

Using the second-generation Web 2.0 tools in developing university EFL students' English language skills

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ABSTRACT

In 2020, conducting education at a distance was obligatory while the world fought the coronavirus disruption. Technology utilization in distance education has demonstrated its significance in teaching English to instructors and learners. This quantitative study examines university EFL learners' perceptions regarding using second-generation Web 2.0 tools (Quizizz, Socrative, Edmodo, and Quizlet) to develop their English skills. This study was conducted with 150 students of the general English language requirement course at the University College of Applied Sciences in Gaza. The results of this study indicate that the participants appeared to have positive attitudes towards using Web 2.0 tools in general. The study results further indicate that both intermediate and low-level students reported more positive opinions about implementing the digital tools individually or all together when compared to other advanced-level students. The participants differed significantly in their perceptions of the awareness and actual usage of the Web 2.0 tools. The implications of this study indicate that these repeatedly used Web 2.0 tools as curricular tasks could be substituted or replaced with other digital tools to alleviate the oversaturation and reluctance to use digital tools by EFL learners.



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INTRODUCTION

Since February 2020, the world has been "caught by surprise with the unexpected arrival of a virus that has now claimed several innocent lives in different parts of the globe" (Muftahu, 2020). As preventive measures to control the rapid spread of the outbreak and to save people's life, governments worldwide assigned different strict roles ranging from imposing lockdowns and wearing masks to ensuring strict social distancing protocols (Nixon et al., 2020). Accordingly, the lockdown for countries becomes a problematic choice, hence its effects will be reflected in their economic, social, and educational life.

The education system is one of these sectors severely affected by the emergence of Covid-19. As stated in UNESCO, approximately 264 million students were not in their schools hence this

pandemic has worsened things (Getty & Pixelfusion, 2020; Holt, 2020). The spread of the pandemic has continually stipulated converting and transforming educational landscapes. There has been an increasing shift towards online virtual teaching because educational institutions are suspended indefinitely as the only option (Getty & Pixelfusion, 2020; UNESCO, 2020). Conducting education at a distance was obligatory since the education process must continue while the entire world was still fighting COVID-19 disruption. Throughout this period, technology utilization in distance education has demonstrated its significant role in teaching English to instructors and learners.

The advancements in computer and Internet technologies have formulated revolutionary trends entitled both language teaching and learning. These technologies range from concepts such as Computer-Assisted Language Learning (CALL), Technology-Enhanced Learning (TEL), and Web-Enhanced Language Learning (WELL) to Information and Communication Technologies (ICT) (Levy & Stockwell, 2007; Nami et al., 2016; Paulsen, 2002). Technology integration in language teaching indicates that it is not a recent concern. This technology utilization is to nourish prospects for language learning through the integration of technology into language teaching. Technology integration is essential to foreign language (FL) teaching. Implementing technology to serve the needs of learners' language acquisition would emerge as a major concern for language teachers. The new generation of technology learners is defined as "digital natives" (Thorpe, 2001), "Net generation" Jones et al., (2010), and "millennials" Oblinger & Oblinger (2005) and hence technology becomes a generation feature. Respectively, implementing Web 2.0 technologies into teaching practice and learning settings is of utmost importance for teachers who would not want to lag behind their students who see technology as a part of their daily life activities. Respectively, important elements should be considered as the attitudes and opinions of technology users (Ateş Çobanoğlu et al., 2017). These high-tech tools have positive reactions on behalf of both students and teachers, where they are highly motivated by means of technology. The integration of Web 2.0 tools in learning and teaching environments should be studied for effectiveness and efficiency by measuring and highlighting the students' perception, especially in the EFL learning context.

Theoretical Framework

Using educational technology can improve and reform students' learning. There are many types of educational technology worldwide and with various branches. For example, E-learning, Web-based Learning, Digital Learning, etc., are all classified as Distance learning. Classroom technology has become a necessary condition for conducting daily learning activities. Furthermore, technological advances have made it possible to integrate high-tech tools into classroom activities, such as supporting group learning and reviewing the material. As an emerging model, Multidimensional education is a particular type of learning model where students can learn in both settings; the classroom and at home (Clipa, 2014). Accordingly, in class, time is spent on practice or one-on-one learning, and when students are back home, they can use other online tools, such as Quizlet, Quizizz, or Google Forms, as a Self-Diagnostic and studying tools (Mohamad, 2020; Rahayu & Purnawarman, 2019; Thuân, 2018).

