



# The Use of Web 2.0 Tools and Technologies in English Language Teaching-Learning Process

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## ABSTRACT

English language instruction increasingly makes use of web 2.0 tools and technologies as the most cutting-edge example of internet-based technology. Wikis, blogs, podcasts, social networks, and video conferencing are some of the most common examples of Web 2.0 technologies that have shown their use in language instruction and study. In the last ten years, Web 2.0 has become an essential part of the educational process, both within and outside the traditional classroom setting. Almost all language classes have used various technological tools and resources in recent years. Using multiple technologies has facilitated and improved students' ability to learn new languages. The use of technology enables teachers to adapt classroom activities, which ultimately speeds up the language acquisition process. It is becoming more critical for teachers to use the tools and technology offered by Web 2.0 to encourage language learning in their classes. This research investigates the impact that contemporary technology has on the process of learning English as a second or foreign language. We looked at various mindsets to see what technology motivates English language learners to enhance their learning abilities. The researcher defines technology and explains how technology may be integrated into educational settings, namely language courses. It reviews previous studies on using Web 2.0 tools and technologies to enhance language learning abilities and makes recommendations for the improved use of these technologies, which aid students in improving their learning abilities. In addition, it reviews previous studies on using Web 2.0 tools and technologies to enhance language learning abilities. The anticipated results from the previously published research demonstrate that students' language-learning abilities improve when they effectively use emerging technologies.

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## Introduction

Since Tim Berners-conception Lee's of the Web in 1989, it has swiftly developed and evolved through three distinct phases: Web 1.0, Web 2.0, and Web 3.0. Web 1.0 is all about one-way information, but Web 2.0 is a two-way communication paradigm. Therefore, the move from Web to Web 2.0 was a key informational milestone (**Badiger, 2018**). The emergence of different social media sites throughout the Web 2.0 era, such as Blogger, Twitter, and Facebook, has revolutionised the sharing and collaboration of information across many users. The next version of the Web, known as Web 3.0, combines the elements of both stages and adds additional functions.

Information architecture expert Darcy DiNucci first used the phrase "Web 2.0" in her January 1999 paper "Fragmented Future": ICT introduces a new type of media for the discovery, articulation, and diffusion of information, and as a result, it influences the time and effort required to learn the knowledge and skills that are evolving within a culture or community. (Diana, 2007). One of the key factors that has an impact on cross-border communication is language. For competency and communication, students use a variety of English language abilities, including speaking, listening, reading, and writing. (Grabe & Stoller, 2002). Technology use in classrooms has received a lot of attention recently. "Educational academics have had a hurdle in determining the usefulness of technology in classrooms for more than 20 years. Our expanding understanding of how technology enhances student learning contributes to the issue. Research is additionally hampered by the technology's frequent alterations. Finally, the need for complete isolation in order to establish cause and effect is eliminated by the interaction of multiple factors in a rich setting like a school. (Baylor and Ritchie, 2002). Rapid technological advancements have had a significant impact on teaching and learning. The issue of how much new technology supports the goal of raising educational quality begs the answer. It is well recognised that conventional forms are not always effective and successful. (Milliken and Barnes, 2002).

Students have the ability to learn more quickly and permanently due to the use of technology in the classroom. Statistics revealed a statistically significant improvement in the exam results of students in a com-

puter-aided learning environment in a different study conducted by Tsou, Wang, and Li (2002). This demonstrates the usefulness of technology in achieving efficient learning.

The way that technology resources are used has also changed in a similar way. The variety of instruments that give learning opportunities outside of school has evolved significantly in recent years as a result of advancements in information technology. The Web 1.0 technologies that were formerly widely utilised to build websites that served as "the Web as information source" are no longer widely used. Many educators tend to favour the current Web 2.0 technologies that are built on the idea of "Web as Participation Platform" (Web 2.0, 2008). Modern teachers can use these potent tools to give their students richer and more engaging learning environments, switch from whole class to small group instruction, act as coaches rather than lecturers, and focus on the weaker students rather than the brighter ones (Duffy and Cunningham, 1996, p. 187). to switch from whole class to small group instruction, to become coaches rather than lecturers, to assist struggling students rather than the brighter ones, to actively engage students in the learning process, to foster more cooperative and less competitive relationships among students, to personalise learning, and to integrate visual and verbal thinking processes rather than concentrating only on verbal thinking processes (Matusevich, 1995, pp. 2-3).

