Journal of General Education and Humanities
Vol. 4, No. 3, August 2025, pp. 913 – 926, https://doi.org/10.58421/gehu.v4i3.579
ISSN 2963-7147

Enhancing Social Studies Learning Motivation Through Quizizz-Based Technology

Mohd Fadlan Riski[1], Toni Nasution[2]
[1,2]Universitas Islam Negeri Sumatera Utara, Indonesia

Article Info

Article history:

Received 2025-06-04
Revised 2025-07-07
Accepted 2025-07-08

Keywords:

Digital Learning Tools
Learning Motivation
Learning Technology
Quizizz
Student Engagement
Social Studies

ABSTRACT

This study examines whether Quizizz-based learning enhances students' motivation in social studies, addressing the limited integration of gamified tools in Indonesian classrooms. Employing a quantitative experimental method with a post-test-only control group design, the research involved two randomly selected seventh-grade classes at SMP 1 Southeast Aceh. One class served as the experimental group using Quizizz-based learning, while the other functioned as the control group with conventional teaching methods. The sample consisted of 39 students—19 in the experimental group and 20 in the control group. Data were collected through post-test assessments measuring students' interest and engagement in learning. The results indicate a significant difference in learning engagement between the two groups. The experimental group achieved an average score of 90.78, while the control group averaged 61.05. An independent sample t-test yielded a t-value of 5.3693, exceeding the critical value of 1.684 at the 5% significance level ($p < 0.05$), confirming a statistically significant effect. These findings suggest that Quizizz-based learning positively influences student engagement in social studies. This study underscores integrating interactive digital tools to create a more engaging learning environment. It is recommended that educators incorporate platforms like Quizizz to foster active participation and enhance learning experiences. Future research should explore long-term impacts across diverse subjects and educational settings to broaden the applicability of gamified learning strategies in Indonesian education.

Corresponding Author:

Mohd Fadlan Riski
Universitas Islam Negeri Sumatera Utara, Indonesia
Email: mohd.03-9202106@uinsu ac.id

1. INTRODUCTION

This study examines whether Quizizz-based learning enhances students' motivation in social studies, addressing the limited integration of gamified digital tools in Indonesian classrooms [1], [2], [3]. Education has long stood as a pillar of human development, yet the

persistent issue of low learning motivation hinders realizing its full potential. Motivation is recognized as a crucial internal factor in teaching and learning that determines the degree to which students actively engage in classroom activities [4], [5], [6]. Even among students with high intellectual ability, a lack of motivation can result in disengagement and underachievement. Motivation itself is not merely a desire, but a driving force, both internal and external, that energizes and sustains learning behaviors toward specific goals. In the case of social studies (Ilmu Pengetahuan Sosial or IPS), which deals with human interactions, community values, and everyday realities, student motivation is fundamental. Unfortunately, IPS is often perceived as abstract, uninteresting, and irrelevant in many Indonesian classrooms, leading to a lack of enthusiasm among students [1], [8], [9].

Observations and interviews at SMP Negeri 1 Aceh Tenggara indicate this problem. Students frequently express boredom during IPS lessons, complaining that the classes are monotonous and overly teacher-centered. This is primarily due to the continued reliance on conventional teaching methods such as lectures, rote memorization, and individual assignments without meaningful interaction or visual aids. Teachers, while committed, often fall into routine practices that do not involve digital or engaging media, causing students to remain passive, merely listening, taking notes, and memorizing. Consequently, students' attention spans wane, their interest in the subject decreases, and their learning motivation remains stagnant. This educational reality points to a pressing gap between the demands of 21st-century learners, who are highly familiar with digital technology, and the traditional instructional methods still prevalent in schools [4], [5], [12].

Implementing more interactive and student-centered approaches is necessary to address this issue. One such method is integrating educational technology, particularly gamified platforms like Quizizz. Quizizz is an online application that allows educators to create engaging, randomized quizzes that students can complete in real time or asynchronously [13], [14], [15]. Its gamification elements—points, rankings, timers, and memes—contribute to a fun and competitive environment that stimulates interest and participation. Prior studies suggest that Quizizz improves students' concentration and reduces opportunities for dishonesty, as each student receives randomized question orders. Furthermore, it provides immediate feedback, making it easier for students to reflect on their learning progress and for teachers to assess comprehension efficiently [7], [8].

