

EXPERIENCES OF ENGLISH LANGUAGE LEARNERS ABOUT USING QUIZIZZ TOOL FOR LEARNING AND LANGUAGE ACHIEVEMENT IN ESP CLASSES

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ABSTRACT

In post-Covid-19 era, digital education has become the new norm. Therefore, teaching and learning English language skills using effective online teaching pedagogy, interactive activities, online assessment and digital feedback have improved. Hence, game-based learning applications are being introduced for learners for acquiring English language skills in face-to-face classes. Quizizz is the most widely used application for teaching and learning the English language in the digital world. Therefore, this study aims to explore English language learners' perceptions and experiences about learning and English language achievement through the Quizizz platform in ESP classes. The target population of the study includes BS Cyber Security undergraduate English language students being enrolled in an ESP course. Qualitative case study design has been utilized to collect data using 5 focus-group interviews having ten participants in each group.

The data from the focus group interviews was transcribed and analyzed using thematic analysis. The findings reported that the Quizizz tool provides a motivating and engaging learning atmosphere for learning, testing, evaluation and feedback from English Teacher. Also, it enhances opportunities for student's language achievement by peer-collaboration, competition and game-based mode of language learning platform. Overall, utilizing Quizizz digital application in the physical classroom enables the students to become self-dependent and practice their language skills for enhanced language achievement.

Keywords: *Digital tools, Quizizz application, Language Achievement, ESP*

1. INTRODUCTION

Technology has revolutionized modern teaching practices around the world (Martin & Parker, 2014). As technology enhances the learning

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experience and addresses the needs of different learners (Albadry, 2015; Alzaidiyeen, 2017 & Stephens & Pantoja, 2016). But at the same time it can alter the learning process as the teaching aids are less interesting (Simuforosa, 2013). However, teaching language skills using effective online teaching pedagogy, interactive activities, online assessment and digital feedback has improved worldwide over the years. (Kuh & Hu, 2001 & Lim & Yonus, 2021). Therefore, technology has become an integral part of the English language learning classroom. (Love, 2020). By introducing digital technology in the classroom, a teacher maximizes the learning process and promotes critical thinking skills among the learners. Hence, interactive English language classrooms are more preferred by learners as it enhances their motivation and engagement towards the lesson (Yunus, Ang & Hashmi, 2021). Overall, in the modern world, especially for the younger generation, digital technological learning is replacing traditional teaching all over the world.

1.1 Online Education in Pakistan

Although, digital education was part of Pakistan's education system as AIOU and Virtual University continuously offered online degree programs and short courses. Yet, the Covid-19 pandemic introduced a new way of teaching in Pakistan (Quraishi et al., 2020). The Ministry of Federal Education and Professional Training (MOFEPT) and HEC advised all the universities to transform to online education in its policy (HEC COVID-19 Policy Guideline, 2020). Hence; the online classes in Pakistan turned out to be a new experiment where institutes, teachers and students faced problems. (Xu & Jaggars, 2014). These issues include administrative: infrastructure, availability and maintenance of technology and academic challenges: training of teachers, information about digital tools and information sharing and degree of involvement, motivation and digital curriculum (Quraishi et al, 2020). However, the second phase of this newly introduced online education showed new trends of teaching and learning, especially learning the four skills of English language digitally by using digital platforms.

1.2 Digital Tools

All over the world, different Learning Management Systems (LMS), tools and online software are being utilized to improve the quality of English language teaching (Yunus, Ang & Hashmi, 2021). These include different Learning Management Systems, Blackboard, Canvas, Google Classroom, Microsoft Teams, Zoom, and Massive Open Online Course - MOOC (Martin & Betrus, 2019). Google Classroom has been the most widely used web-based course learning system for teaching and learning English. It provides access to

instructional material and learning resources synchronously and asynchronously using other applications as well. (Iftakhar, 2016, Shaharanee, Jamil, & Rodzi, 2016). It is also used for grading and assessment purposes through integrated applications Google Doc, Google Forms and Google Slides where other online applications can be connected and adapted in the lesson plan (Albashtawi & Al Bataineh, 2020).

