting pieces of information, work together, discuss issues, etc" [8]. In the last years, more and more people familiar with online learning become enthusiastic about the advantages of a constructivist online learning environment [6]. That is the reason why, the use of wikis become more and more popular in educational research. Bruns and Humphrays ([7]) described how a wiki- based assignment was incorporated in a media

technologies class. The students developed the M/Cyclopedia (Media/Culture), a collection of information on new media concepts, with the use of MediaWiki of Wikipedia.

Byron and Tsinakos ([9], [10]) attempted to analyse the use of wikis in online learning classes, the first in a symbolic logic class and the second as an collaborative environment in several online classes. We mention the following examples in wikis in education.

#### Wiki Pages

k12 wiki conference

(<http://k12onlineconference.org/>)

Student Data Storage - Needs and Methods

(<http://k12wiki.wikispaces.com/Student+Data+Storage+Needs+and+Methods>)

High School Online Collaborative Writing

([http://schools.wikia.com/wiki/Main\\_Page](http://schools.wikia.com/wiki/Main_Page))

#### 2.1.1 Blogs

There is a lot of recent research on the application of weblogs in education and it shows very interesting results especially when it comes to the use of this tool as a digital diary ([11], [13], [12]). As a result of the conducted research, more and more educationalists adopt the use of weblogs in teaching and learning ([14], [15], [16]). In most of the cases the application is on the field of journalism, humanistic studies and much less on the field of business administration and technology. According to a research conducted on Portuguese students, who were partitioned in small groups and kept a blog for the achievement of their cooperation, this internet technology has proved to be a versatile and useful tool that enhances not only learning but also the development of social skills [12]. Ferdig and Tramelli ([19]) analyzed how weblogs adjust to the principles of cognitive learning theory. With the conduction of this research they came to the conclusion that weblogs are the most useful medium for the reflection and the publication of the learners' thoughts. Du, Wagner (2005) conducted a study in order to investigate the impact of weblog use on individual learning in a university environment. The research took place during an information systems undergraduate course with 31 students and indicated that weblog performance is a significant predictor for learning outcome, while traditional coursework is not [18]. The most effective learning has proved to be the one coming from first-hand experience where the learners share their experience and then create mental models [37]. Consequently, the use of blogs enhances learning as it allows its beginning by the time the learners start their active participation as collaborators for a common purpose.

We mention the following examples in educational blogging.

Adventures in Educational Blogging: The purpose of this website is the sharing of experiences and ideas on the ways that have been used by educationalists from all over the world in order to achieve learning.

In addition, this website provides many other websites with educational blogs.

<http://ssedro.blogspot.com/>

The following links belong to the most representative blogs in education until today.

<http://weblogg-ed.com/> - a blog for the blogs in education,

<http://ssedro.blogspot.com/> - a blog for the educational blogging,

<http://cnx.org/content/m14135/latest/> - about online discussions,

<http://www.getnetwise.org/> - Website about internet safety,

<http://blogsavvy.net/> - Website about the use of blogs.

## 4 Conclusion

As it was presented above, the contribution of Web 2.0 tools such as wikis and blogs is very important since this kind of tools keep getting more and more popular. In order to obtain the most efficient results using wikis and blogs, we need to explore a number of questions. Learners are familiar with regular written assignments but not with the different nature of wikis. Consequently, educationalists should provide sufficient help and instructions to learners in order for them to understand the demands of writing in a wiki. So a question to be explored is what the exact kind of guidance should be for the learners to achieve the best performance conducting this kind of assignments. Can blogging promote reflection and deep learning? We need to come up with activities empowering current excitement on blogs use and that is a field to explore.

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