

Quizizz for EFL Learning Tool: Students' Views and Attitudes

Maryam Sorohiti^{1*}, Adyra Yasa Nauli Nadra², Jati Suryanto³ and Nur Fatimah⁴

^{1,2,3}English Language Education Department, Universitas Muhammadiyah Yogyakarta, Indonesia

⁴English Language Education Department, Universitas Ahmad Dahlan, Indonesia

Abstract. As technology-based educational tools become increasingly prevalent in global educational settings, it is essential for teaching methods to evolve alongside technological advancements to maintain students' engagement. Quizizz, a notable platform within Mobile Assisted Language Learning (MALL), has been widely adopted by English educators to enhance the teaching and learning experience. This study aimed to explore students' perspectives on utilizing Quizizz as a learning tool and identify the primary aspect of their attitudes toward its use. Employing a quantitative research approach with a survey design, data was gathered from 79 students enrolled in the English Department of a university in Indonesia. Results indicated that students generally hold positive attitudes toward Quizizz, with an overall mean score of 3.25 for students' attitude ($M = 3.25$). Furthermore, the affective aspect emerged as the most prominent facet, showing the highest mean score of 3.29 ($M = 3.29$). The findings suggested that Quizizz is favoured among students for its ability to enhance motivation, engagement, and memorization. This study underscored the recommendation to integrate Quizizz into language learning and teaching practices.

Keywords: EFL Learning, MALL, Quizizz, students' attitude

1 Introduction

The discussion surrounding technological advancements in education has become increasingly captivating. Various initiatives aimed at enhancing educational quality, such as improving teacher training, upgrading facilities, and bolstering management, have been undertaken [1]. Particularly in the context of industry 4.0, rapid advancements in information and communication technology (ICT) are revolutionizing industries through interconnected intelligent systems, significantly impacting the teaching-learning process. The twenty-first century witnesses a notable surge in technological innovation, especially in the wake of the new normal brought about by the pandemic [2]. The fourth industrial

*Corresponding author: maryamsorohiti@umy.ac.id

revolution promises transformative solutions, with technology playing a pivotal role in improving the efficacy of learning processes. Mobile-assisted learning, for instance, facilitates more engaging, interactive, and observable educational experiences, thus enhancing the learning environment [3].

Learning media constitute a crucial component of the teaching-learning process. Employing relevant learning materials can amplify educational activities and stimulate students' interest in the subject matter, ultimately aiding in information retention [4]. Moreover, the integration of technology and evaluation proves essential in education, with technology offering detailed insights into students' performance and aiding in constructing effective teaching strategies. Technological advancements have also led to the deployment of mobile applications like Mobile-Assisted Language Learning (MALL), which revitalizes language learning experiences [5]. However, challenges such as maintaining students' focus and ensuring consistent learning activities persist in online learning environments. Multimedia classroom technologies provide unique learning experiences, leveraging various educational platforms and communication technologies to enhance learning outcomes [6].

Furthermore, online assessment tools like Kahoot!, Quizizz, and Quizlet offer interactive classroom activities, enriching students' educational experiences. Quizizz, in particular, stands out as a multiplayer game that not only engages students but also allows them to assess their progress and compete, thereby fostering a dynamic learning environment [7]. Despite the benefits, challenges persist, such as students' lack of confidence and motivation in using tools like Quizizz. Addressing these challenges is crucial to ensuring the effectiveness of learning media [2]. Additionally, enhancing learning experiences through effective media usage can boost students' motivation and interest, particularly when utilizing applications like Quizizz for assignments.

Given the pivotal role of technology, especially Quizizz, in education, it is imperative to assess students' attitudes towards its usage. This study aimed to investigate students' attitudes towards utilizing Quizizz as a learning medium, considering the challenges and opportunities presented by digital technologies in education. Identifying the problem, the study recognized the necessity for effective utilization of digital technologies in learning while addressing potential distractions and ensuring engagement, especially in the context of distance learning during the COVID-19 pandemic. Furthermore, it acknowledged challenges such as maintaining students' concentration and streamlining evaluation processes. This study offers specific insights into students' positive attitudes, particularly within the affective domain when using Quizizz as a learning tool in an EFL context. Additionally, by detailing Quizizz's positive impact on motivation, engagement, and retention, this study provides empirical support for the continued use of MALL platforms in classroom settings.

