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University EFL students' perceptions of using second-generation web 2.0 tools in developing 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) in developing 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 altogether when compared to other advanced-level students. The participants differed significantly in terms of 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.

Keywords: quizlet; Edmodo; university Students; EFL; Quizizz; web 2.0 tools; Socrative

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INTRODUCTION

Since February 2020, the entire 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 outbreak's rapid spread and save people's lives, 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 difficult choice; 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 (2020a, 2020b), approximately 264 million students were not in their schools; hence, this pandemic has made things further worse. The spread of the pandemic has continually stipulated converting and transforming the educational landscapes. There has been an increasing shift towards online virtual teaching due to educational institutions' suspension for definite and indefinite periods of time as the only option left (Martinez, 2020; UNESCO, 2020b, 2020c). Conducting education at a distance was obligatory since the education process must continue while the entire world is still fighting COVID-19 disruption. Throughout this period, technology utilization in distance education has demonstrated its significant role in teaching English to both the instructors and the 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, 2013; Paulsen, 2001; Nami et al., 2016).

Technology integration in the process of 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" (Prensky, 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 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 (Çobanoğlu & Yücel, 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.

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 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 (Rahayu & Purnawarman, 2019; Mohamad, 2020; Pham, 2018).

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 (Ekici et al., 2017; Kaufman, 2013; Thieman, 2008; World et al., 2015). Furthermore, the study by Buzzetto-More (2015) revealed that American students had positive perceptions regarding learning efficiency and using YouTube in online hybrid courses. It was found that the integration of 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 for the purpose of teaching 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 pertaining to 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, which represents a framework for evaluating online learning, is The SAMR Model. By exploring the possibilities and reviewing the research, it becomes clear that many factors influence the implementation of 2.0 technology within the educational context in general and within EFL language learning specifically. 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 be used to improve learning.

Understanding the SAMR Model allows educators to reflect on their own progress while investigating ways to use educational technology in a useful and productive way. The SAMR Model allows all educators to view the steps they are taking along the road of technology

enhancement toward true transformation (Romrell et al., 2014; Hamilton et al., 2016). All educators must realize that the final goal of any classroom is redefinition (Zhai et al., 2020; Marlatt, 2019). Sometimes, even the most proficient educators with technology conduct a task at the substitution level. It really comes down to the tool fitting the task and learning target. Through the work of Dr. 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 (Tseng, 2019; Budiman et al., 2018; Alivi, 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 a bit of time as educators practice, reflect, and learn.

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. If the teacher overuses a Web 2.0 tool, students most definitely will feel 'oversaturated'. Oblinger (2008) warns that "not all students have computers, not all are skilled users, and not all want to use technology". 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 always be considered open and safe; 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 does not design the knowledge individually. Pedagogies can use e-learning techniques to decrease their working pressure, but students are at different levels of learning; they find it hard to follow teachers' progress and make themselves feel more stressed when they get lower results than others. Therefore, using Quizizz to set up the same complex tasks for students is hard. Quizizz does not deliver knowledge and assessments individually. At this point, it lacks consideration of personal needs and motivation.

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 for 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 (Yaday & Patwardhan, 2016). 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 the English preparatory school students' perceptions and attitudes about using 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, Quizziz, 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.

METHOD

This descriptive-analytic study investigates the perceptions of tertiary-level English EFL learners regarding the perceived usefulness, perceived ease of use, awareness, and actual system usage and their attitudes towards using 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. 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)?

This quantitative and descriptive study uses a non-experimental, cross-sectional survey design. The aim of this study is to present EFL learners' perceptions of the use of Web 2.0 tools for their language learning. This study aims to describe EFL learners' perceptions as they are without applying any intervention. Next, this research study is nonexperimental since the researchers do not attempt to control the variables as Ary, Jacobs, Razavieh. and Sorensen (2006) highlight: "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 administered 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 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). This 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 so as to continue with inferential statistics. Nonetheless, descriptive statistics were run as well with the aim of a better understanding of the data.

FINDINGS AND DISCUSSION

Findings

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

The learners' perception of the usefulness of the Web 2.0 tools

EFL learners' perceptions of the perceived usefulness of the Web 2.0 tools (Edmodo, Quizlet, Quizizz, and Socrative) were examined. 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 (2008, p. 18).

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. As the results demonstrated, having the lowest mean score, the participants from the advanced level have statistically significantly 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 (Binh Minh, 2018; 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 had the tendency 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 et al., 2019).

The EFL learners' attitudes towards the use of the Web 2.0 tools

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 made their 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 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 invisible to 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; O'Reilly, 2007). Appointed by West & West (2009), 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 & Vasinda (2008) and Wang & Vasquez (2012) described Web 1.0 as "oneway communication" or "a monologue", 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, 2009). In this aspect, Web 2.0 can be described as a "dialogue" McLeod & Vasinda (2008), while Kapp & 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 to read-write web. It is worth noting that student-based learning can be highly interactive by means of technology. Technology can enhance and reinforce the learning experience. This can be seen as a major support for education pedagogy. Integrating technology within the classroom practices has become evident that students can go through formative steps to become proficient in the blended learning experience.

