

Quizizz Gamification of Student Learning Attention and Motivation

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ABSTRACT

Student attention and motivation are one of the factors that support student success. Therefore, teachers need to use various efforts, such as using learning media, so that learning becomes fun and students are interested in learning. This study aims to examine the effectiveness of Quizizz on students' attention and motivation. The research method used is quantitative. The population and sample in this study are grade 7.1 junior high schools in Palembang City for the 2022/2023 academic year, with a total of 31 students (one-shot case study). The data was obtained through a questionnaire, and the data analysis technique used was to determine the effectiveness with a percentage. This study concluded that the average percentage of the effectiveness of the Quizizz application on student attention was 70.1% or quite effective, while Quizizz on student learning motivation was 70.3% or quite effective. Thus, Quizizz is effective in increasing students' attention and learning motivation. If Quizizz is used by the teacher in learning, it will increase student attention and motivation.

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1. INTRODUCTION

Learning is one of the keys to success in education, because the essence of education is learning. Learning is basically an interaction carried out by teachers and students in a certain environment in order to achieve an educational goal (Rizawati et al., 2017; Saumi et al., 2021). In learning, the teacher must also pay attention to the personality and social development of students in addition to intellectual development. And also, the teacher continues to provide enthusiasm and motivation to learn optimally.

One of the factors that can determine the success or failure of the learning process that comes from within the student is motivation (Emda, 2018). Whether there is motivation to learn greatly affects the success of student learning. Learning success will be achieved if there is a will and drive to learn.

Motivation is a change in energy in a person's personality which is characterized by the emergence of affective (feelings) and reactions to achieve goals (Santi, 2016). In addition to providing enthusiasm, teachers also need to increase student attention. Attention has an important role in learning activities. According to Gage and Berliner that without attention, it is impossible to learn (Dimiyati & Mudjiono, 2002). According to Daryanto (2010), attention is an activity carried out by someone in relation to the selection of stimuli that come from their environment.

Learning motivation and student attention in learning are one of the factors supporting the success of learning. Therefore, teachers can utilize all resources, one of which is technology-based learning media. By leveraging technology, changes occur. Teachers must study better in learning, and need to utilize learning resources as optimally as possible. This is important, because the effectiveness of learning is also accompanied by progress and the ability to utilize learning media (Yustanti & Novita, 2019).

The presence of technology in the world of education is both a challenge and an opportunity. Among the challenges are inadequate facilities (Astini, 2020), low self-confidence, and lack of teacher knowledge of digital technology and learning time (Putra, 2019). Meanwhile, the opportunity is to use technology in learning (Tafonao & Saputra, 2021). Teachers must be ready to adapt to the changing times that are so fast; otherwise, education will be left behind.

Now technology products have been widely used in the world of education and have even become mandatory in accompanying learning. Various information technology platforms have the opportunity to be used to support online learning activities and, at the same time, have the opportunity to force lecturers to be information technology literate. Some of them are e-learning, Rumah Belajar, Edmodo, EdLink, Moodle, Google Classroom, and Schoology online classes (Astini, 2020). Some of the modern technology-based evaluation tools that can be used by teachers to create quizzes or record students' opinions are such as Kahoot, quizizz, socrative, polldaddy, verso, poll everywhere, google form, classmaker (Chaiyo & Nokham, 2017), wondeshare quiz creator (Nengsih, 2022) and others.

In 2022, the curriculum in Indonesia will change to a new curriculum, namely the Merdeka Curriculum. At the implementation stage, this curriculum asks teachers to utilize technology in learning. Before this curriculum was implemented, teachers were required to increase their competence in using technology due to Government instructions regarding the implementation of online learning, due to the Covid-19 Pandemic. Some of the applications used are WhatsApp, Zoom Meeting, Google Classroom, Kahoot, Quizizz, and others.

One learning activity that uses the application is the evaluation of learning. The evaluation used in the Independent Curriculum is diagnostic, summative, and formative (Barlian & Solekah, 2022; Lutfiana, 2022). The use of applications during evaluation is very helpful for teachers, especially to help process grades and is easy to use. The application that is often used by teachers is Quizizz. According to Wahyudi (2020), Quizizz can be used as an alternative to learning assessment because the design is attractive and not monotonous, and is based on games and makes it easy and summarizes for teachers in effective learning assessment.

Quizizz is a form of a game. Games as learning media that are integrated with material or evaluation questions can make learning more interesting and fun. Henry (2010) stated that one of the positive effects of using games is that games create a fun and entertaining atmosphere and games provide practice for problem-solving and logic. Now, games are increasingly being used to arouse student activity and interest.

Game Quizizz is a game-based educational app which brings multi-game activities to the classroom and makes classroom practice fun and interactive. Implementation of using the Quizizz Game, students can do exercises in class on their electronic devices. Quizizz games have game characteristics such as avatars, themes, memes, and music that give fun effects during the learning process. Quizizz allows students to compete with each other and motivates them to study so that learning outcomes can increase. Students take quizzes simultaneously in class and see their live ranking on the leaderboard (Purba, 2017). With the characteristics and advantages of this application, the

teacher feels helped by the benefits obtained when it is used for learning evaluation. Prior to the existence of game applications, teachers used paper to assess and score manually.