2 Literature review

2.1 The significance of students' attitude

Understanding students' attitudes is fundamental for the success of their learning journey. It aids both educators and learners in accomplishing their learning objectives [8]. Scholars widely agree that pedagogical strategies must consider students' attitudes. Attitude, as defined by researchers, refers to a person's established inclination to respond positively or negatively to various stimuli, including objects, experiences, concepts, or individuals [9]. This predisposition significantly influences a person's actions and perceptions. Ganapathy

and Ying [10] asserted that students' attitudes and perceptions toward their tasks and learning materials are crucial for their learning and overall development. These attitudes serve as a means for students to express their preferences and sentiments regarding different elements encountered in learning environments. Given the inseparability of attitudes and learning, they are considered pivotal, particularly concerning language proficiency [11].

Attitudes can broadly be categorized into positive and negative, each impacting motivation and proficiency acquisition differently. Positive attitudes encompass traits such as responsibility, receptiveness, and empathy, fostering enthusiasm and excellence in learning [12]. Conversely, negative attitudes, including laziness and rudeness, can hinder motivation and obstruct learning progress. Students who cultivate positive attitudes toward their subjects tend to demonstrate greater interest, value, and commitment, which in turn motivates them to excel academically [3]. Conversely, negative attitudes pose psychological barriers to learning, making the learning process more arduous.

Attitudes comprise three core components: cognitive, affective, and behavioural. The cognitive aspect involves a person's thoughts and beliefs about an object or situation, shaping their perceptions and interpretations [10]. Emphasizing cognition, this aspect evolves through knowledge acquisition and analytical processes. The affective component, on the other hand, pertains to emotional reactions and feelings elicited by stimuli, significantly influencing individuals' responses and motivations [7]. Lastly, the behavioural aspect encompasses observable actions or responses resulting from attitudes, reflecting individuals' inclinations and predispositions.

2.2 The role of learning media

Learning media play a vital role in shaping students' attitudes throughout the learning process. Effective utilization of learning media enhances students' understanding and engagement with the material, ultimately fostering positive attitudes toward learning [2]. The integration of appropriate learning materials and technology not only enhances classroom activities but also boosts students' motivation and interest. By employing diverse learning media, educators can cater to different learning styles and needs, creating a more dynamic and engaging learning environment [13].

2.3 Mobile-Assisted Language Learning (MALL)

Learning media play a vital role in shaping students' attitudes throughout the learning. MALL has gained popularity in language education due to technological advancements [12]. It utilizes portable mobile devices such as smartphones and tablets to facilitate language learning, offering learners flexibility and accessibility. With its emphasis on portability and connectivity, MALL enables learners to engage in language learning anytime, anywhere, leveraging various digital resources and applications [6]. By harnessing the capabilities of mobile technology, MALL aims to enhance language learning experiences and support learners' individual needs and preferences.

2.4 Exploring Quizizz

Quizizz, an educational game-based software, is a prominent component of MALL. It offers interactive and engaging learning experiences through multiplayer activities, transforming traditional lessons into dynamic and enjoyable experiences [14]. Additionally, Quizizz serves as a versatile tool for formative assessment, enabling teachers to assess students'

language skills and track their progress. Its features, including quick feedback, review sections, and the option to repeat or create new quizzes, enhance learning experiences and promote active engagement [7]. With its user-friendly interface and accessibility across various devices, Quizizz facilitates collaborative learning and provides instant feedback, contributing to a more interactive and effective learning environment.

Users have the option to create a variety of question types on Quizizz, including multiple-choice, poll, fill-in-the-blank, open-ended, draw, voice response, video response, and slide questions. They can choose between conducting an instructor-led session or an asynchronous learning mode to administer a live quiz or assign homework [15]. In the live quiz format, a live dashboard allows participants to monitor the game's progress while responding to questions. Finally, teachers can review the results to identify correct and incorrect participant responses [2].

Quizzes can be crafted in various formats, such as true or false, multiple choice, and fill in the blank. Teachers have the option to make quizzes public or private [6]. Public quizzes can be shared with other teachers. In class, teachers initiate a quiz by sharing a game code with students, who can then join the game on their mobile devices by inputting the code [16]. Upon joining, students are assigned unique avatars, which typically heighten their engagement. Teachers can monitor students' participation, displayed with their names and avatars, and commence the game once all students have joined [3].