However, as online teaching and learning requires engagement and interaction; therefore game-based mechanisms are being used throughout the world to improve the digital learning experience (Fernandes-Rio, 2020). Hence, there are multiple game-based software's which are being used in online and physical classes. These include Kahoot, Quizizz, FlipQuiz, Duolingo, Ribbon Hero, ClassDojo and many more (Priyanti et al 2019). However, using them in a Pakistani ESP classroom requires exposure and training. As students are enrolled in a particular course to learn the language for certain specified goals and language achievement for professional life.

1.3 Research Gap

Digital platforms and tools must serve the purpose of facilitating the learning process in alignment with the learning objectives and course content. (Kurt et al, 2017). These tools are not user friendly and require training and assistance in the initial stages. However, once they are utilized in the English language classroom, it maximized the learner's achievement (Quraishi et al., 2020). Hence, the perceptions and experiences of using digital tools in the physical classrooms for learning English language skills needs to be investigated; as well as its impact on the language achievement of learners. Previously, the researchers explored the use of digital tools in online classes; however, the present study focuses on the use of Quizizz application in the physical classes learning English language in ESP classroom.

1.4 Research Objectives

1. To explore English language learners' perceptions about learning English language through Quizizz application.
2. To investigate English language learners' experiences about English language achievement through Quizizz application

1.5 Research Questions

1. What are English language learners' perceptions about learning English language through the Quizizz application?
2. What are English language learners' experiences about English Language achievement through the Quizizz application?

2. LITERATURE REVIEW

Quizizz is an easily accessible and free online digital tool which is used for a variety of purposes in the teaching and learning of English language (Lim & Yonus, 2021 & Degirmenci, 2021). Quizizz serves as a gateway for English language material where multiple lessons and quizizz are available in the library and can be utilized, edited, copied and implemented in any language classroom with an internet connection (Lim & Yonus, 2021). Teachers can create their own lessons and integrate the Quizizz tool with it and enrich the English language learning process. Moreover, it provides a language learning context which makes learning meaningful and interactive. (Gursoy & Goksun, 2019; Mohamad, 2020; Müller et al, 2021; & Pektas & Kepceoğlu, 2019). It can easily be used in a physical classroom through laptop and smartphones. In the same way, this online web-based application is used for the learning and remembering process after the target language item is being taught by the teacher. As learners achieve more points by answering the statements, question or fill in the blanks correctly (Almeida & Simoes 2019 & Fernandes-Rio, 2020). Moreover, learners can check their process against the language content and questions and revise the language being taught.

Similarly, it acts as a game-based platform where learners compete with each other and effectively learn and practice English language items, rules, grammar, tenses, and vocabulary in a fun way (Mohamad, 2020). Hence, it is a learning resource that can be used in different ways like for classroom exercises and assessment. (Altun & Dincer, 2020; Degirmenci, 2021 Razali, et al, 2020 & Suryaman, et al 2020). The game-based feature enables learners to self-practice and improve their language skills as per their level and motivation (Degirmenci, 2021 & Razali et al, 2020). Hence, students are motivated intrinsically and extrinsically as well to learn the language by participation and assessment (Razali et al, 2020). Also, this tool makes assessment easier for language learners as the record and progress of learners can be traced and kept for a longer time. In the same way, Quizizz increases the enthusiasm and self-satisfaction of the learners while learning English language (Ahmed, 2016). Overall, it makes the learners self-dependent as they are able to track and review their performance after completing the assigned exercise, task or quiz (Mohamad, 2020). Holistically, they are able to retain the English language content in a better way (Suryaman et al, 2020).