The second generation of online tools, or Web 2.0 technologies, have allowed students to take a more active role in their own 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.

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 Lee & McLoughin (2011), 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 are helpful in creating 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. Yadav and Patwardhan (2016) analyzed studies on Web 2.0 tools and how they were used at the tertiary level. Their results demonstrated that the dominant tools that were widely studied were social networking tools, blogs, and wikis. Another striking outcome revealed that theoretical or feasibility studies are more in number than real-time studies. Therefore, real-time research should be conducted on integrating Web 2.0 tools into the tertiary level of education. With reference to 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 in terms of paragraph organization, topic sentence accuracy, and sentence structure. Also, the survey results demonstrated that students had positive opinions about 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.

The findings of this study suggest that participants generally had a favorable impression regarding adopting Web 2.0 technologies. Parallel to this finding, (Girgin & Cabaroğlu, 2021) and (Aşiksoy, 2018) have stressed that Web 2.0 tools utilized inside or outside of the classroom had a good impact on 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 audial elements may impact this result.

The study's findings also show that as compared to other advanced-level students, intermediate and low-level students had more favorable thoughts about using the digital tools singly or collectively. There were notable differences among their opinions of the participants' knowledge and actual 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

(Binh Minh, 2018; Ph 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 et al., 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 emphasised based on the results. First is the need to integrate various 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 certain 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.

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). 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. The use of Edmodo was found the least useful for learning English while the use of Quizlet and Quizizz was 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 in general. They tended to have moderately positive opinions on the ease of using Web 2.0 tools in general.

REFERENCES

- Alivi, J. S. (2019). A review of tpack and samr models: how should language teachers adopt technology. *Journal of English for Academic and Specific Purposes*, 2(2), 1-11. DOI: 10.18860/jeasp.v2i2.7944
- Al-Naibi, I., Al-Jabri, M., & Al-Kalbani, I. (2018). Promoting students' paragraph writing using Edmodo: An action research. *The Turkish Online Journal of Educational Technology* (TOJET), *17*(1), 130-143. Retrieved from https://eric.ed.gov/?id=EJ1165747
- Alsmari, N. A. (2019). Fostering EFL students' paragraph writing using Edmodo. *English Language Teaching*, 12(10), 44-54. DOI:10.5539/elt.v12n10p44
- Aşiksoy, G. (2018). ELT students' attitudes and awareness towards the use of Web 2.0 technologies for language learning. *Journal of Language and Linguistic Studies*, 14(2), 240-251.
- Budiman, A. B., Rahmawati, R., & Ulfa, R. A. (2018). EFL teacher's belief and practice on integrating ICT in the classroom: a case study on the implementation of samr model in teaching reading

- descriptive text at MA Assalam, Sukoharjo. *Jurnal Penelitian Humaniora*, 19(2), 39-51. DOI: 10.23917/humaniora.v19i2.6809
- Clipa, O. (2014). Transdisciplinarity and Communicative Action in Multidimensional Education. Editorial. *Revista Românească pentru Educație Multidimensională*, 6(2), 9-13.
- Çobanoğlu, A. A., Yücel, Z. E., Uzunboylar, O., & Ceylan, B. (2017). A blended mentoring practice for designing e- material for English as a foreign language learning. *Turkish Online Journal of Qualitative Inquiry*, 8(1), 141-160.
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2012). How to design and evaluate research in education (8th ed.). McGraw-Hill Education
- Getting, B. (2007). Basic definitions: Web 1.0, Web 2.0, Web 3.0: What do they mean, and how do they impact my e-commerce business? *Practical Ecommerce*. Retrieved October 29, 2019, from http://www.practicalecommerce.com/articles/464/Basic-Definitions-Web-10- Web-20-Web-30/
- Girgin, P., & Cabaroğlu, N. (2021). Web 2.0 supported flipped learning model: EFL students' perceptions and motivation. *Cukurova University Faculty of Education Journal*, 50(2), 858-876.
- Hamilton, E. R., Rosenberg, J. M., & Akcaoglu, M. (2016). The substitution augmentation modification redefinition (SAMR) model: A critical review and suggestions for its use. *TechTrends*, 60(5), 433-441. DOI: 10.1007/s11528-016-0091-y
- Jones, C., Ramanau, R., Cross, S., & Healing, G. (2010). Net generation or Digital Natives: Is there a distinct new generation entering university. *Computers & education*, 54(3), 722-732. https://doi.org/10.1016/j.compedu.2009.09.022
- Kapp, K., & O'Driscoll, T. (2010). Designing virtual immersive environments. T+D, 64(4), 30-32.
- Levy, M., & Stockwell, G. (2013). *CALL dimensions: Options and issues in computer-assisted language learning*. Routledge.
- Lim, W. N. (2017, April). Improving student engagement in higher education through mobile-based interactive teaching model using socrative. *In 2017 IEEE Global Engineering Education Conference* (EDUCON) (pp. 404-412). IEEE.
- Manowong, S. (2017). Incorporating online tools to promote English reading for EFL leaners: An action research study. *Pasaa Paritat Journal*, *32*, 98-124. Retrieved from http://www.culi.chula.ac.th/Publicationsonline/files/article2/Uz8VwjDfrZMo n32902.pd
- Marlatt, R. (2019). "I didn't say, 'Macbeth,' it was my Google Doc!": A secondary English case study of redefining learning in the 21st Century. *E-learning and Digital Media*, 16(1), 46-62.
- McLeod, J. K., & Vasinda, S. (2009). Electronic portfolios: Perspectives of students, teachers, and parents. *Education and Information Technologies*, 14(1), 29-38.
- McLeod, J., & Vasinda, S. (2008). Critical literacy and Web 2.0: Exercising and negotiating power. *Computers in the Schools*, 25(3-4), 259-274.
- Mohamad, A. M. (2020). student as teacher–alternative revision method via Quizizz app. *Malim: Jurnal Pengajian Umum Asia Tenggara* (Sea Journal of General Studies), 21.
- Muftahu, M. (2020). Higher education and COVID-19 pandemic: Matters arising and the challenges of sustaining academic programs in developing African universities. *International Journal of Educational Research Review*, 5(4), 417-423.
- Nami, F., Marandi, S. S., & Sotoudehnama, E. (2016). CALL teacher professional growth through lesson study practice: An investigation into EFL teachers' perceptions. *Computer Assisted Language Learning*, 29(4), 658-682.

