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# PEDAGOGICAL IMPLICATIONS OF WEB 2.0 IN HIGHER EDUCATION

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### **Abstract**

Web 2.0 represents an emerging suite of applications that hold immense potential in enriching communication, enabling collaboration and fostering innovation. Web 2.0 has been, during the most recent years, a standout amongst the most in vogue words for an entire scope of developments with respect to the Internet. In spite of the fact that it was recognized by the investigators as the key technology for the following decade, the onscreen characters from the educational field don't generally realize what Web 2.0 methods are? Web 2.0 speaks to a progressively participative and possibly worldview changing environment for structure and sharing knowledge. A few teachers have started to apply the tools in homerooms in any case, as its utilization in the public arena extends, there will be a desire for its more extensive application in higher education.

This paper investigates the utilization of Web 2.0 technologies for cooperative learning in a higher education setting. However, their utilization in higher education settings is exceptionally low. Further investigation might be created so as to discover the potential explanations behind this low use and what might be the solutions to augment it. The top barriers keeping them from the viable utilization of Web 2.0 in education are identified. Difficulties and openings identifying with utilization of web 2.0 in higher education is likewise talked about in this paper.

**Keywords**: Web2.0, Higher education, Knowledge, tools

## BACKGROUND OF WEB 2.0:

Web 1.0 was read-only where internet users went online to discover data. It was like heading off to the library to discover books. With Web 2.0, which is read/compose, individuals have turned out to be dynamic members and substance makers. They discover data on the Internet, however they likewise make and offer substance (Thompson, 2007). The communitarian idea of Web 2.0 is steady with educational speculations, for example,

constructivism and Connectivism. This makes Web 2.0 applications alluring to students and educators. At present, commonly used web2.0 applications are Wikis, blogs and social bookmarking. The utility of Web 2.0 is developing as are the number and assortment of utilizations. Underscoring a participatory culture, Web 2.0 technologies energize and

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empower teachers and learners to share thoughts and team up in creative ways. They additionally power instructors to re-evaluate the manner in which we instruct and learn and to change our education practices with the goal that we can bolster increasingly dynamic and significant learning that includes "learning to be" just as "learning about."

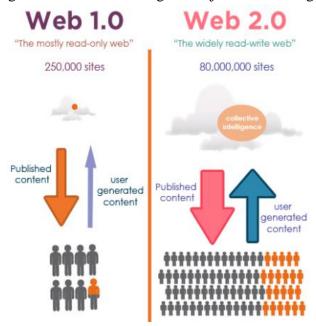


Figure 1: Comparison of web 1.0 with web 2.0 (www.znetlive.com)

Despite the fact that Web 2.0 technologies, for example, blogs, podcasts, wikis, and social systems administration destinations (SNSs) are all inclusive utilized for instruction and learning purposes, there is yet to be an across the board reception of these technologies in the higher education segment around the world. A hoard of complex components is embroiled in such manner: the digital gap; uneven digital proficiencies; variable student and staff backgrounds and abilities; staff frames of mind toward Web 2.0 technologies and their availability to grasp them; and institutional foundation and backing. (Melville et al., 2009)

Web 2.0 enables learners to take an interest in this cloud, through five fundamental attributes, i.e. cooperation, inventiveness, discussion, network and control. It is a read and compose web where "users are as significant as the substance they transfer and offer with others". The participatory and open nature of Web 2.0 gives us the ability to team up with new knowledge and to make engaging connections and network between individuals. It enables us to innovatively use and reuse material in novel ways because there isn't one brought together power controlling the web. At long last, and above all, Web 2.0 changes us from uninvolved to dynamic data buyers, enabling our online voice to be a piece of the discussion. The manner in which we produce, store and devour data has changed, and we need Web 2.0 so as to interface with and to coordinate the eventual fate of grant and learning.