Second Generation Web 2.0 Tools and SAMR Model

The Shift from Web 1.0 to Web 2.0 started in August 1995 when Web 1.0 was born due to the Internet shifting from being invisible to being visible everywhere and to everyone (Getting, 2007; Thompson, 2007). Eight years later, Dale Dougherty introduced the popular buzzword 'Web 2.0' in 2004 (Thompson, 2007). Appointed by West and West (2008), the history of the World Wide Web witnessed a dramatic change from 'the read-only Web' or 'Web 1.0' to 'the read-write Web' or 'Web 2.0'. McLeod and Vasinda (2008) and Wang and Vasquez, (2012) described Web 1.0 as "one-way communication" or "a monologue" (p. 260) hence people were only able to browse, read and retrieve information. Respectively, Web 1.0 created more passive users with limited human-computer interaction (West & West, 2008). In this aspect, Web 2.0 can be described as a "dialogue" McLeod and Vasinda (2008), while Kapp and O'Driscoll (2010) used the term "web-volution" to describe the shift from Web 1.0 to Web 2.0 because of Web 2.0 technologies benefits. Considerably, Web 2.0 takes a participatory form engaging participants in social media,

blogs, and podcasts, shifting from read-only Web to read-write Web. It is worth noting that technology can make student-based learning highly interactive. Technology can enhance and reinforce the learning experience. It can be seen as a major support for education pedagogy. Integrating technology within classroom practices has become evident that students can go through formative steps to become proficient in the blended learning experience.

Web 2.0 tools facilitate authentic interactions with content and other learners, allowing them to respond to assignments innovatively. They also offer learners real-world problems, thus allowing them to practice problem-solving skills, considered among the 21st-century skills (Iwuanyanwu, 2020). Furthermore, the study by More and Nicole (2015) revealed that American students had positive perceptions regarding learning efficiency and using YouTube in online, hybrid courses. It was found that integrating YouTube into courses was especially effective in developing fully online learners' educational experiences. Parallel findings were reported in English for Specific Purposes (ESP) context. Balula et al., (2014) investigated the educational benefits of a concept-mapping tool called IHMC Camp. It was used to teach reading and speaking in a Business English course. According to the study results, in addition to the vocabulary acquisition of Business English, the linguistic competence of the Portuguese learners was enhanced. Additionally, their collaboration and communication skills were also developed.

Questions in research on the effects of this interactive technology and how 2.0 tools can be used to support the teaching-learning process can be answered in the light of online education theories and models. One of these models, representing a framework for evaluating online learning, is The SAMR (Substitution, Augmentation, Modification, Redefinition) Model. By exploring the possibilities and reviewing the literature, it becomes clear that many factors influence the implementation of 2.0 technology within the educational context in general and EFL language learning. Discussions of 2.0 technology in education often focus on selecting an appropriate tool for learning activities. However, it is more important for educators and instructional designers to focus on how these tools can improve learning.

Understanding the SAMR Model allows educators to reflect on their progress while investigating ways to use educational technology in a valuable and productive way. The SAMR Model allows all educators to view the steps they are taking down along the road of technology enhancement toward true transformation (Hamilton et al., 2016; Romrell et al., 2014). All educators must realize that the final goal of any classroom is redefinition (Marlatt, 2019; Zhai et al., 2020). Sometimes, even the most proficient educators with technology conduct a task at the substitution level. It comes down to the tool fitting the task and learning target. Through the work of Ruben Puentedura, the SAMR Model (Substitution, Augmentation, Modification, Redefinition) provides a wonderful lens to look at this progression. It must be understood that the goal is to create lessons that allow for the ability to facilitate lessons that practice redefinition. At the same time, it must be remembered that all the stages allow for technology interaction and increased student engagement. Sometimes, simple substitution is all that is needed and is most appropriate by giving the learning target. Educators becoming familiar with the SAMR Model allows them to reflect and evaluate their technology integration practice while striving for powerful learning experiences. While learning activities can get blurred between the steps of SAMR, it must be remembered that educators are working on a progression (Alivi, 2019; Budiman et al., 2016; Tseng, 2019). The first two steps involve technology as an enhancement tool, and the last two involve technology as a transformation tool. The steps between enhancement and transformation can often take some time as educators practice, reflect, and learn.