## Objectives of the study:

The objectives of the present study were as follow:

- i. to determine what level faculty members, use Web 2.0 tools
- ii. to explore the importance of using Web 2.0 tools among teachers and students
- iii. to find out what are the difficulties and challenges faced by faculty members when attempting to use Web 2.0 tools in their teaching

## Evolution of Web 2.0

Web 2.0 is the second generation of the web, which began in 2006. It was a kind of web that allowed for two-way

communication; hence it was considered a read-write web. Web 2.0 users were capable of interacting and sharing fresh information with their peers. Here, the user might use network effects and distribute the material in a variety of ways. Web 2.0 supports significant qualities such as participatory, collaborative, and dispersed behaviours that enable formal and informal everyday activities to take place on the web (Kujur and Chhetri, 2015).

The tools and resources of Web 2.0 have enabled instructors to educate pupils. Not only does it benefit instructors, but it also enables kids to collaborate with teachers, other students, and parents. These Web 2.0 teaching tools are hardly miraculous, but they often enable instructors to save time and inspire kids to study. These applications are likewise modest in size and need very little space on PCs or mobile devices. Some of the tools are accessible online without the need to install any additional software.

## Literature Review

Chawinga and Zinn (2016) examine the students' understanding and specific use of Web 2.0 technologies and identify the factors that impact the use or non-use of Web 2.0 in their research. According to the survey, students utilise this technology to search for information, interact with professors, submit assignments, and engage with classmates over academic work. Wikipedia, WhatsApp, Google Apps, and YouTube were utilised by students as vital resources. Inadequate broadband access and the unavailability of Wi-Fi are the key hurdles to the widespread adoption of Web 2.0. In addition, the research indicates that a robust training schedule and a high-bandwidth connection are required to increase Web 2.0 accessibility for students.

Eze (2016) investigated the comprehension and utilisation of Web 2.0 technologies by LIS students at the University of Nigeria, Nsukka. The most popular Web 2.0 apps are Facebook, YouTube, and wikis. These technologies are utilised for interacting with family and friends, sharing personal views and news, and meeting new people. Friends and self-study have been the most common means of acquiring Web 2.0 technical knowledge.

The research done by Echeng and Usoro (2016) reveals the views of students and teachers towards

the usage of Web 2.0 in educational activities. It has been discovered that an improved learning experience through the use of Web 2.0 technologies in higher education is positively correlated with perceptions of utility, perceived ease of use, prior knowledge, a motivation to use, social variables, a conducive condition, and performance expectations.

The usage of Web 2.0 technologies by librarians at Iranian university libraries in East Azerbaijan was the subject of a comprehensive research done by Pirshahid et al. in 2016. The poll revealed that librarians were more familiar with Web 2.0 technologies such as wikis and blogs. The primary reasons for using Web 2.0 technologies are amusement, curiosity, collaboration with coworkers, social interaction with friends and family, and keeping current. In addition, librarians consider Web 2.0 technologies to be the most effective means of sharing information about library resources. Blocking of the Internet, lack of access to high-speed Internet, and a lack of training were the major impediments to the adoption of Web 2.0 by librarians.

Baro et al. (2013) investigated the level of Web 2.0 tool knowledge among librarians in Nigerian university libraries, as well as their extensive use of Web 2.0 technologies. According to the poll, librarians were most familiar with social networking sites, instant messaging (IM), media-sharing sites, blogs, and wikis, while Flickr, RSS feeds, podcasts, and social bookmarking were among the least utilised. Online reference services, library news and events, training resources, and image and video sharing are the most frequent applications of Web 2.0 technology by librarians. Insufficient internet access, inadequacy of skills, and lack of time were highlighted as obstacles to the utilisation of Web 2.0 technology.