As Web 2.0 provides vital opportunity to learn, it won't be workable for teachers at any level to overlook it. Society, particularly bosses, will anticipate that education should create fundamental abilities with the new tools and students officially acquainted with the tools will hope to have the option to apply their knowledge and aptitudes while learning. Teacher education has the double test of applying Web 2.0 in practice that will improve

learning opportunities for teachers in real sense and get them ready to work adequately with Web 2.0 in their very own homerooms. Subsequently it is significant for teacher instructors to know about the educational capability of Web 2.0 and to advance their programs in manners that both exploit that possibility to improve the programs and get ready graduates will's identity ready to apply Web 2.0 in their own work.

## **WEB 2.0 IN HIGHER EDUCATION:**

The utilization of Web 2.0 technologies with regards to Higher Education could prompt the usage of a model of learning focused on the idea of Community of Practice (LAVE and WENGER, 1991), in which students are viewed as members of a system that has social structure, as opposed to being latent components that secure models of a static world. Peerpressure to upgrade execution and to take an interest in aggregate exercises is a factor that advances the structure of moral connections between individuals engaged with a Community of Practice.

The execution of Web 2.0 technologies in scholastic settings brings up issues about the jumble of the current traditional learning worldview with the new instructional methods intrinsic in Web 2.0 tools. Up to this point, higher education grasped a training model dependent on traditional originations of learning. This traditional learning worldview concentrated on how the environment, which incorporated teachers' activities, prompted the ideal reaction in understudies comprising of discernible changes of conduct that were kept up after some time. For instance, a well-organized address prompted understudies "learning" the material as shown by the right reactions in a test. Inside factors one of a kind to the student, for example, earlier knowledge, commitment, and inspiration were not part of this traditional learning model and learning. Intellectual analysts, be that as it may, scrutinized this learning model during the 1970s, moving their concentration from the environment and the results of learning to the procedures of learning. Learning progressed toward becoming "dynamic, useful, total, and objective situated". Learning was never again only a recognizable change in conduct. Learning models presently incorporated a progression of complex inward procedures including "imperceptible" changes in insight and implying that brought about detectable practices (Hicks and Graber 2010).

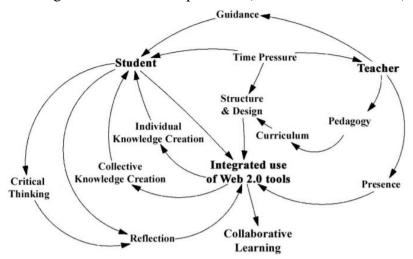


Figure 2: A Conceptual model to explain Web 2.0 community of inquiry, illustrating relationships between teacher, student and the integrated use of Web 2.0 tools. (semanticscholar.org)

## Current Scenario:

Teachers worldwide are persuaded about the possibilities of web technologies in bringing out changes in the field of higher education. The report of the examination led in 25 South African nations in regards to e-learning and web 2.0 notes that integration of web tools and technologies in African higher education is low. Use of ICT in education is restricted to versatile technology (E-learning and Web 2.0, 2012). However, the integration of Web includes in the conveyance of education content by means of versatile technology can improve instructing and learning exercises in Africa. This report could be treated as a delegate contemplate for the creating nations where the use of ICT has not entered profoundly. In the Indian setting, some significant perceptions have been noted. Students are not subject to the traditional techniques for learning like retaining and repeating. Since they have prepared access to real data, they could concentrate on the propelled abilities like analysis, synthesis and assessment. Singular student is at the centre of this new community oriented learning procedure. In the new e-learning 2.0 environment, teachers act not as the educators but rather as the facilitators of new communitarian, participatory strategies for learning (Gokhale and Chandra, 2009)

The investigation directed in Calicut University, India demonstrates that however the students are utilizing the web 2.0 tools outside the academic circle more, they are likewise utilizing them for the academic reason. 36.6% of them use for academic correspondence, 29.1% examine new thoughts and social issues and 8.9% distribute their composition through web 2.0 tools (Mohamed and Sumitha, 2011).