Examples of Web 2.0 Tools in Teaching EFL

Edmodo

Founded in 2008, Edmodo, also known as "Facebook for school," is a free social media and learning platform for teachers and students alike. The platform is supported by applications that enable educators, students, and parents to access Edmodo when needed. It is considered an educational website that takes the ideas of a social network and refines them and makes them appropriate for a classroom. As a collaborative platform (Rahman & Kodriyah, 2015), Edmodo

provides useful advantages for learners in developing their writing skills (Al-Naibi et al., 2018; Alsmari, 2019). Also, Edmodo can be helpful with sentence structure, spelling, and vocabulary for EFL students (Al-Naibi et al., 2018). In addition, Edmodo could provide scaffolding for students' motivation to learn English. Edmodo students also have positive opinions and attitudes regarding its usage in their language learning process (Al-Naibi et al., 2018; Alsaïdi & Al-Ruheili, 2015). In a safe environment, students and teachers can reach out to one another and connect by sharing ideas, problems, and helpful tips. A teacher can assign and grade work on Edmodo, while students can get help from the entire class. With Edmodo, teachers can truly bring the classroom online. With the ability to give students assignments, quizzes, and polls, Edmodo users can manage their classes and consolidate all their activities in one place. Edmodo can be used in a classroom through various applications that allow students to connect with their teachers. Teachers can set up classes for each school or set up a large class and have all their students in one group, making it simple to track student progress. Grades can also be stored and easily accessible through Edmodo. It also allows teachers to gather student feedback on class discussions and assessments and offer suggestions to confused students. It is the teachers' all-in-one line of communication, grade book, and assessment tracker.

Quizlet

Quizlet is an American online study application that allows students to study various topics via learning tools and games. It was founded by Andrew Sutherland in October 2005 and released to the public in January 2007. Quizlet trains students via flashcards and various games and tests. As of February 2019, Quizlet has over 300 million user-generated flashcard sets and over 50 million active users as it ranks among the top 50 websites in the U.S. In 2016, Quizlet was recognized by Similar Web as the fastest-growing US Education site in 2015. As a Web 2.0 tool, Quizlet can be considered a promising tool for learners and teachers, considering the opportunities for vocabulary learning and teaching (Sanosi, 2018). The way learners perceive Quizlet's use and usefulness is another significant issue to be considered, and positive reactions are the most recurrent emergence (Anjaniputra & Salsabila, 2018).

Quizizz

Quizizz was founded by Antik Gupta and Deepak Joy Cheenath in 2015, and it started to be used in a school in Bengaluru, India. Quizizz is a Web 2.0 tool that has built a learning stage for pedagogies, learners, and parents. It helps teachers and parents to check children's homework and exams and bring those tasks into a self-paced game (Chaiyo & Nokham, 2017; Orhan Gökşün & Gürsoy, 2019). Quizizz is considered an online student-paced formative assessment tool that allows teachers and students to create and use one another's quizzes. After providing students with a unique access code, a quiz can be presented live as a timed competition or used for homework with a specific deadline. After the quizzes have been completed, students can review their answers.

Furthermore, the resulting data is compiled into a spreadsheet to give the instructor a clear visual of the student's performance and analyze trends in which areas might need the most focus. Teachers can use this immediate feedback to revise future learning activities and alter the focus of material by putting a more significant emphasis on concepts that students are struggling with. Quizizz has a very straightforward layout, and the site does a great job of helping teachers through the step-by-step quiz-making process.