In this study, a quasi-experimental design with a pre-test and post-test control group was used to determine the effectiveness of Quizizz in enhancing learning motivation among Class VII students in social studies. The sample consisted of two comparable groups: one experimental group taught using Quizizz-based activities, and one control group taught through conventional methods. Both groups were administered motivation scales before and after the intervention [18], [19]. The data collected were analyzed using an independent sample t-test to assess the difference in motivation scores between the two groups. The statistical findings revealed a significant difference in student motivation, with a p-value less than 0.05. This indicates that the students who experienced Quizizz-based learning showed higher motivation levels than those in the control group [11].

The implications of these findings are noteworthy. They suggest that integrating interactive, game-based tools such as Quizizz into IPS instruction can foster greater student

engagement and enthusiasm for learning. This aligns with the characteristics of today's learners, who are more responsive to digital environments and interactive tasks. Teachers are therefore encouraged to rethink their instructional strategies by incorporating technology that supports active participation [12], [13]. Moreover, educational stakeholders and policymakers should support the professional development of teachers through training in ICT-based learning media, ensuring that teachers are equipped with the skills necessary to modernize their classrooms. Ultimately, this study highlights the importance of reimagining traditional classroom dynamics to suit contemporary learners' needs [24]. By adopting Quizizz as a teaching medium, student motivation can be significantly increased, and the overall quality of the learning experience can also be enhanced. The integration of such tools does not merely serve as a novelty but as a strategic innovation that holds the potential to transform passive learning environments into vibrant spaces of exploration and growth. As schools evolve in the digital era, the thoughtful use of platforms like Quizizz can bridge the gap between educational content and student engagement, paving the way for more meaningful and effective learning in the future.

2. METHOD

2.1 Types of research

This study used quantitative research, and pre-test and post-test were used to measure changes in learning motivation of grade VII students in social studies subjects before and after implementing Quizizz-based learning technology. The pre-test was conducted before using Quizizz to determine the initial level of students' learning motivation, while the post-test was conducted after the intervention to see the effectiveness of Quizizz's influence in increasing the motivation. The data obtained were analyzed quantitatively to determine significant differences between the pre-test and post-test results [15].

This research took place at SMP 1 Southeast Aceh, located at Jln Pelajar No. 240, Gumpang Jaya, Kec. Gumpang Jaya, Southeast Aceh Regency, Southeast Aceh 24651. This research was conducted from September 2024 until completion. The implementation of the research, which includes the planned activities and implementation of the research, can be seen in the table below.

2.2 Population

Population is a generalization area consisting of objects with specific qualities and characteristics that researchers determine to be studied, and then conclude. This study's population was all Class VII students in Social Studies at SMP 1 Southeast Aceh.

2.3 Sample

A sample is a part of the population and characteristics possessed by the population. If the population is large, and researchers cannot study everything in the population, for example, due to limited funds, human resources, and time, then researchers can use samples taken from the population. What is learned from the sample will apply to

the population. For that reason, samples taken from the population must be truly representative. The researcher used random sampling at a random class system in this study.

The steps in the random process include:

a. Write the numbers of the three classes as the population, then roll up the numbered paper.
b. Then the roll of paper is put into the container, the rolls are drawn by shaking the container, and two rolls of paper are removed.
c. The first roll of paper is designated as the experimental class, and the second is the control class.

Then the selected paper rolls will be samples. After implementing the steps above, the selected Class VII students as research samples will be divided into experimental and control classes.

2.4. Research methods

The research method is a scientific way to obtain data with specific goals and uses. The method used in this study is an experimental method that aims to determine whether there are differences in results due to differences in treatment of the experimental and control classes. This experimental research uses the Post-test Only Control Design type.