Al-Daihani (2010) examines the attitudes and utilisation of social software among master of library and information science (MLIS) students from Kuwait University and the University of Wisconsin-Milwaukee. The poll revealed that the majority of pupils at both schools were familiar with social software applications and their use. The highest mean scores were assigned to blogs, video sharing, collaborative writing, communication, and social networking. Their institutional connection did not significantly alter their attitudes toward online activities, their utilisation of social software, or

the impediments to its use. In addition, it was demonstrated that institutional affiliation strongly affected participants' perceptions of educational social software applications.

## Benefits of Web 2.0 in Teaching-Learning

The technological advancements of the World Wide Web permit us to follow the evolution of e-learning through the phases of the multimedia era (1984-1993) Internet infancy (1994-1999) Web technologies of the next generation (2000-2005) and mobile learning technologies of today. The new learning technologies have altered the instructional objectives. Due to the pervasive integration of technology into many facets of modern life, digital learners seldom view e-learning as a separate activity. Students no longer rely on outdated memorization techniques for learning. Higher level skills, such as analysis, synthesis, and assessment, have replaced their ability to memorise things via rote memorization. Today's collaborative training strategies are more individualised. The Web 2.0 allows a new learning paradigm, as evidenced by the widespread usage of the phrase elearning 2.0 in its lexicon<sup>7</sup>.

In the e-learning 2.0 environment, instructors take on the role of facilitators of the learning process, and learning-by-doing, collaborative, and active methods of instruction are seen indispensable for achieving the new learning objectives. While many e-learning websites utilise a variety of Web 2.0 capabilities, the following Web 2.0 aspects are most frequently linked with the e-learning 2.0 situation. Wikis: A wiki is a website that allows people to create or modify site content, such as Wikipedia. Wikis may be utilised in education to facilitate collaborative work, construct a course collaboratively, and exchange information among students for the purpose of updating course materials. Blogs: A blog is a mechanism for one or more authors to disseminate knowledge, post comments, and receive new articles via RSS readers. Without prior understanding of HTML, teachers frequently utilise blogs to create dynamic learning environments to facilitate collaborative work. RSS Reader Pages: This application is based on a novel method of communal and collaborative information exchange. RSS distributes the complete page based

on RSS syndication guidelines. Online Office, often known as the Web desktop or the WebTop, enables browser-based programme execution. Online office refers to software packages comparable to Microsoft Office or Open Office, such as word processors, spread sheets, multimedia presentations, etc. This office permits the development of online papers with notes on their history, debate, and annotations, etc.

As an example, consider Google Docs. As its name implies, social book marking is a novel method of information access based on collaborative selective searching, such as del.icio.us. Shared Videos: Youtube.com and other similar websites facilitate the sharing of educational and instructive videos over the Internet, frequently resolving technical or size-related issues. Teachertube, Sclipo, Expertvillage, etc. are a few examples of websites that offer instructional content. Podcasting refers to the distribution of many types of educational instructional resources, including multimedia presentations, textual texts, and photographs, etc. This content can be downloaded for free use. Video Online: Institutional and publicly accessible websites, such as Stickam.com and Ustream.com, frequently provide online videos as educational materials. These websites enable instructors to deliver instructional films during remote learning or coaching sessions. Social Networks: The idea and practice of social networks is the foundation of Web 2.0 comprehension. Social networks built expressly for the educational community, such as ELGG, are frequently viewed as communities of practice. While virtual campuses have been utilised in e-learning settings, the most recent trend in the Web 2.0 era is the personal learning environment (PLE).

Based on eLearn magazine's Editor-in-Chief Lisa Neal's blog article, ten things you can do in ten minutes to be a more successful e-learning professional, Stephen Downes has highlighted ten things one can do to effectively use Web 2.0 technologies in order to be a more effective e-learning professional<sup>9</sup>. These include: Utilize RSS feeds to scan conference sessions and book mark conference websites. (ii) Record presentations regarding the work or learning materials as audio, video, or blog posts. DESIDOC Journal of Library and Information Technology, 2009, 29 (1) Use Google Blog Search, Google Image Search, Del.icio.us, Technorati, Slideshare, and Youtube in addition to GoogleSearch to conduct a search and store results to del.icio.us for