Socrative

Socrative is a cloud-based student response system developed in 2010 by Boston-based graduate school teachers and students. Socrative is an interactive and engaging assessment. It provides immediate paperless feedback via formative assessments. It saves time when grading assignments. It allows teachers to create simple quizzes that students can take quickly on laptops or, more often, via classroom tablet computers or smartphones (Guarascio et al., 2017; Lim, 2017). In Socrative, quizzes can be true or false, multiple choice, graded short answers, or allow open-ended short responses. Activities can either be teacher-paced during a classroom discussion or student-paced for use as a more traditional class-end "exit ticket" or quiz. There is also a gaming

element: the “Space Race” feature can set up a quiz so that teams of students can compete against one another to launch rockets into space. Results can be displayed live in the classroom to facilitate discussion with student identity kept anonymous, a “nifty way of using formative assessment to further students’ learning.” At the same time, teachers can access detailed classroom and student data on their own devices. Socrative is a smart student response system that empowers teachers to collect student data via smartphones, laptops, and tablets. Socrative is the most helpful SMS application because students can use it on any platform with internet service rather than phones with text messaging services.

Web 2.0 in The EFL Setting

Integrating Web 2.0 in education offers several features that could serve as educational value (Ferdig, 2007). Consequently, as indicated by the literature, a vast amount of research has explored using Web 2.0 tools in language classrooms. To illustrate, according to the classification made by (McLoughlin & Lee, 2010), among the Web 2.0 tools that are used mostly in the field of education are blogs, wikis, social networking tools such as Facebook and Myspace; multimedia archives such as podcasts, YouTube, e-portfolios; synchronous communication tools such as Skype, and 3D worlds such as Second Life. Furthermore, Wang and Vasquez (2012) investigated the literature on the current research trends that focused specifically on Web 2.0 and the second language (L2). They found that Web 2.0 technologies help create a learning atmosphere that is comfortable, relaxed, collaborative-oriented, and community-based. Another finding from their study indicates that Web 2.0 tools help to foster a favorable language learning environment for learners. Concerning these tools, for instance, Alsmari (2019) investigated the effects of using Edmodo on learners’ development of paragraph writing skills. In his experimental research, eighty female Saudi ELT students of pre-intermediate level were exposed to Edmodo through writing tasks. Furthermore, (Al-Naibi et al., 2018) investigated the use of Edmodo for processing writing skills and the perceptions and attitudes of students regarding the use of Edmodo. In their action research, 25 pre-intermediate Arab EFL learners at the tertiary level volunteered. The pre-test and post-test showed that the learners’ writing skills statistically significantly improved after the intervention using Edmodo regarding paragraph organization, topic sentence accuracy, and sentence structure. Also, the survey results demonstrated that students had positive opinions concerning using Edmodo for learning English. Almost all (90%) showed a positive attitude towards using Edmodo. The survey results also revealed that Edmodo helped passive students become more active. With the help of Edmodo, the learners learned from their peers. Moreover, they felt more secure and comfortable with Edmodo. They also thought that Edmodo helped with writing, grammar, spelling, and vocabulary.

Drawbacks and Limitations of Web 2.0 Tools.

Despite the benefits of Web 2.0 tools in motivating students and increasing their interest in learning and interacting with their instructor and the language, there are still some drawbacks. Students will feel 'oversaturated' if the teacher overuses a Web 2.0 tool. Oblinger and Oblinger (2005) warns that “not all students have computers, not all are skilled users, and not all want to use technology” (p. 18). Therefore, it should be borne in mind that teachers who want to use Web 2.0 technologies in teaching and want their students to benefit from them must be prepared to provide scaffolding to the learners. Web 2.0 tools cannot be considered open and safe all the time hence most of these tools have a drawback side. For example, by using Quizizz, students can become more individualistic and unwilling to help other students who are in trouble. The drawback addressed in this part is that Quizizz may distract students when using Quizizz during class; the second one is that this kind of e-learning-based technique is not designing the knowledge individually. Pedagogies can use e-learning techniques to decrease their working pressure, but students are at different levels of learning. It is hard to follow teachers' progress and make themselves feel more stressed when they get low results than others. Therefore, using Quizizz to set up the same complex tasks for students is challenging. Quizizz does not deliver knowledge and assessments individually. At this point, it lacks consideration of personal needs and motivation.