- Nixon, N., Chittick, S., & Faustino, J. (2020). Pivoting to respond to COVID-19: Early thoughts from the Philippine. Retrieved from https://devpolicy.org/pivoting-to-respond-to-covid-19-early-thoughts-from-the-philippines-20200327/.
- Oblinger, D. G. (2008). Growing up with Google: What it means to education. *Emerging Technologies for Learning*, 3, 11-30. Retrieved from https://library.educause.edu/resources/2008/3/growing-up-with-google-what-it-means-to-education.
- Oblinger, D., Oblinger, J. L., & Lippincott, J. K. (2005). Educating the net generation. EDUCAUSE.
- O'reilly, T. (2007). What is Web 2.0: Design patterns and business models for the next generation of software. *Communications & strategies*, (1), 17. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1008839
- Paulsen, P. (2001). New era trends and technologies in foreign language learning: An annotated bibliography. *Interactive Multimedia Electronic Journal of Computer-Enhanced Learning*, 4(6), 36-48. http://imej.wfu.edu/Articles/2001/1/05/index.asp.
- Phạm, Đ. T. (2018). Integration of technology-enhanced language learning tools into teaching English for efl students. http://repository.vnu.edu.vn/handle/VNU_123/67608
- Rahayu, I. S. D., & Purnawarman, P. (2019). The use of Quizizz in improving students' grammar understanding through self-assessment. *In Eleventh Conference on Applied Linguistics* (CONAPLIN 2018). DOI: 10.2991/conaplin-18.2019.235
- Romrell, D., Kidder, L., & Wood, E. (2014). The SAMR model as a framework for evaluating mLearning. *Online Learning Journal*, 18(2). DOI: 10.24059/olj.v18i2.435
- Thompson, J. (2007). Is Education 1.0 ready for Web 2.0 students? *Innovate: Journal of Online Education*, *3*(4). https://nsuworks.nova.edu/innovate/vol3/iss4/5
- Tseng, J. J. (2019). Do EFL teachers transform their teaching with iPads? A TPACK-SAMR approach. In C. N. Giannikas, E. Kakouli Constantinou & S. Papadima-Sophoclelous (eds.), *Professional development in CALL: A selection of papers* (pp. 71-85). *Research-publishing*. DOI: 10.14705/rpnet.2019.28.871
- UNESCO. (2020a). Three ways to plan for equity during the school closures. https://gemreportunesco.wordpress.com/2020/03/25/three-ways-to-plan-for-equity-duringthe-coronavirus-school-closures/
- UNESCO. (2020b). 10 recommendations to ensure that learning remains uninterrupted. https://en.unesco.org/news/covid-19-10-recommendations-plan-distance-learningsolutions)
- UNESCO. (2020c). COVID-19 educational disruption and response. https://en.unesco.org/covid19/educationresponse
- West, J. A., & West, M. L. (2009). *Using Wikis for online collaboration: The power of the read-write Web.* John Wiley & Sons.
- Yadav, A. K. S., & Patwardhan, A. A. (2016). Use of impact of Web 2.0 tools in higher education: Literature review. In S. Parmar, & A. K. Siwach (Eds.) *Academic Libraries in Electronic Environment* (pp. 218-246). Intellectual Foundation. DOI:10.13140/RG.2.1.2748.6965/1
- Yundayani, A., Susilawati, S., & Chairunnisa, C. (2019). Investigating the effect of Canva on students' writing skills. *English Review: Journal of English Education*, 7(2), 169-176. doi:10.25134/erjee. v7i2.1800.
- Zhai, X., C Haudek, K., Shi, L., H Nehm, R., & Urban-Lurain, M. (2020). From substitution to redefinition: A framework of machine learning-based science assessment. *Journal of Research in Science Teaching*, 57(9), 1430-1459. https://doi.org/10.1002/tea.21658