The use of web 2.0 in higher education in India is as yet minor and should defeat a ton of hindrances so as to hold its ground as in higher education of created nations. It directed the investigation of use of web tools by the employees of the university. The investigation demonstrates that the resources at the university are very much aware of the web tools and technologies. Their mentality towards the use of web 2.0 is good. Be that as it may, this is a beginning time of reception of web tools. In another investigation of web tools utilization in two colleges in Odisha, results demonstrate that use of web tools at the university level isn't exceptionally noteworthy. The technologies aside from wikis and social systems administration locales are not prevalent among the university academic network. In addition, the exploration uncovers that this low use is because of the absence of knowledge about the technologies. In any case, academic network has enthusiasm towards these tools as a major aspect of their instructing and learning process. (Majhi and Maharana, 2011).

## Educational Benefits Of Web 2.0 Applications For Teachers And Students

Web 2.0 platforms offer both faculty and students a single destination in which they can bring their ideas together.

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## **Benefits for Students**

- ➤ While stimulation and staying in contact with companions are the most widely recognized uses of Web 2.0 sites, a few students likewise depend on them for discovering data (particularly if there should arise an occurrence of Wikipedia), just as for different investigation and employment related assignments.
- The two blogs and wikis were anything but difficult to learn and use by the students, with basically no specialized issues experienced.
- ➤ The two blogs and wikis were discovered exceptionally useful by the students, encouraging correspondence and coordinated effort between colleagues, expanding interest, inspiration and contribution, sorting out knowledge, supporting background trade and input from peers.
- Numerous students discovered useful and imaginative purposes in education for the tools they have already cooperated with practically speaking.
- ➤ The majority of the students indicated readiness and energy towards the huge scale presentation of Web 2.0 tools in the instructional procedure.
- ➤ Web 2.0 technologies empower students to —become makers of knowledge. As one noted, Web 2.0 technologies give students —the chance to make content themselves rather than simply tuning in to lectures, and this backing dynamic and understudy focused learning in which students assume liability for their learning.
- ➤ Web 2.0 technologies help students become increasingly capable recorded as a hard copy and in the use of technology.

## Communicating via Web 2.0 tools

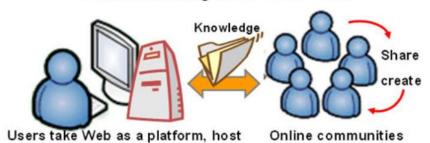


Figure 3: Use of web 2.0 for communication (en.wikibooks.org)

Web 2.0 applications likewise advance communication among students and teachers, yet in addition among students, inside and between classes. Utilizing an online dialog discussion or a social network, students can pose inquiries, cause remarks just as to get moment criticism from the two teachers and peers. For their parts, teachers can respond to students' inquiries, post assignments, reach out in class talks and report forthcoming exercises or occasions. Since these social stages can be gotten to anyplace and at anytime, students and teachers can have more opportunities to connect with one another. This expanding number in teacher-understudy and understudy interactions can help better comprehend and unravel learning challenges. Thus, students will most likely adapt rapidly and an abnormal state.

## **Benefits for Teachers**

➤ Interaction, communication and joint effort.

Most teachers trusted that utilizing Web 2.0 technologies in encouraging helps fabricate a feeling of network, builds interaction and communication among the educators, students, and other individuals, and advances coordinated effort and resource sharing.

## > Knowledge creation.

Half of the teachers detailed that Web 2.0 technologies empower students to "become makers of knowledge." A few teachers likewise noticed that Web 2.0 technologies make an environment where a teacher turns into a facilitator of learning as opposed to a wholesaler of knowledge.

## Convenience and adaptability.

About 33% of the teachers revealed that Web 2.0 tools are anything but difficult to-use and adaptable. They noticed that while a portion of the traditional course management frameworks (CMS) are excessively static, Web 2.0 tools evacuate time limitations by giving a progressively adaptable learning environment that isn't hindered to classroom dividers.