Priyanti et al (2020) conducted a quasi-experimental study to test students reading skills using Quizizz platform. Data was collected from seventy-three, 11th grade students (37 experimental and 36 controlled group). The experimental group was taught reading skills using Quizizz application while the other group was taught using traditional way of teaching. The

findings of study reported that students reading comprehension skills were improved as a result of digital teaching and the five aspects that improved by integrating with Quizizz are

"Literal recognition of the text: explicit information (word meaning, and contextual reference), reorganization (classifying into class, outlining, and synthesizing), and inference: predicting outcome, main idea, implicit information, cause and effect relationship" (Priyanti et al. 2020; p.7)

Hence, the study concluded that gamified Quizizz tool is useful to prepare different reading activities and can easily be used in a classroom setting.

Icin and Orta (2018) conducted a quantitative study to know whether Quizizz tool can be used for teaching English vocabulary or not. Data was collected using a questionnaire, test and observation. The tests were analyzed using paired-t test and the results indicated that there are significant differences after adapting the tool for vocabulary teaching and learning. The findings suggested that Quizizz introduces new words, synonyms and antonyms and improves learners' knowledge by guessing and using vocabulary in the context (Icin and Orta, 2018).

Zukriyah and Pratolo (2020) conducted a qualitative study to know the views of learners about Quizizz as an assessment tool. Data was collected using semi-structured interviews. The findings narrated student's views that Quizizz is an interesting tool for assessment; it enhances confidence of learners and improves the reading and makes learners self-dependent. In the same manner Primastuti (2022) explored the use of Quizizz application for teaching and learning of English Language among Tenth Grade students. Therefore, descriptive qualitative study was conducted and data was collected using observation and interviews from teachers and questionnaire for English language learners. The findings showed that the teachers narrated that the Quizizz application is one way of using modern technological pedagogy for easy learning and assessment. While students reported that Quizizz provides fun-based learning, motivation and opportunities for self-reflection and learning,

Therefore, the present study explores traditional Pakistani English language classrooms where this digital tool has been effectively used for teaching, learning and assessment. It aims to find out the learning experiences of the students for large scale implication of this tool in other contexts, classrooms and institutes for teaching and assessment.

3. METHODOLOGY

This study aims to explore the experiences and perceptions of learners about usage of Quizizz application in the physical classroom. Therefore, Qualitative Case Study has been undertaken. The focus is to know perceptions and experiences of English Language learners enrolled in an ESP course. Therefore, perceptions and experiences require in-depth exploration of the cases and qualitative inquiry would provide details insights about perceptions and learning experiences. (Creswell, 2014).

The target population of the study includes those students who are enrolled in the first semester of BS Cyber Security degree in an ESP course. As the study aims to incorporate the perceptions and experiences of all students; therefore, data was collected from all the 40 students; giving equal opportunity to male and female students to take part in the study. The data from the participants was collected using purposive homogenous sampling. Purposive homogenous sampling was selected as those students from the ESP classroom were made part of the study who had adequate experience of using the Quizzizz application. As per the objectives of the study, data was collected from those students who have been using Quizziz application for learning English Language within the ESP classroom. Also, they must proper internet connection while using it in the classroom and have used Quizizz application twice to thrice within the ESP classroom.

The data from the participants was collected using focus group interviews. As Focus Group interviews focuses on the shared understanding of participants (Creswell, 2014). Therefore, in order to incorporate the perceptions and experiences of all the students for a collective opinion; focus group interviews were selected. As these interviews provide and give equal opportunity to all the students to speak within a specified time-limit. Hence, 5 focus-group interviews having eight participants each were conducted. Each focus-group interview lasted for 50 minutes. Representation to gender and social standing was equally provided. The interviews were conducted in English language; partially bilingual (Urdu and English) and recorded with the consent of the participants. The recorded data was transcribed for accurate representation of participants' view in English language and analyzed for thematic analysis using codes, categories, themes and sub-themes.