Purpose Statement

While quite a vast amount of literature has been searched on Web 2.0 utilization into EFL language teaching and learners' attitudes, there is an urgent need to shed light on the learners' perception of the efficiency of this technology advancement on their EFL skills improvement. Different high-tech platforms are established to support the quest of learning and teaching; among these tools are Quizizz, Socrative, Edmodo, and Quizlet, which act as promising potentials in connecting students with their teachers. These platforms create interactive and enjoyable environments where students can improve language efficiency despite teaching virtually. Therefore, there is a need for studies that focus on less investigated Web 2.0 tools such as content creation tools, online study platforms, and learning management systems.

This study explores the students' perceptions of utilizing second-generation Web 2.0 tools represented by the platforms in developing English language skills. To the best of the researchers' knowledge, few studies on English preparatory school students' perceptions and attitudes. Regarding Web 2.0 have been conducted at the English EFL university students' level. In this respect, this study will make use of four Web 2.0 tools that are Edmodo, Quizlet, Quizizz, and Socrative, to investigate tertiary-level EFL learners' perceptions of perceived usefulness, ease of use, awareness, and actual system usage of these specific tools in their language learning quest. This study examines whether there are any statistically significant differences among different levels of EFL learners' perceptions and attitudes regarding the use of Web 2.0 tools. For these purposes, the study addresses the following research questions:

- (1) What is the learners' perception of the usefulness of the Web 2.0 tools (Edmodo, Quizlet, Quizizz, and Socrative)?
- (2) Is there a statistically significant mean difference among EFL learners regarding their perceptions of the usefulness of the Web 2.0 tools (Edmodo, Quizlet, Quizizz, and Socrative)?
- (3) What are the EFL learners' attitudes towards using the Web 2.0 tools (Edmodo, Quizlet, Quizizz, and Socrative)?

METHOD

This descriptive-analytic study investigates the perceptions of tertiary-level English EFL learners regarding usefulness, perceived ease of use, awareness, and actual system usage and their attitudes toward Web 2.0 tools (Edmodo, Quizlet, Quizizz, and Socrative). This study examines whether there are any statistically significant differences among different levels of EFL learners' perceptions and attitudes regarding the use of Web 2.0 tools.

This quantitative and descriptive study uses a non-experimental, cross-sectional survey design. This study presents EFL learners' perceptions of using Web 2.0 tools for language learning. This study aims to describe EFL learners' perceptions as they are without applying any intervention. Next, this research study is non-experimental since the researchers do not attempt to control the variables as [Ary et al., \(2006\)](#) highlights: "The researcher identifies variables and looks for relationships among them but does not manipulate the variables" (p.29). Third, this study can be considered a survey design study because an adapted online survey was employed to obtain data. This study is also cross-sectional because the data were obtained at one point in time but from learners with different levels of English competency, and the sample was drawn from a predetermined population ([Fraenkel et al., 2012](#)).

This study was conducted at the University College of Applied Sciences in the Gaza Strip. The participants were first-level English requirements students at the University College of Applied Sciences in the first semester of 2020-2021. An online questionnaire was sent to 250 male and female students, and 150 questionnaires were retrieved, yielding a response rate of (60%). The questionnaire consisted of two main sections. The demographic information of the participants has been presented in [Table 1](#).

Table 1. Demographic Information of Participants

No.	Variables	Category	N	Percentage
1	Gender	Male	98	65.3%
		Female	52	34.6%
2	Years of study	First Grade	33	22%
		Second Grade	27	18%
		Third Semester	47	31.3%
		Fourth Semester	43	28.6%

It can be seen in Table 1 that there were 52 female and 98 male students in the study group. In addition to this, 33 of the participants were their first semester, 27 of them were in their second semester, 47 of them were in their third semester, and 43 of them were fourth-semester students.

The first section of the survey focused on the participants' perceived usefulness, perceived ease of use, awareness, actual system usage, and attitudes toward using Web 2.0 tools. The results of the structural validity of the questionnaire indicate that all correlation coefficients in all areas of the first questionnaire are statistically significant considering ($p \leq 0.05$). The Cronbach's Alpha coefficient value for all the items was (0.942). It means that the coefficient stability is high and statistically significant. After cleaning the missing data from the survey, the Cronbach Alpha Coefficients and Corrected Total- Item Correlation levels for the four constructs in the survey were analyzed for the actual survey. Following the reliability analysis of the items, composite scores were formed for each construct to continue with inferential statistics. Nonetheless, descriptive statistics were run as well with the aim of a better understanding of the data.