Quizizz as a learning medium is useful in clarifying the presentation of material and information so that it can direct students' attention it can lead to learning motivation which has an impact on activeness and learning outcomes (Salsabila et al., 2020). Taking part in the challenges of digital-based learning, along with the development of technology and information, it encourages the creation of the use of innovative, effective and efficient learning media. For this reason, digital-based learning media is needed to be utilised to improve student learning outcomes (Irwan et al., 2019). Utilization of Quizizz media in learning can foster learning motivation because students are very enthusiastic about participating in learning (Anugrawati & Hermansyah, 2021; Safarati & Rahma, 2020)

Much research on Quizizz has been done before, including Quizizz's research on motivation (Rosiyanti et al., 2020; Solikah, 2020), learning outcomes (Al Mawaddah et al., 2021; Annisa & Erwin, 2021; Citra & Rosy, 2020; Cristiyanda & Sylvia, 2021), interest (Azzahra & Pramudiani, 2022), concentration (Purba, 2019), and other research. In contrast to previous research, this study focuses on the effectiveness of Quizizz as an evaluation medium in terms of attention and learning motivation, with the hope that it can become new insights for teachers. This research is important to do to provide support for teachers who will use Quizizz in learning.

2. METHODS

The research method used is quantitative. The population and sample in this study are grade 7.1 junior high schools in Palembang City for the 2022/2023 academic year, with a total of 31 students (one-shot case study). The research method used was a questionnaire containing 10 questions for attention according to attention indicators and 8 questions for learning motivation. The questionnaire was made using Google Forms with a Likert scale of four types, namely with the criteria (1) disagree; (2) do not agree; (3) agree; and (4) strongly agree.

The data analysis technique used in this study is the determination of effectiveness by percentage. Percentage techniques through data checking procedures, data classification, data tabulation, calculating the frequency of answers, calculating the percentage of each data obtained and interpreting the data. Determination of effectiveness seen from the percentage of answers and data obtained by using the formula:

$$P = \frac{\text{Total score obtained}}{\text{Maximum score}}$$

$$\text{Program Effectiveness} = \frac{\text{The average number of effectiveness of all indicators}}{\text{Number of indicator variables}}$$

Table 1. Effectiveness Score Interval

Ratio	Category
< 40%	Very ineffective
40% - 59,99%	Ineffective
60% - 79,99	Effective enough
80% >	Very effective

3. FINDINGS AND DISCUSSION

3.1. Quizizz Effectiveness in Increasing Student Attention

According to Santoso (2020), attention indicators namely 1) listening; 2) looking; 3) writing or recording; 4) reading; 5) summarising or underlining; 6) observing tables, diagrams and charts; 7) remembering; 8) think; 9) exercise or practice; and 10) ask. After distributing the questionnaire, the results are shown in Table 2.

Table 2. The Effectiveness of Quizizz in Increasing Student Attention

No.	Indicator	Number of Respondents				Percentage
		4	3	3	1	
1	Listen	4	26	1		70,6
2	looking	8	19	4		71,3
3	Write or take notes	1	22	8		63,2
4	Read	5	21	5		68,4
5	Summarize	7	23	1		72,8
6	Observe diagrammatic tables or charts	6	20	5		69,1
7	Remember	8	21	2		72,8
8	Think	9	18	4		72,1
9	Exercise or practice	6	20	5		69,1
10	Ask	6	24	1		72,1
Average						70,1

Based on Table 2, the average percentage of the effectiveness of the Quizizz application is 70.1% or quite effective. In accordance with, the results of each indicator, it shows that Quizizz is quite effective in terms of student attention. The use of Quizizz in learning can attract students' attention, starting from seeing, reading, writing, asking, thinking, and others. Before students are asked questions, the teacher prepares multiple-choice questions. To attract students' attention, the teacher gives short questions equipped with pictures, animations, and various colours and fonts. To awaken students' competitive spirit, the teacher sets the answer time, which is 10 seconds. When given a student, the class atmosphere was silent for 10 seconds, after which the students clamoured to see the score ranking. What happened next was that the students' attention increased.

According to Priyanti et al. (2019) stated that Quizizz is a digital platform to help students understand something to read in a fun way by using their gadgets. Some features that attract students' attention include the option to activate background instruments when working on questions, attractive and colourful letter designs and layouts, feedback when answering different correct or wrong answers, and a leader board which shows student rankings based on the scores obtained. In addition to these main features, several additional features can be activated by the teacher to add to the excitement and interest of elementary school students, such as a reward for reworking wrong questions if they successfully answer several other questions correctly in a row.