Table 1. Research Design: Posttest-Only Control Design

Class	Treatment	Post-Test
R	X	O1
R	-	O2

Information:

R : Classes selected randomly
X : Teaching using Quizizz-based learning technology
O1 : Learning motivation test for experimental class.
O2 : Learning motivation test for control class.

2.5 Research Variables

Research variables are anything in any form that is determined by the researcher to be studied so that information about it can be obtained, and then conclusions can be drawn. The variables in this research are:

a. Variable X1: Learning Motivation with the influence of Quizizz-based learning technology by Grade VII Students in Social Studies Subject at SMP 1 Southeast Aceh.
b. Variable X2: Motivation to Learn using conventional methods (lectures) by Grade VII Students in Social Studies Subject at SMP 1 Southeast Aceh.

2.6 Operational Definition of Research

The operational definition in this study is as follows:

a. A mental force, either internal or external, that propels students to engage in learning activities to accomplish specific objectives is known as learning motivation. A person

with great intelligence may not learn if they are not sufficiently motivated. Since motivation influences a student's propensity to complete tasks, it is crucial to the continuity of learning activities. For students, motivation is the primary factor that drives their desire to study, and for teachers, it is crucial to comprehend student learning motivation to preserve and enhance the spirit of learning.

b. Quizz-based learning technology is an engaging and enjoyable learning environment created through interactive digital media. Teachers can use Quizizz to develop instructional games that can be accessed through digital devices as quizzes. Quizizz's gamification features, which include leaderboards, quick scores, and eye-catching displays, promote competitive and engaged student engagement. Quizizz is not just an assessment tool but also a tactic to boost student engagement and learning motivation because it allows teachers to track learning outcomes in real time.

2.7 Research Instruments

Research instruments are tools for quantifying social and environmental phenomena that have been observed. Research variables are the precise term used to describe all of these phenomena. A test is the research instrument, according to the aforementioned research factors. The impact of Quizizz-based learning technology on the learning motivation of seventh-grade social studies students at SMP 1 Southeast Aceh is the test used in this study.

Table 2. Assessment Instruments

No	Assessed Indicators	Rated aspect	Score
1	There is a desire and wish to succeed. The desire and wish to succeed in learning and everyday life is generally called the achievement motive.	Very appropriate, Quite appropriate, Less appropriate, Not appropriate	4 3 2 1
2	There is a drive and need to learn because of the drive to avoid failure, which stems from the fear of failure.	Very appropriate, Quite appropriate, Less appropriate, Not appropriate	4 3 2 1
3	Having hopes and aspirations for the future. Hope is based on the belief that people are influenced by their feelings about the outcome of their actions.	Very appropriate, Quite appropriate, Less appropriate, Not appropriate	4 3 2 1
4	Learning is accompanied by appreciation. The simplest and most efficient strategy to boost student motivation for greater learning outcomes is to express gratitude verbally or through other means for positive behavior or learning achievements. .	Very appropriate, Quite appropriate, Less appropriate, Not appropriate	4 3 2 1
5	There are interesting activities in learning. Both simulations and games are among the most interesting processes for students. An interesting atmosphere makes the learning process meaningful.	Very appropriate, Quite appropriate, Less appropriate, Not appropriate	4 3 2 1
6	The existence of a conducive learning environment. Individual motives include doing something, such as studying well.	Very appropriate, Quite appropriate, Less appropriate, Not appropriate	4 3 2 1
Maximum Score			24

Description: Value = $\frac{\text{Score obtained}}{\text{Maximum score}}$ x 100%

2.8 Data Analysis Techniques

The data analysis technique used in this study is a quantitative descriptive analysis. This technique involves testing and analyzing data by calculating numerical values to test the hypothesis. To obtain data on the influence of Quizizz-based learning technology on student learning motivation in Grade VII Social Studies subjects at SMP Negeri 1 Southeast Aceh, the following steps were carried out:

a. Determining the score or value of each student.
b. Calculating students' grades and their respective grade percentages based on the predetermined assessment criteria.