Before the start of the focus group interviews; participants were required to sign a consent form for voluntary participation in the study. Participants were assured that their identity would be kept confidential and data would be used for research purposes and findings would be shared with the students as well.

4. FINDINGS

The data from focus group interviews was analyzed for thematic analysis. The responses were arranged according to the objective of the study for teaching and assessment.

4.1 Perceptions about English Language Learning

4.1.1 Digital Language Context

While interviewing participants; they narrated that *"our English Language teacher frequently used digital applications especially Kahoot, Nearpod, Pear Deck and Quizizz for enhancing our learning experience in the physical classroom"* While P31 said that *"the teacher used it for introducing new concepts"* P23 narrated that *"using Quizizz makes learning effective and engaging"*. Emphasizing on this, another participant remarked that *"the use of this digital application reduces chances for students to get distracted or use social media"*. P07 said that *"we can use social media easily in our other classes but in English classes we are focused; as the teacher monitors our progress on the multimedia"* P36 recalled that *"one of the benefits of this application is that the teacher can easily trace who left and started using other application"* While P09 said that *"Quizizz is a digital application which full of resources for every topic, follow-up assignments and practice for future learning"*.

4.1.2 Access, Content and Delivery

In the same manner another participant remarked that *"we have access to the teacher's lectures and slides during the class"*. While P02 said that *"it is a platform which provides us an opportunity to learn and practice along with the lecture"*. P29 said that *"the teacher makes interactive lesson plan to engage us"*. Similarly; P07 remarked that *"because of the engaging content; we are eager to learn the English language"*. Table 01 shows the different strategies and activities used by the teacher to deliver the lecture on Quizizz as narrated by the participants.

Table no. 1: Strategies used for Teaching on Quizizz Application

Strategies	Percentage
Check-In Quizizz	5%
Ice-Breaker	5%
Introducing to new concepts	28%
Storytelling	12%
Debate	10%
Discussion	10%
Concept Checks	10%
Polls	10%
Exit Ticket	10%

P40 said that *"we have learnt about pre-writing, reading, vocabulary and grammar rules though quizizz; which provides us a reflection as well that how much we have learnt and acquire"* P32 said that *"this tool provides an opportunity to not only learn while the lecture is being delivered but afterwards as well "* While P36 narrated that *"we are learning new content in our English classes daily; technology makes it more interesting and engaging"* P12 said *"Modern disciplines require effective teaching; therefore this digital platform provides an opportunity for learning, revision and self-learning"* Hence, one participant set *"we have set goals and it can be used to achieve in each class"*

4.1.3 Gamification and Motivation

Quizizz enhances learners' attention because of its gamification element of teaching and learning. While narrating about this P02 said that *"This game-based application motivates language learners by active participation and constant playing of the game; the learners will be able to remember the content, rules and knowledge without being consciously aware about the learning process"*.

P22 said that *"after the teacher explains the lecture; the teacher can check our understanding by a range of activities like gap filling, fill in the blanks, MCQs and open-ended questions which cross-checks our learning"* P07 said that *"after the lecture, everyone waits for the quiz to be started because it creates a competition among them"*. P21 said that the *"gamification elements enable us to recall concepts and provides an opportunity for collaborative learning"*. P06 said that *"Quizizz is an amazing platform that offers individual, team-work and collaborative language learning opportunities"*

Beside motivation; participants almost 10 of them remarked that *"Quizizz provides an opportunity for individual learning and self-improvement"*. Overall, P03 said *"Quizizz enhances our motivation and we can actively participants in the classroom lecture and assessment"* These views were supported by another participant who said that *"it makes us self-independent learners"*

4.2 Experiences about Assessment

4.2.1 Detailed Individual Progress

Participants also narrated that *"using Quizizz in the physical classroom creates a competition among students"* Similarly another participant said *"it adds the gamification element in the assessment which makes it interesting and fun"*. P09 said *"It can be used for follow-up assignments as well"*. Also; *"students can attempt concept check polls to test their knowledge"*