RESULTS AND DISCUSSION

Results

Based on quantitative data from an online survey, tertiary-level EFL learners' perceptions and attitudes towards using the Web 2.0 tools (Edmodo, Quizlet, Quizizz, and Socrative) were gathered and analyzed using SPSS. With the following results and discussion regarding the overall descriptive and inferential statistics, it may be possible to make assumptions about tertiary-level EFL learners' perceptions and attitudes toward Web 2.0 tools.

The learners' perception of the usefulness of the Web 2.0 tools (Edmodo, Quizlet, Quizizz, and Socrative)

EFL learners' perceptions of the usefulness of the Web 2.0 tools (Edmodo, Quizlet, Quizizz, and Socrative) were examined. Before seeking the answer for whether there was a statistically significant difference among EFL students in terms of their perceptions on the usefulness of the Web 2.0 tools through one-way ANOVA, Levene's Test of Equality of Error Variances (homogeneity of variances) criteria were met ($p = .733$). It proceeded with Tests of Between Subjects Effects. As the results from Table 2 indicate, there was not a statistically significant mean difference between the students ($F_{(2, 83)} = 11.652, p = .321$) pertaining to the participant's perceptions of the usefulness of the Web 2.0 tools (i.e., Edmodo, Quizlet, Canva). Then, to find out which levels of learners differed from each other, multiple comparisons were conducted.

Table 2. One-Way ANOVA Results for EFL Learners' Perceptions of the Perceived Usefulness of the Web 2.0 Tools

No.	Perceived Usefulness of	N	Sum of Squares	Mean Square	df1, df2	F	P	R ²	Adjusted R ²	Observed Power
1	Web 2.0 Tools	146	1.248	.574	2,85	1.652	.231	.035	.013	.323
2	Quizlet	148	5.155	3.57	2,85	4.41	.006	.123	.092	.881
3	Edmodo	148	.112	.056	2,85	.012	.010	.002	-.002	.066
4	Quizizz	148	1.59	.970	2,85	.950	.210	.021	-.021	.207
5	Socrative	148	1.59	.805	2,85	.915	.232	.021	-.021	.251

Although it was found that there was not a significant mean difference among EFL learners in terms of their perceptions of the usefulness of the Web 2.0 tools, the results from a total of 150 participants showed that the mean scores of the participants from intermediate and low-level were very close and possibly indicated that they were mostly satisfied and share positive perception about the usefulness of the Web 2.0 tools altogether. However, as suggested by the mean results, there was not a strong inclination for the EFL learners to hold onto positive opinions regarding the usefulness of these Web 2.0 technologies. One possible reason could lie in the learning style and preferences of the learners in that “not all students want to use technology” in their learning journey, as asserted by (Oblinger & Oblinger, 2005).

Is there a statistically significant mean difference among EFL learners regarding their perceptions of the usefulness of the Web 2.0 tools?

In terms of their perceptions of the usefulness of Edmodo. The results demonstrated having the lowest mean score, the participants from the advanced level statistically differed from the other two levels. Whereas intermediate and low-level EFL learners possessed moderately positive opinions on the usefulness of Edmodo for their language learning, advanced-level EFL learners were hesitant to provide a clearer-cut opinion and therefore appeared to have neutral opinions. The reason might be that the advanced-level students used Edmodo only once as a curricular activity. Although there was not a statistically significant mean difference among the three levels, the descriptive statistics show that EFL learners from all three levels appeared to share moderately positive opinions about the perceived usefulness of Quizlet and Socrative. This result moderately aligns with other relevant literature studies (Phi et al., 2016). In terms of their perceptions of the usefulness of Edmodo, even though there was not a significant mean difference among the levels, the descriptive statistics suggest that EFL learners from all three levels have tended to possess neutral opinions. To a certain extent, this result diverged from what previous studies found. For instance, EFL learners’ perceptions of the usefulness of Edmodo were generally positive (Manowong, 2017; Yundayani, 2019).