Table 3. Categories and Percentage of Values

Value Range	Letter	Criteria
80-100	A	Very good
66-79	B	Good
56-65	C	Enough
40-55	D	Not enough
<39	E	Very less

c. Calculating the mean or average value of student scores to determine the general level of learning motivation.
d. Applying the t-test formula as an inferential statistical analysis to examine whether there is a significant difference between the learning motivation of students using Quizizz-based learning technology and those who do not.
e. Hypothesis Testing

   To test this hypothesis, it is done by comparing the price of t_{count} with t_{table} with a confidence level of α = 0.05% with the provision that if $t_{count} > t_{table,}$ then Ha is accepted with the understanding that there is an Influence of Quizizz- Based Learning Technology on the Learning Motivation of Class VII Students in Social Studies Subjects at SMP 1 Southeast Aceh. If $t_{count} < t_{table.}$ Then Ha is rejected and Ho is accepted with the understanding that there is no influence of Quizizz-based learning technology on the learning motivation of class VII students in social studies subjects at SMP 1 Southeast Aceh.

.

3. RESULTS AND DISCUSSION

3.1 RESULT

This study used a One-Group Pretest-Posttest Design to analyze students' learning motivation before and after receiving treatment using Quizizz-based learning technology. The subjects were seventh-grade students at SMP Negeri 1 Aceh Tenggara, consisting of Class VIIA (experimental class) with 19 students and Class VIIB (control class) with 20 students.

Before implementing the treatment, the researcher administered a pre-test to measure students' learning motivation in Social Sciences (IPS). This pre-test provided baseline data regarding students' motivation levels before using Quizizz.

After completing the pre-test, the researcher implemented technology-based learning using Quizizz. The learning activities began with the teacher's explanation of the

material, followed by students accessing Quizizz on their personal devices or school facilities.

Quizizz functioned as an interactive quiz platform containing questions aligned with the Social Sciences material. Students participated in the quizzes live and in real-time, with points and rankings displayed instantly to increase engagement, enthusiasm, and healthy competition. During the activity, teachers monitored students' performances and provided immediate feedback.

At the end of the treatment, the researcher administered a post-test using the same instrument as the pre-test to measure changes in learning motivation. By comparing pre-test and post-test results, the researcher assessed the effectiveness of Quizizz-based learning technology in enhancing students' motivation.

3.1.1 Student Learning Motivation Scores Without Using Quizizz-Based Learning Technology (Control Class)

a. Final Score Calculation

Students' final scores were calculated using:

$$Value = \frac{\text{Score obtained}}{\text{Maximum score}} x100 \quad (1)$$

For example, a Class VIIB student with initials FS and attendance number 12 obtained a raw score 12. Therefore:

Final Score = (12/24) x 100 = 50

The same calculation is performed on the following attendance number, thus obtaining the final value of the following control class.

b. Mean (Average) Score Calculation

After the students' scores are determined, the scores are added up to get the mean. In this case, the researcher formulates:

$$Mean = \frac{Total\ Scores}{\text{Number of Students}} \quad (2)$$

$$Mean = \frac{1{,}221}{20}$$

Mean = 61.05

Hence, the average motivation score for Class VIIB students without Quizizz-based technology was 61.05.

c. Standard Deviation Calculation

$$SD = \frac{\sqrt{(X^2)}}{N}$$

$$SD = \frac{\sqrt{75.955}}{20}$$

SD = 13.77

So the standard deviation obtained is 13.77. To see the assessment categories produced by students, the values are entered in the following table:

Table 4. Category and Percentage Value

No.	Value Range	Amount	Percentage	Information
1.	80-100	-	-	Very good
2.	66-79	5	25 %	Good
3.	56-65	9	45 %	Enough
4.	40-55	6	30 %	Not enough
5.	<39	-	-	Very less

3.1.2 Student Learning Motivation Scores Using Quizizz-Based Learning Technology (Experimental Class)

a. Final Value

The student's final grade is obtained using the following formula:

$$\text{Value} = \frac{\text{Score obtained}}{\text{Maximum score)l}} \text{ x } 100 \quad (3)$$

With the following calculation example:

A class VIIA student named FA with attendance number 6 obtained a raw score 23.