Teachers have the flexibility to customize quizzes by toggling various settings, such as background sound, ranking criteria, question mixing, and more. Additionally, quizzes can be assigned as homework for students to complete on their mobile devices after class [14]. Upon answering each question, students receive instant feedback in the form of amusing memes displayed on the screen. Correct responses trigger positive memes, while incorrect one's prompt encouraging or corrective messages [15]. The live scoreboard, showcasing students' rankings based on performance, adds an element of competition and motivation throughout the quiz. Once all participants have completed the quiz, the game concludes [4]. Students can revisit questions and review their answers and explanations. Meanwhile, teachers may highlight key questions and assist students in identifying areas for improvement based on performance metrics [5]. Quiz results are accessible online and can be exported as spreadsheets.

2.5 Students' attitudes towards Quizizz usage

The literature suggests a correlation between students' attitudes and their use of ICT tools for learning [9]. Positive attitudes towards MALL, particularly Quizizz, may enhance students' motivation and willingness to integrate technology effectively into the teaching-learning process. Conversely, negative attitudes towards technology in education may hinder students' willingness to engage with technological tools [1]. Attitudes towards an object can manifest as either positive or negative responses. Teachers should acknowledge that individuals hold both positive and negative attitudes, which can evolve with exposure and experience [11]. While the behavioural aspect of attitudes often involves observable actions, such as statements or behaviours, individuals may not consistently demonstrate negative behaviour even if they hold negative attitudes.

Students' attitudes towards learning methods also influence their overall attitude towards the learning process. The capacity to articulate attitudes enables students to express preferences and dislikes in various contexts [10]. Emotional responses and inner feelings significantly influence students' actions and engagement with learning materials. Students with positive attitudes towards language learning tend to exhibit a more optimistic outlook

on their learning experiences [7]. Examining the advantages and disadvantages of Quizizz in learning and its relationship with students' attitudes reveals potential positive and negative outcomes. Pham [15] suggested that students may derive satisfaction from Quizizz due to its user-friendly interface and effectiveness, enhancing their competitiveness and motivation. However, students may also identify shortcomings in Quizizz games, such as inaccuracies or flaws, which can impact their overall experience.

Previous research has explored students' attitudes towards using Quizizz as a learning tool, providing valuable insights. Amalia [13] investigated students' perceptions of Quizizz as an online assessment tool for English learning, highlighting its stimulating and competitive nature compared to traditional tests. Dhamayanti [2] focused on EFL students' attitudes and motivations towards Quizizz as an online learning tool, emphasizing its positive impact on learning engagement and motivation. Pham [15] examined university students' attitudes towards Quizizz for English language learning, revealing high levels of satisfaction and positive associations with motivation and engagement. While these studies share similarities in their quantitative methodologies, each contributes unique perspectives based on different contexts and populations. This current study aimed to enrich existing research by exploring students' attitudes towards Quizizz as a learning medium within EFL contexts.

3 Method

The current study was conducted at an English Department of a university in Indonesia due to the integration of Quizizz as a learning activity within the department. The target population comprised EFL students who had experience with Quizizz in their learning activities. The sample consisted of 79 students selected via convenience sampling, reflecting a confidence level of 95% and a confidence interval of 5%.

3.1 Research design

This study adopted a quantitative approach to investigate students' attitudes towards Quizizz and identify the dominant aspects of their attitudes. Quantitative research involves the measurement and statistical analysis of numerical data [17], making it suitable for this study's objectives. A survey design was employed to collect data on students' attitudes towards Quizizz, utilizing a questionnaire as the research instrument. Survey designs enable the identification of trends in attitudes, opinions, and behaviours within a target population.

3.2 Instrument

To explore students' perceptions of Quizizz as a learning tool and identify the primary dimensions of their attitudes at a university in Indonesia, we utilized a questionnaire as the primary data collection instrument. The questionnaire serves as effective tools for gathering insights into individuals' perceptions, opinions, and expectations [17]. The questionnaire, comprising 23 items employing closed-ended questions. The items were categorized into three dimensions of attitude: affective (items 1-8), behavioural (items 9-17), and cognitive (items 18-23). The questionnaire was adapted from previous research, specifically Pham's study [15], with modifications made to ensure alignment with the context of students' attitudes towards Quizizz as a learning medium.