The EFL learners’ attitudes towards the use of the Web 2.0 tools (Edmodo, Quizlet, Quizizz, and Socrative)

Before seeking the answer for whether there was a statistically significant mean difference among A, B, and C level EFL learners in terms of their attitudes towards the use of the Web 2.0 tools (through one-way ANOVA, Levene’s Test of Equality of Error Variances (homogeneity of variances) criteria were met ($p=.855$). After that, it was continued with Tests of between-Subjects Effects. The results from Table 3 suggest that there was no statistically significant mean difference between A, B, and C levels ($F(2, 84)= 1.194, p = .308$) regarding the participants’ attitudes towards using the Web 2 tools. Based on the information obtained from multiple comparisons through Bonferroni results, the participants in none of the three levels ($MA = 3.97, SD = 0.718$), ($MB = 4.21, SD = 0.626$) and ($MC = 4.27, SD = 0.855$) statistically significantly differed.

Table 3. One-Way ANOVA Results for EFL Learners’ Attitude towards the Web 2.0 Tools

N o.	Perceived Usefulness of	N	Sum of Squares	Mean Square	df1, df2	F	P	R ²	Adjusted R ²	Observed Power
1	Web 2.0 Tools	147	1.248	.574	2,84	1.194	.308	.035	.013	.323
2	Quizlet	148	5.155	3.57	2,85	4.41	.006	.123	.092	.881
3	Edmodo	148	.112	.056	2,85	.012	.010	.002	-.002	.066
4	Quizizz	148	1.59	.970	2,85	.950	.210	.021	-.021	.207
5	Socrative	148	1.59	.805	2,85	.915	.232	.021	-.021	.251

Even though it was found that there was not a significant mean difference among EFL learners in terms of their attitudes towards the use of Web 2.0 tools, it was seen from the results of a total of 150 participants that the participants from all three levels had quite positive attitudes towards the use of the Web 2.0 tools and found these Web 2.0 technologies helpful to interact with their teachers and peers. They also agreed on the collaboration opportunities offered by these Web technologies. Furthermore, the participants agreed that Web 2.0 tools make learning more

entertaining, diverse, comfortable, and less stressful than traditional classroom learning. They also agreed that Web 2.0 technologies enabled them to be more creative and innovative. Furthermore, the participants thought that the advantages of using Web 2.0 tools for their language learning endeavors were more than the drawbacks, thus, believing in the importance of using Web 2.0 technologies for their learning. In addition, through Web 2.0 tools, the participants agreed that they became more active than passive learners.

Discussion

The Internet has replaced other forms of communication in today's age of lightning-fast technology breakthroughs, both in our everyday lives and in the classroom. The second generation of online tools, or Web 2.0 technologies, have allowed students to participate more actively in their learning. This study investigated how university-level EFL students perceived utilizing second-generation Web 2.0 technologies (Quizizz, Socrative, Edmodo, and Quizlet) to improve their English. The findings of this study suggest that participants generally had a favorable impression regarding adopting Web 2.0 technologies. Parallel to this finding, [Girgin and Cabaroğlu \(2021\)](#) and [Aşıksoy \(2018\)](#) have stressed that Web 2.0 tools utilized inside or outside the classroom positively impacted the English learning skills of English students. The students agreed that Web 2.0 technologies had an impact on improving their understanding of English. The influence of Web 2.0 technologies, including various materials, on students' knowledge and linguistic communication abilities was highlighted, suggesting that utilizing Web 2.0 tools to learn is more enjoyable and efficient for students than doing it the old-fashioned way. Web 2.0 technologies allow students to develop dynamic, creative, and flexible learning environments. Creating a rich, dynamic, creative, and flexible learning environment from visual and auidal elements may impact this result.

The study's findings also show that intermediate and low-level students had more favorable thoughts about using digital tools singly or collectively compared to other advanced-level students. There were notable differences among their opinions of the participants' knowledge and usage of Web 2.0 technologies. The results of this study suggest that other digital tools might be utilized in place of these frequently used Web 2.0 technologies in curriculum activities to reduce the oversaturation and resistance to using digital tools among EFL students. These findings are consistent with previous investigations in the pertinent literature ([Phi et al., 2016](#)). Even though there was no statistically significant mean difference across the levels, the descriptive statistics indicate that EFL students from all three levels tended to have neutral attitudes toward Edmodo. This conclusion was quite different from what had been discovered in other investigations. For instance, EFL students' opinions of Edmodo's perceived value were largely favorable ([Manowong, 2017](#); [Yundayani, 2019](#)).