## Barriers And Opportunities & Challenges To The Use Of Web 2.0 In Higher Education:

There are a few barriers to the use of Web 2.0 in instructing and learning. Numerous studies have endeavoured to sort the barriers to the use of these technologies. Barriers are gathered into two classifications: *first-request barriers* extrinsic to teachers (for example get to, time, support, assets, preparing) and *second-request barriers* characteristic for teachers (for example demeanors, convictions, rehearses, opposition). Thus, Rogers-Estable (2014) expressed that a portion of the barriers to the use of ICT in education are extrinsic, for example, time, preparing, and support. Others are characteristic, for example, convictions, inspiration, and certainty. In any case, an another scientist assembled the barriers as per whether they identify with the individual (teacher-level barriers, for example, absence of time, absence of certainty, and protection from change), or to the establishment (school-level barriers, for example, absence of powerful preparing and absence of access to assets). In like manner barriers are additionally arranged into two groups including teacher-level barriers, e.g. certainty, ability, and protection from change, and school-level barriers, e.g. time, backing, and openness.

Some different barriers to the use of Web 2.0 in education were observed to be identified with protection issues and the unwavering quality of data. For instance, Amin, Hasnan, Besar and Almunawar (2016) investigated that teachers are not willing to use Web 2.0 in their instruction because of security issues and obsolete and problematic data on websites. An absence of awareness of legal and copyright issues when utilizing outer assets were additionally barriers identified with security.

To aggregate up, evaluating the literature demonstrated that K-12 teachers have indicated uplifting dispositions towards the use of Web 2.0 applications in the learning and educating forms. Numerous studies have tended to the circumstance of utilizing a particular Web 2.0 device, for example, Facebook, wikis, blogs, Twitter, and YouTube in education. They can be used in K-12 education viably. Be that as it may, this may require an adjustment in the teacher's job in the study hall; teachers may confront a few barriers to the compelling use of Web 2.0 in education, for example, time, security, certainty, and preparing.

## **Opportunities and Challenges**

A few difficulties of utilizing Web 2.0 tools in language learning were recognized in the explored investigations. As a matter of first importance, specialized issues have tenaciously fended off certain students and teachers from utilizing them in language learning and teaching. For instance, wikis' moderate stacking time, digital broadcasts' huge record size and low association speed, and members' brief breakdown of web access have all presented great difficulties to learners that blocked their utilization (Woo et al., 2011). For example, the naturally social and problematic nature of social networking tools, for example, Twitter and Facebook can bring a lot of diversion and clamor data, which conceivably keeps students from their genuine learning purposes. Incidental issues, for example, students' relational connections are probably going to be accidentally brought into the homeroom by the social networking tools, which in a roundabout way influences the realness of a formal learning environment.

### Conclusion

The most recent age of Web 2.0 technologies (blogs, wikis, RSS and so forth.) are rapidly getting to be omnipresent, offering numerous remarkable and amazing data, sharing and joint effort highlights. By and large, the innovations are driven by lovers – regardless of whether in administration, IT, e-learning or libraries, or in academic offices. So why teachers should turn upward from their course books and observe Web 2.0 tools? The reason these social technologies work is because teachers can encourage communitarian work among their very own students, yet with associates, students, and network individuals from around the globe. Web 2.0 tools have the incredible potential to serve the higher education network with different perspectives. However, their potential isn't completely used. Particularly in the developing nations the level of use of web tools is exceptionally low. In spite of the fact that the developing nations are lingering behind in utilizing web tools in higher education, the studies uncover that the disposition of the students and teachers towards web tools are great.

Further research can be directed to address the topic of how Web 2.0 applications can be utilized all through school environments to improve the way toward learning and educating learners. At last, it would merit examining down to earth look into with structuring instructional Web 2.0 tools in different territories.

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