To facilitate comprehension among participants, the questionnaire was translated from English to Indonesian as the participants' native language. The Likert scale was

utilized in the questionnaire, providing participants with four response options: Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD). This four-point Likert scale format was chosen to prompt respondents to select one of the options, excluding a 'Neutral' choice, to ensure clarity and avoid ambivalent responses. Each variable in the questionnaire was assessed using the four Likert scale points, as outlined in the accompanying table.

In quantitative research, validity refers to the extent to which a concept is accurately measured [18], reflecting the accuracy of the research. To ensure validity, we employed the expert judgment method to assess the questionnaire before data collection. This involved analyze the item validity using Microsoft Excel and SPSS software. Expert judgment was integral in evaluating the questionnaire's strength and relevance. Furthermore, consultations with experts aimed to refine the instrument for effective data collection. The Aiken formula was utilized to assess content validity, involving expert judgement with scores ranging from 0 to 1 indicating instrument validity. All questionnaire items demonstrated high validity ($V = 0.96$), signifying their suitability for the current study. Reliability, crucial for establishing trustworthiness, refers to the consistency and stability of an instrument's scores [17]. All questionnaire items underwent reliability testing, with Cronbach's Alpha used as the criterion. The reliability test results revealed a Cronbach's Alpha value of 0.908, indicating high reliability for all questionnaire items.

3.3 Data collection procedures and analysis

The data collection process involved several steps. After preparing the instrument, we contacted respondents, seeking permission from teachers to distribute the questionnaire during classes where Quizizz was frequently used. Once approval was obtained, the questionnaire was distributed online. In addition, quantitative data analysis utilized descriptive statistics to describe the research variables. Descriptive statistics, including mean, median, variance, skewness, kurtosis, minimum, maximum, and frequency distribution tables, were employed for analysis [17]. To determine the category of positive attitude and negative attitude the researchers used the interval as follows.

Category of attitude

Interval	Category
4,00 – 2,51	Positive
2,50 – 1,00	Negative

4 Findings and discussion

The current study was conducted at the English Department of a university in Indonesia, involving a sample of 79 students. The primary research question aimed to explore the students' attitudes toward using the Quizizz application as a learning medium, focusing on three aspects of attitude.

4.1 Students' attitude toward using Quizizz

Descriptive statistics were employed to analyze the students' attitudes toward utilizing the Quizizz application. The data were entered into SPSS, and the resulting descriptive statistics are presented in the following table.

Table 1. EFL students' feel about utilising Quizizz.

Item	M	SD
I feel motivated when I play Quizizz games.	3.2 3	.61 9
I feel excited when won Quizizz games.	3.4 6	.65 6
I am eager to learn via Quizizz.	3.1 3	.62 8
I find Quizizz competitive.	3.2 8	.71 5
I feel happy about my results in Quizizz games.	3.3 8	.62 6
I feel energetic when I play Quizizz in class.	3.2 2	.76 2
I feel more confident choosing the correct answers.	3.4 2	.67 2
I feel relaxed in Quizizz sessions.	3.2 4	.68 3
I look forward to playing Quizizz games.	3.2 5	.70 7
I focus on the questions in Quizizz games.	3.3 3	.67 4
I focus on the answers in Quizizz games.	3.2 2	.61 3
I respond as quickly as possible to each question.	3.1 3	.70 5
I respond as accurately as possible to each question.	3.2 3	.65 9
I maintain collaboration in Quizizz games.	3.1 9	.68 1
I maintain competitiveness in Quizizz games.	3.3 3	.54 8
I study harder to win Quizizz games.	3.2 7	.69 3
I expect Quizizz to be used in every lesson.	3.2 0	.68 6
Quizizz helps me remember more details in my lessons.	3.2 7	.72 9
Quizizz helps me understand my lessons better.	3.2 4	.73 8
Quizizz helps me solve problems in my lessons faster.	3.1 5	.66 2
Quizizz helps me compare and contrast different kinds of items in my lessons.	3.0 6	.68 6
Quizizz helps me make judgements about the information in my lessons.	3.3 0	.72 2

Quizizz helps me gain more knowledge and develop more skills.	3.3 0	.62 7
---	----------	----------

We utilized SPSS to compute the mean score of the dataset, resulting in an overall average. The first research question, “What is the students’ attitudes towards using the Quizizz application as a learning medium?” was addressed and answered based on the mean score. Table 1 illustrates the mean of the data by summing up the mean scores of questions 1 to 23 and dividing the total by 23 (the number of items). The resulting average mean score is 3.25. This mean score of 3.25 indicates a positive attitude among the students.