P7 remarked that *"Quizizz gives results instantaneously; therefore, we can improve and revise the concept and learn from our mistakes"* P13 said that *"Quizizz reduces paper worksheets with live leader board quizziz for instantaneous assessment and feedback about the answers as well"* While P32 said that *"Quizizz provides a detail report card where every student can check their progress and answers".* Also, P03 said *"we actually learn from our mistakes as we can foresee the result at the leader board and detailed excel sheet as well along with answers for each question"*. P10 said that *"the detailed excel sheet provides insights about our learning and language achievement"* P29 said that *"we can foresee how much language skills we have learnt and what's the way forward as well"* Similarly; sixteen participants said *"we no longer have to wait for feedback and results; you get it on the spot and during class"* Overall, *"it enhances the learning opportunities and provides an engaging classroom environment"*

4.2.2 Language Achievement

P13 narrated that *"because of game-based application, my performance improved"* Similarly, P06 said that *"by reviewing by detailed performance, I was able to improve my vocabulary and reading skills"*. P32 said that *"Quizizz application provides a lot of opportunities for speaking"* P22 said that *"the different activities kept us engaged and improved our English language"* P01 said that *"gamification element provided an opportunity to learn language easily and interact with other students to practice language"* Overall, learners reported that language learning is easy by the synchronous and asynchronous feature of learning of Quizizz application.

4.2.3 Limitations

The present study is a case study where a digitally equipped physical classroom was taken as a case study for exploration and investigation. Although there are many advantages of using this digital application in a physical classroom in Pakistani context, yet, there are drawbacks of using this application as well as Quizizz works with a proper internet connection. As internet connectivity is an issue in underdeveloped areas of Pakistan.

However, it is still an effective tool because it can be operated through mobile applications as well. But providing equal opportunities in terms of learning process is equally important as well while using a digital tool. Therefore, all the learners should have equal access to the internet (Kurt et al, 2019). Similarly, using this gamified tool in English classes require training and exposure for teaching and learning.

5. DISCUSSION

Quizizz is a digital learning application that can be used for designing creative content and before, after and during the class as well. Lim & Yonus (2021) reported the same that Quizizz provides a three-dimensional approach to learning. The present study explored the perceptions and experiences of students regarding English language learning and achievement. The findings reflected students' perceptions that Quizizz is a platform for digital content that can be used for concept learning, revision, communication, reading and vocabulary building. Lim & Yonus (2021) reported the same that Quizizz is a digital resource where material can be edited and adopted to serve a variety of purposes.

Similarly, the students reported that Quizizz is an application that gives a range of options to of learning where teachers act as a facilitator to deliver the lecture in an effective and engaging way by using different strategies and games for language learning. This study reported different strategies and activities as shown in Table 1 above which are used by teachers for delivering engaging and interactive content for language learning.

Also, the gamification features enable students to be active learners and enhance their motivation. (Primastuti, 2022) Mohamad (2020) also narrated that the gamification element increases the motivation of learners. Overall, the experiences and perceptions reflect that Quizizz is an effective tool for assessment; as it provides detailed results and feedback (Primastuti, 2022). Altun & Dincer (2020), Degirmenci, (2021) Razali, et al, (2020) and Suryaman, et al (2020) also reported that Quizizz is an application that can be used in multiple ways for assessment.

While Priyanti et al (2020) tested reading skills; Icin and Orta (2018) focused on vocabulary learning and Zukriyah and Pratolo (2020) focused on views about assessment. The present study provides an insider's view about learning and its impact on the language achievement of learners in ESP classes. Using Quizizz for English language learning is an effective way of learning and this mode of teaching can be adopted by other institutes to enhance language learning opportunities within the physical classroom.