The use of the Quizizz application can also make the learning process and online learning fun. Teachers who give questions and take advantage of the features in the Quizizz application are able to attract students' attention so that students enjoy participating in the online learning process. Students are interested and happy because the Quizizz application has an interesting display of features because using the Quizizz application learning outcomes can be seen directly by students in the form of scores and ratings, while for teachers, there is a recap of the scores (Kurniawan, 2022). This is also reinforced by the document review, namely the display of interesting Quizizz application features, which can only be seen on the student portal. This is in accordance with the theory put forward by Arsyad (2010) that using learning media can make learning more enjoyable. Furthermore, using the Quizizz application can make the learning process more enjoyable because there are various application features that make students happy (Sari & Yarza, 2021).

This research is in line with Ardiansyah's findings (2022) and Lestari (2022) that the use of Quizizz as an evaluation medium can attract students' attention. Students' interest in Quizizz is due to the score and ranking features so that students are motivated to answer each quiz that is proposed.

3.2. Quizizz Effectiveness in Increasing Student Learning Motivation

According to Sardiman (2012), there are several indicators that can be used to determine the strength of learning motivation, namely: 1) diligently facing assignments; 2) tenacious in the face of difficulties (not easily discouraged); 3) showing interest in various adult problems; 4) prefer to work independently; 5) don't get bored quickly with routine tasks; 6) can defend his opinion; 7) it is not easy to let go of things that are believed; and 8) happy to find and solve problems. After distributing the questionnaire, the results are shown in Table 3.

Table 3. The Effectiveness of Quizizz in Increasing Student Learning Motivation

No.	Indicator	Number of Respondents				Percentage
		4	3	3	1	
1	Persevere in facing the task	6	19	6		68,4
2	Tenacious in the face of adversity	7	19	5		69,9
3	Show interest	6	22	3		70,6
4	Enjoy working independently	8	19	4		71,3
5	Get bored quickly on routine tasks	4	24	3		69,1
6	Can defend his opinion	8	19	4		71,3
7	It's not easy to let go of things you believe in	6	23	2		71,3
8	Enjoys finding and solving questions	7	20	4		70,6
Average						70,3%

Based on Table 3, the average percentage of the effectiveness of the Quizizz application is 70.3% or quite effective. When Quizizz is used as an assessment medium, students always pay attention to every quiz given. Then each student answers the quiz even though the time is small. What's interesting is that students are very enthusiastic about every quiz given, speed in answering is the most interesting and awaited thing by students. Furthermore, each student's points are displayed when they have finished answering. This is the atmosphere most awaited by students to see the score ranking. In addition, student independence is very visible in answering questions.

Student motivation can be influenced by the use of media or learning tools that are suitable to support learning evaluation. With the development of technology, there are many interesting online learning tools to take advantage of. The Quizizz application is a quiz-based learning evaluation medium. Using the Quizizz application makes evaluating online learning more fun and not boring. This application, which is equipped with various features and colours, can attract students' attention. One of its features, namely scores and rankings, is able to make students enthusiastic and motivated to learn (Lestari & Abd Rohman, 2022). The features presented by Quizizz are a consideration for teachers to use in learning, especially when the teacher wants to create a fun learning atmosphere.

The results of this study are in line with the research of Wijayanti (2021), Cristiyanda (2021), and Rahman (2020) that the use of Quizizz as an evaluation medium can increase student motivation. This data shows that learning media is a factor in increasing learning motivation.

According to Pusparani (2020), Quizizz is one of the media innovations in learning evaluation activities. Many features that can be used, such as multiple choice questions, filling questions, and description questions. This application can be used wherever students are. Another opinion by Kusuma (2020) Quizizz is a digital and online-based learning evaluation tool (can be used if there is adequate internet support) which consists of quizzes, surveys, questions, and discussion features. The quizizz application is described as a web tool for creating interactive quiz games that can be run using a

smartphone and can be accessed through the website www.quizizz.com and accessed on the Playstore or Appstore.

The Quizizz application has very interesting features, such as audio, images, music, and various types of fun games. Educational games are able to attract students' interest in learning and make learning evaluation more fun. The application of Quizizz application can increase student learning motivation to be more active in learning. Learning motivation is one of the important factors in achieving the success of learning objectives. Therefore, educators need to use interactive media to increase student motivation. The use of learning evaluation media in the teaching and learning process generates motivation and stimulation of learning activities in students (Lestari & Abd Rohman, 2022).

In addition, the ranking system that is displayed after doing work will create an atmosphere of competition that motivates students to be the best. This can encourage students to be mutually motivated in obtaining the best position in their class. Students will struggle to answer quickly and accurately, although sometimes there are problems in the internet network because Quizizz requires a stable internet network to complete step by step. However, this obstacle does not reduce the enthusiasm of students to be the best in their class. Indirectly, this also encourages all students' active participation in learning (Sitorus & Santoso, 2022). Learning motivation and student attention are very important to note by the teacher so students easily understand the material presented.

4. CONCLUSION

This study concluded that the average percentage of the effectiveness of the Quizizz application on student attention was 70.1% or quite effective, while Quizizz on student learning motivation was 70.3% or quite effective. Thus, Quizizz is effective in increasing students' attention and learning motivation. What is lacking in this study is that the object of research is only one class, so it is recommended for further research to examine the effectiveness of Quizizz broadly through experimental research.

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