4.2 The most dominant aspect of students’ attitude

Regarding the second research question, “What is the most dominant aspect of the students’ attitude?”, we evaluated the aspects using a descriptive statistics test, as outlined in Table 2.

Table 2. EFL students’ attitudes towards the use of Quizizz based on three dimensions.

Dimension	M	SD
Affective	3.2 9	.39 9
Behavioural	3.2 4	.40 2
Cognitive	3.2 2	.49 8

Table 2 presents the three dimensions of students’ attitudes towards the Quizizz application: affective, behavioural, and cognitive aspects. From the data, it was found that the affective aspect was perceived by students as the most dominant aspect of attitude (M = 3.29, SD = .399), indicating its significance. This suggests that the emotional response of individuals towards an object or situation, as represented by the affective aspect, played a major role in shaping their attitudes.

4.3 Discussion

This section delves into the interpretation of descriptive statistics to address the two research questions. The analysis revealed that students exhibited a positive attitude towards Quizizz (M = 3.25). This positivity permeated all aspects of the questionnaire, with no instances of negative perceptions. The results align with previous studies such as Pham [15], which also found positive attitudes among university students towards Quizizz.

The findings suggest that students found Quizizz engaging and enjoyable, with benefits such as increased excitement and motivation, as noted in the study by Fadillah and Maryanti [16]. The competitive elements of Quizizz, along with its colourful and interactive interface, contributed to its appeal among students. Moreover, Quizizz was perceived as more interesting and stimulating compared to traditional offline tests, fostering a competitive learning environment.

Regarding the dominant aspect of students’ attitude, the affective dimension emerged as the strongest (M = 3.29, SD = .399). This finding resonates with Pham [15], indicating that emotional factors significantly influenced students’ attitudes towards Quizizz. Items such as feeling excited when winning and feeling confident in choosing

correct answers underscored the emotional appeal of Quizizz. While the behavioural and cognitive aspects also exhibited positive attitudes, their mean values were slightly lower. However, items related to Quizizz aiding in decision-making and knowledge expansion highlighted its cognitive benefits.

5 Conclusion

In summary, this study explored students' attitudes towards Quizizz as a learning tool, revealing a predominantly positive outlook. The affective aspect emerged as the most influential, emphasizing the emotional response of students towards Quizizz. This underscores the importance of considering emotional factors in educational technology adoption. Overall, Quizizz proved to be an effective tool for enhancing student engagement and motivation in learning. Based on the findings, several recommendations are proposed for different stakeholders. For students, utilizing Quizizz is encouraged to enhance motivation and facilitate learning. For teachers, integrating Quizizz into classroom activities is advised to capitalize on its benefits for student engagement. Moreover, future research should delve deeper into the challenges and experiences of using Quizizz across different educational contexts and disciplines.