6. CONCLUSION

Technology has changed the traditional dynamics of teaching and learning the English language in the modern times. Since, in every English language classroom technology is utilized for improving the learning experience of the learners. Therefore, multimedia, learning management system inside and outside the classroom, digital learning applications and

websites are used by the teacher to enrich the learning experience of the learners.

Hence, Quizizz is an easy-to-use free online tool which is used by the teachers for students to make learning fun and engaging. It can be operated synchronously instructor-guided or student pace asynchronously. Moreover, it is a tool that engages the learners collectively and enhances their motivation by introducing gamified learning experience.

Quizizz provides a language context, serves as a resource material for teaching and learning language, enabling the learners to learn, remember and revise the content; enhances their motivation for language learning by gamification element and make them self-dependent learners instead of solely relying on the teachers for language learning. As far as its application is concerned, it enhances the reading skills, vocabulary knowledge, adds the element of game-based instruction that can be utilized for teaching any element of language and provides an assessment model for teachers and learners.

REFERENCES

- Albadry, H. (2015). The effect of iPad assisted language learning on developing EFL students' autonomous language learning. Paper presented at the Critical CALL – Proceedings of the 2015 EUROCALL Conference, Padova, Italy.
- Albashtawi, A., & Al Bataineh, K. (2020). The effectiveness of google classroom among EFL students in Jordan: An innovative teaching and learning online platform. *International Journal of Emerging Technologies in Learning (IJET)*, 15(11), 78-88.
- Almeida, F.; Simoes, J. (2019). The role of serious games, gamification and Industry 4.0 Tools in the education 4.0 paradigm. *Contemp. Educ. Technology*, 10, 120–136.
- Altun, L.; Dincer, R (2020). A comparison of implicit and explicit teaching in terms of grammar and writing skills of intermediate learners. *Bartın Univ. J. Fac. Education*, 9, 96–105.
- Alzaidiyeen, N. J. (2017). English as a foreign language students' attitudes towards the utilization of iPad in language learning. *Malaysian Online Journal of Educational Technology*, 5(3), 16-24.
- Chaiyo, Y.; Nokham, R. (2017). The effect of Kahoot, Quizizz and Google Forms on the student's perception in the classrooms response system. *Int. Conf. Digit. Arts Media Technology*, 178–182.

- Degirmenci, R (2021).The use of Quizizz in language learning and teaching from the teachers' and students' perspectives: A literature review. *Lang. Educ. Technology*, 1, 1–11.
- Fernandes-Rio, J. (2020). Gamification and physical education. Viability and preliminary views from students and teachers. *Phys. Educ. Sport Pedagogy*, 25, 509–524.
- Gursoy, G. & Goksun, D. (2019). The experiences of pre-service Science teachers in educational content development using Web 2.0 tools. *Contemp. Educ. Technology*, 10, 338–357.
- HEC (2020). HEC Covid-19 Policy Guideline Retrieved from <https://hec.gov.pk/english/HECAnnouncements/Documents/nCoVirus/Government-Directive.pdf>
- Icin, and D.O.K.B.A Orta (2018).Using Quizizz.Com to Enhance Pre-intermediate Students' Vocabulary Knowledge." *International Journal of Language Academy*, 295-303
- Kuh, G. D., & Hu, S. (2001). The relationships between computer and information technology use, selected learning and personal development outcomes, and other college Experiences. *Journal of College Student Development*, 42, 217-232.
- Kurt, A.A.; Sarsar, F.; Filiz, O.; Telli, E.; Orhan-Göksün, D.; Bardakcı, S. (2019). Teachers' use of Web 2.0: Education bag project experiences. *Malays. Online J. Educ. Technology*, 7, 110–125.
- Lim, T.M.; Yunus, M.M. (2021). Teachers' Perception towards the Use of Quizizz in the Teaching andLearning of English: A Systematic Review. *Sustainability*, 13, 6436. <https://doi.org/10.3390/su13116436>
- Love, M. (2020). How EFL teacher trainees in a TESOL graduate program integrate tools and platforms into teaching EAP. *Teach. Engl. Technol*, 20, 38–64.
- Martin, F., & Betrus, A. K. (2019). *Digital media for learning: Theories, processes, and solutions*. New York: Springer.
- Martin, F., & Parker, M. A. (2014). Use of synchronous virtual classrooms: Why, who, and how. *MERLOT Journal of Online Learning and Teaching*, 10(2), 192-210.
- Mohamad, A.M. (2020). Student as teacher—Alternative revision method via Quizizz app. *J. Pengaj. Umum Asia Tenggara* , 21,147–156.
- Müller, A.M.; Goh, C.; & Lim, L.; Gao, X. (2021). COVID-19 emergency e-learning and beyond: Experiences and perspectives of university educators. *Educ. Sci.* 11, 19.
- Pektaş, M and Kepceoğlu, I (2019). What do prospective teachers think about educational gamification? *ICASE*, 30, 65–74.