later reading. (iv) Compose a brief blog post or article about a recent lesson learned at a meeting or conference note. The aim is to make your message rapidly known to others and hit submit. (v) Constantly update your e-portfolio, for example, by uploading your slides, audio, and video to the proper web sites, coding your presentations online, or describing the links to your most recent online publications and projects. (vi) Utilize Flickr's Creative Commons licence to locate an image and produce presentations using ZOHIO. (vii) Locate the blogger of interest in your RSS reader, visit their website, and follow any links to more blogs, feeds, or postings. (viii) Comment on a blog post, article, or book by an e-learning researcher or practitioner. Visit sites such as Engadget.com, Metafilter.com, Digg, Mixx, Mashable, and Hotlinks, peruse their content, and make a blog post or comment on anything of interest. (x) Catch up with an online gaming buddy or watch an internet video to unwind after a long day. The Web 2.0 list compiled by Baris provides a comprehensive list of Web 2.0 resources that may be utilised for such activities<sup>10</sup>.

The learning object repository (LOR) is the greatest Web 2.0 repository for digital reusable learning items. These LORs are built on the OpenCourseWare consortium and facilitate the use and exploitation of interoperable geographic, cultural, scholarly, or scientific collections and items from libraries, archives, and museums. WikiEducator contains a comprehensive database of open e-learning material repositories<sup>11</sup>, in addition to a number of links that illustrate the breadth and depth of the LORs. LORs are instances of institutional repositories (IRs) that play a vital role in boosting e-learning. Learning in a virtual environment occurs on any website with educational value and in the normal learning environment that a student may find suitable for his or her e-portfolio. It is a web-published collection of documents, information, audio, and video clips, with no constraints on the quantity of data that may be added, erased, or shared. It is also known as a webfolio. Often referred to as PLE, it allows students to raise questions, post drafts, connect to comments on comparable and relevant sites, and construct an ad hoc learning environment that is most suited to his or her needs and abilities<sup>12</sup>. When coupled with IRs, these webportfolios serve as LORs, facilitating the network,

finding, and retrieval of Web 2.0 learning materials. Thus, Web gives a platform for students to develop their digital identities. Using networks, one may link resources, experiences, and tutors, so enhancing their e-learning 2.0 experience.

## Challenges of Web 2.0:

Several studies have examined the usage of Web-based technologies in the educational setting (Hoq, 2020; Mahyoob, 2020; Mishra et al., 2020; Palaigeorgiou & Grammatikopoulou, 2016; Rasheed et al., 2020). The incorporation of Web 2.0 tools into education poses both obstacles and rewards, according to these research. Using interviews with instructors, Palaigeorgiou and Grammatikopoulou (2016) recognised the barriers and benefits of Web 2.0 learning in traditional learning environments. The study concluded that Web 2.0 learning activities educate students how to interact, generate digital material, reflect on their opinions, extend the time-space of educational discussion, and foster student-teacher trust. However, the findings revealed that students confront a number of obstacles when utilising Web 2.0 for educational purposes, including the amount of time and effort necessary, an overestimation of students' abilities, and a lack of training opportunities.

Moreover, Rasheed et al. (2020) suggested that the incorporation of technology into education has caused students, instructors, and institutions to feel uneasy. For instance, students must have "self-regulation abilities and technical proficiency because they are asked to manage and conduct their studies independently of their teacher, at their own speed, and also using online technologies outside of their face-to-face sessions" (p. 2). According to Rasheed et al., insufficient technological expertise and difficulties with self-regulation are obstacles students and instructors experience while adopting Web 2.0. In addition, students' objectives and prior knowledge present excellent chances for technological engagement and the development of digital literacy. Prasad et al. (2018) assessed the degree to which overseas students gain digital competence. According to the results, kids are highly motivated to utilise unknown technologies.