References

- [1] L. S. L. Purba, "The effectiveness of the Quizizz interactive quiz media as an online learning evaluation of physics chemistry 1 to improve student learning outcomes," in *6th International Conference on Mathematics, Science, and Education (ICMSE 2019)*, IOP Publishing, 2020. doi: 10.1088/1742-6596/1567/2/022039.
- [2] F. I. Dhamayanti, "EFL students' perception and motivation toward Quizizz as e-learning media in English e-classroom," *EDUCAFL: Journal on Education of English as Foreign Language*, vol. 4, no. 2, pp. 70–77, 2021, doi: 10.21776/ub.educafl.2021.004.02.03.
- [3] W.-C. Hu and S.-T. Hsu, "Beyond technocentrism: Improving lower-achiever's English listening performance by using mobile-assisted language learning on University of Technology students," in *11th International Conference on Information Communication and Management (ICICM)*, Tokyo, Japan: Association for Computing Machinery, 2021. doi: <https://doi.org/10.1145/3484399.3484413>.
- [4] M. D. Pitoyo, S. Sumardi, and A. Asib, "Gamification-based assessment: The washback effect of Quizizz on students' learning in higher education," *International Journal of Language Education*, vol. 4, no. 1, pp. 1–10, 2020, doi: 10.26858/ijole.v4i2.8188.
- [5] N. W. I. Priyanti, M. H. Santosa, and K. S. Dewi, "Effect of Quizizz towards the eleventh-grade English students' reading comprehension in mobile learning context," *Language and Education Journal Undiksha*, vol. 2, no. 2, pp. 71–80, 2019, doi: 10.23887/leju.v2i2.20323.
- [6] F. Zhao, "Using Quizizz to integrate fun multiplayer activity in the accounting classroom," *International Journal of Higher Education*, vol. 8, no. 1, pp. 37–43, 2019, doi: 10.5430/ijhe.v8n1p37.
- [7] I. S. D. Rahayu and P. Purnawarman, "The use of Quizizz in improving students' grammar understanding through self-assessment," presented at the Eleventh Conference on Applied Linguistics (CONAPLIN 2018), Atlantis Press, 2019. doi: 10.2991/conaplin-18.2019.235.

- [8] B. Aglen, "Pedagogical strategies to teach bachelor students evidence-based practice: A systematic review," *Nurse Education Today*, vol. 36, pp. 255–263, 2016, doi: 10.1016/j.nedt.2015.08.025.
- [9] R. Scherer, A. Rohatgi, and O. E. Hatlevik, "Students' profiles of ICT use: Identification, determinants, and relations to achievement in a computer and information literacy test," *Computers in Human Behavior*, vol. 70, pp. 486–499, 2017, doi: 10.1016/j.chb.2017.01.034.
- [10] M. Ganapathy and G. C. Ying, "Attitude and motivation of students towards learning English as second language in a secondary school in Penang," *Malaysian Journal of Languages and Linguistics (MJLL)*, vol. 5, no. 2, pp. 39–56, 2016, doi: 10.24200/mjll.vol5iss2pp39-56.
- [11] N. Ahmad, "The students' attitude toward teacher's strategy in teaching English at the eighth grade of MTs At'Taqwa Jampue Pinrang," Undergraduate Thesis, IAIN Parepare, Parepare, 2019.
- [12] R. Kamasak, M. Özbilgin, D. Atay, and A. Kar, "The effectiveness of Mobile-Assisted Language Learning (MALL): A review of the extant literature," in *Handbook of Research on Determining the Reliability of Online Assessment and Distance Learning*, IGI Global, 2021, pp. 194–212. Accessed: Jul. 04, 2024. [Online]. Available: 10.4018/978-1-7998-4769-4.ch008
- [13] D. F. Amalia, "Quizizz website as an online assessment for English teaching and learning: Students' perspectives," *Jo-ELT (Journal of English Language Teaching)*, vol. 7, no. 1, pp. 1–8, 2020, doi: 10.33394/jo-elt.v7i1.2638.
- [14] D. MacNamara and L. Murphy, "Online versus offline perspectives on gamified learning," presented at the GamiFIN Conference 2017, University Consortium of Pori, Finland, 2017.
- [15] A. Pham, "University students' attitudes towards the application of Quizizz in learning English as a foreign language," *International Journal of Emerging Technologies in Learning (iJET)*, vol. 17, no. 19, pp. 278–290, 2022.
- [16] I. N. Fadillah and R. Maryanti, "Application of learning videos and Quizizz in increasing students interest in learning English in middle schools," *Indonesian Journal of Multidisciplinary Research*, vol. 1, no. 2, pp. 329–336, 2021, doi: 10.17509/ijomr.v1i2.37853.
- [17] J. W. Creswell and J. D. Creswell, *Research design: Qualitative, quantitative, and mixed methods approaches*, 5th ed. Los Angeles: SAGE Publications, 2018.
- [18] R. Heale and A. Twycross, "Validity and reliability in quantitative studies," *Evidence-Based Nursing*, vol. 18, no. 3, pp. 66–67, 2015, doi: 10.1136/eb-2015-102129.