The influence of Web 2.0 technologies on language learning is crucial since they are user-friendly, affordable, and accessible. Teachers-in-training should be guided by educators on how to use these tools, which positively impact motivational, pedagogical, and emotional elements and may significantly advance learning. Important pedagogical and practical implications can be emphasized based on the results. First is the need to integrate high-tech tools that help create a student-centered environment to maximize and reinforce the target language's use. Second, the repetitive and continuous usage of specific Web 2.0 tools at all the learners' levels can yield oversaturation and reluctance. Considerably, it would be beneficial and more effective for language instructors to select other Web 2.0 technologies as a substitution or reinforcement for the already used Web 2.0 tools. Third, there is an urgent need to involve all the students in selecting the taught topics, contents, and the selected Web 2.0 tools. In this way, the learners would feel that their opinions and preferences were considered when integrating and implementing Web 2.0 technologies for their language learning. As a result, their perceptions of the awareness and the actual usage of Web 2.0 tools could become more positive.

Limitations and Future Research

There were limitations in this study as well. The first limitation was that the study was composed of EFL students involved in studying the English requirements. In future studies, EFL students studying specialized English courses may be interested in the study. The second limitation was that the gender factor was not considered in the study. The female and male students' attitudes toward the Web 2.0 tools can be compared in future studies. Another limitation was that the study used only questionnaires as data collection tools. Data can also be obtained through semi-structured interviews with students.

CONCLUSION

Second-generation Web 2.0 tools offer various opportunities for creating a student-centered environment that maximizes and reinforces the use of the target language. Integrating Web 2.0 resources into EFL language classrooms can create an engaging learning environment for instructors and learners. EFL learners can produce better language output as they interact and interpret content demonstrating their understanding and language abilities. This quantitative study highlighted the perceptions and attitudes of tertiary-level EFL learners about using second-generation Web 2.0 tools (Edmodo, Quizlet, Quizizz, and Socrative).

In this study, results from a total of 150 participants showed that the mean scores of the participants from intermediate and low-level were very close and possibly indicated that they were mostly satisfied and shared positive perceptions about the usefulness of the Web 2.0 tools altogether. Furthermore, the participants from the advanced level have statistically differed from the other two levels. Whereas intermediate and low-level EFL learners possessed moderately positive opinions on the usefulness of Edmodo for their language learning, advanced-level EFL learners were hesitant to provide a clearer-cut opinion and therefore appeared to have neutral opinions. In addition, the participants from all three levels had quite positive attitudes towards the use of the Web 2.0 tools and found these Web 2.0 technologies helpful to interact with their teachers and peers. They also agreed on the collaboration opportunities offered by these Web technologies. Furthermore, the participants agreed that Web 2.0 tools made learning more entertaining, diverse, comfortable, and less stressful than traditional classroom learning. They also agreed that Web 2.0 technologies enabled them to be more creative and innovative.

The study's results demonstrated that the intermediate and low-level participants generally reported more positive perceptions and attitudes regarding using the Web 2.0 tools individually or altogether. In contrast, advanced-level participants tended to have negative or neutral opinions. Edmodo was found the least useful for learning English, while Quizlet and Quizizz were the most useful, according to the participants' opinions. Furthermore, all the participants from the three levels (low-intermediate-advanced) appeared to have positive attitudes toward using Web 2.0 tools. They tended to have moderately positive opinions on the ease of using Web 2.0 tools. The results of this research evoke initiatives to conduct future research on the challenges teachers and students face in using Web 2.0 tools. Furthermore, more new tools can be explored.

In conclusion, the influence of easy-to-use, accessible, and low-cost Web 2.0 technologies on language acquisition is critical. Educators should educate preservice teachers in using these technologies, which have a favorable impact on motivational, pedagogical, and emotional elements and may result in major contributions to the advancement of learning.

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