- Primastuti, Y., & Sabariyanto, S. (2022). The Using of Quizizz Application in English Learning at Tenth Grade of SMA Batik 2 Surakarta in Academic Year of 2021/2022 (Doctoral dissertation, UIN Surakarta).
- Priyanti, N.; Santosa, M.; Dewi, K. (2019). Effect of Quizizz towards the eleventh-grade English students' reading comprehension in mobile learning context. *Lang. Educ. J. Undiksha* 2019, 2, 71–80.
- Quraishi, N. H., Asif, M., Sheeraz, M., & Amer, K. (2020). Novel Coronavirus (COVID-19) and its impact on Education at Tertiary Level: Challenges and Solutions for Pakistani Universities. *Journal of Education & Social Sciences*, 8 (2), 40-54.
- Razali, N.; Nasir, N.; Ismail, M.; Sari, N.; Salleh, K. (2020). Gamification elements in Quizizz applications: Evaluating the impact on intrinsic and extrinsic student's motivation. *Mater. Sci. Eng.*, 917, 1–11.
- Simuforosa, M. (2013). The impact of modern technology on the educational attainment of adolescents. *International Journal of Education and Research*, 1 (9), 1-8.
- Shaharane, I. N. M., Jamil, J. M., & Rodzi, S. S. M. (2016). The application of Google Classroom as a tool for teaching and learning. *Journal of Telecommunication. Electronic and Computer Engineering*, 8(10), 5-8.
- Stephens, K. K., & Pantoja, G. E. (2016). Mobile devices in the classroom: learning motivations predict specific types of multi communicating behaviors. *Communication Education*, 65(4), 463-479.
- Suryaman, M.; Akbar, F.; Salsabila, S (2020). English education students as pre-service English teachers' perception on Quizizz: Considering mall utilization as a pedagogical tool. *Indones. Technol. Enhanc. Lang. Learning*, 11, 139–142.
- Xu, D., & Jaggars, S. S. (2014). Performance gaps between online and face-to-face courses: Differences across types of students and academic subject areas. *Journal of Higher Education*, 85(5), 633–659. <https://doi.org/10.1353/jhe.2014.0028>
- Yunus, M.M.; Ang, W.S.; & Hashim, H (2021). Factors affecting teaching English as a Second Language (TESL) postgraduate students' behavioral intention for online learning during the COVID-19 pandemic. *Sustainability*, 13, 3524.
- Yunus, C.C.; Tan, K. (2021). Exploring a gamified learning tool in the ESL classroom: The case of Quizizz. *J. Educ. E-Learn. Res.*, 8,103–108.
- Zuhriyah, S. & Pratolo, B. W (2020). Exploring Students' Views in the Use of Quizizz as an Assessment Tool in English as a Foreign Language (EFL) Class. *Universal Journal of Educational Research*, 8(11), 5312 - 5317. <https://www.hrpub.org/download/20201030/UJER32-19517253.pdf>