Due to digital cultural gaps, some overseas students may find it difficult to utilise Web 2.0. (Ozad & Barkan, 2004; Vesisenaho, Voltonen, Kukkenen, & Anu, 2010). Students need abilities to use Web 2.0 technologies for learning (Meyers et al., 2007), and they must dedicate considerable effort to acclimating to the new technology (Prensky, 2003). Web 2.0-based learning is predominantly student-centered (Ozad & Barkan, 2004; HoicBozic et al., 2015). Research indicates that the incorporation of Web 2.0 into the conventional learning strategy can facilitate the development of collaborative learning among students (Abdul Rahman et al., 2020). As a result, digital literacy is of the utmost importance, given that the facilities are excellent in fostering beneficial learning outcomes (Eshet-Alkalai, 2004; Hoic-Bozic et al., 2016). During the Covid-19 epidemic, only a few research focused on Web-based education. Mishra et al. (2020) investigated the use of online teaching and learning during the COVID19 epidemic in India. The study showed that the Covid- 19 epidemic has wreaked havoc on education and that it is difficult to administer online tools for learning, particularly over the long term. Similarly, Hoq (2020) utilised a survey to examine instructors' preferences for various e-learning technologies in Saudi Arabia during the Covid-19 outbreak. According to the results, educators believe that e-learning technologies "save time and effort when revising and updating instructional content" (p. 462). However, some educators lack the confidence to satisfy the technical requirements. Mahyob (2020) utilised a survey to identify the difficulties experienced by English language learners in Saudi Arabia during the Covid-19 epidemic.

The studies revealed that English language learners confront technological, intellectual, and communicative obstacles. According to Mahyob, "the majority of learners are dissatisfied with continued online learning since they were unable to meet the promised language learning performance gains" (p. 351). In a similar vein, Mouchantaf (2020) discovered that professors "mostly complained about students skipping classes, technological difficulties, and a lack of institutional support and training" (p. 1264). In addition, the incorporation of Web 2.0 tools with

conventional learning components has created concerns, "yet there has been no clear understanding of the issues associated with blended learning's online component" (Rasheed, et al., 2020, p. 1). Ignatow and Robinson (2017) stated that a poor socioeconomic level might also result in a lack of digital competence. Complex comparisons make it dubious if the families of overseas students, particularly those from developing nations, can be defined as middle class in the Western sense (Banerjee & Duflo. 2008). However, there is insufficient study on the problems students confront while using Web 2.0 for educational reasons (Rasheed et al., 2020). Nonetheless, other research only highlighted these issues from the perspective of instructors (Brown, 2016; Hoq, 2020). Additionally, relatively few studies have focused on the issues international students encounter while using Web 2.0 for educational reasons (Prasad et al., 2018).

## **Opportunities of Web 2.0**

Inadequate or insufficient study has been conducted on the difficulties and benefits of web 2.0- based learning among overseas ESL students, particularly during the Covid-19 Pandemic. Consequently, this study contributes to our knowledge of Web-based learning among foreign ESL students, as well as its obstacles and advantages during the Covid-19 epidemic. Particularly for new students, training and orientation programmes on the usage of Web 2.0-based learning technologies can solve these obstacles. Educational institutions and related authorities can collaborate to accomplish this purpose. It was anticipated that the administration of higher education institutions, educators, and students in general would benefit from this study. This qualitative study is confined to international ESL students at EMU and consists of a small sample size. Consequently, future research may employ a mixed-method approach to provide generalizable results. (Challenges and Benefits of Web 2.0-based Learning for International Students of English during the Covid-19 Pandemic in Cyprus Isyaku Hassan Faculty of Languages and Communication Universiti Sultan Zainal Abidin, Kuala Terengganu, Malaysia Musa BaraU Gamji).

## Conclusions

Web 2.0 influences the ways in which individuals learn, access information, and communicate. To be successful in this digital world, students must be abreast of the newest technology and how they might be included in their education or utilised as required. The purpose of the poll was to determine whether or not students use web 2.0 tools and technologies. Social networking sites and Wikipedia were the most utilised tools. Additionally, it was observed that pupils show a high utilisation and comprehension of social networking platforms. The majority of these applications are used for chatting with friends, sharing photos/files, and conducting professional tasks such as job hunting, dissertation writing, assignment, etc. Although there are numerous websites and services accessible, there are also risks and issues that consumers confront. Privacy and data protection are the primary considerations when utilising these websites. Despite these worries, kids use the online technologies for a variety of objectives.

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