So the final value = $\frac{23}{24}$x 100 = 96

The same calculation is carried out on the following attendance number to obtain the final value of the following experimental class.

b. Mean (Average) Score Calculation

After the students' scores are determined, the scores are added up to get the mean. In this case, the researcher formulates:

$$\text{Mean} = \frac{\text{Total Scores}}{\text{Number of Students}} \quad (4)$$

$$\text{Mean} = \frac{1.725}{19}$$

Mean = 90.78

Based on the calculations above, the average score of class VII A students can be seen. At SMP 1 Southeast Aceh, the Student Learning Motivation Using Quizizz - Based Learning Technology is 90.78.

c. Standard Deviation Calculation

$$SD = \frac{\sqrt{(X^2)}}{N}$$

$$SD = \frac{\sqrt{\mathbf{150.035}}}{19}$$

SD = 20.38

So the standard deviation obtained is 20.38.

Table 5. Category and Percentage Value

No.	Value Range	Amount	Percentage	Category
1.	80-100	18	98%	Very good
2.	66-79	1	2 %	Good
3.	56-65	-	-	Enough
4.	40-55	-	-	Not enough
5.	<39	-	-	Very less

Table 5 above shows the distribution of student grades and their categories. Based on Table 5, 98% of students' grades are in the good category, while the remainder are in the good category.

3.1.3 Data Analysis Prerequisite Tests

a. Normality Test

The normality test is utilized to determine whether or not the data is normally distributed. Kolmogorov-Smirnov (KS) is the data normalcy test used in this investigation. The data are not normally distributed if the significance is less than 0.05, and they are normally distributed if the significance is greater than 0.05. Finding the Unstandardized Residual value is a prerequisite for performing a normalcy test.

Below are the results of the normality test using the Kolmogorov-Smirnov test with the help of the SPSS program.

One-Sample Kolmogorov-Smirnov Test

			Unstandardized Residual
N			19
Normal Parameters[a,b]	Mean		.0000000
	Std. Deviation		7.64395527
Most Extreme Differences	Absolute		.147
	Positive		.147
	Negative		-.102
Test Statistic			.147
Asymp. Sig. (2-tailed)[c]			.200[d]
Monte Carlo Sig. (2-tailed)[e]	Sig.		.329
	99% Confidence Interval	Lower Bound	.317
		Upper Bound	.341

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

e. Lilliefors' method based on 10000 Monte Carlo samples with starting seed 926214481.

Figure 1. SPSS Output Normality Test Results

IBM Statistics Test Results

Test Criteria:

1. The data is regularly distributed if the significance value is greater than 0.05.
2. The data is not regularly distributed if the significance value is less than 0.05.

It is evident from the above table's One-Sample Kolmogorov Smirnov test findings that the Asymp. Sig (2-tailed) value is 0.200>0.05. Therefore, it may be said that the first test criterion is satisfied, indicating that the normality test results are normally distributed.

b. Homogeneity Test

The homogeneity test determines whether the data comes from a population with the same variance. This is a stage in the statistical testing procedure. If the significance is less than 0.05, the data is not homogeneous; if it is larger than 0.05, it is homogeneous. Below are the findings of the homogeneity test conducted with the SPSS program.

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
HASIL BELAJAR	Based on Mean	.043	1	37	.837
	Based on Median	.045	1	37	.833
	Based on Median and with adjusted df	.045	1	36.984	.833
	Based on trimmed mean	.041	1	37	.840

Figure 2. SPSS Output of Homogeneity Test Results

IBM Statistics Test Results

Test:

1. The data is homogeneous if the significance value based on the mean is > 0.05.
2. The data is not homogeneous if the significance value is based on the mean < 0.05.

The SPSS output test results in the following table yielded a significance value of 0.837. Therefore, the mean > 0.05 (0.837> 0.05) indicates significance. Therefore, it may be said that the test result data is homogeneous since the first test criterion is satisfied.

3.1.4 The Influence of Quizizz-Based Learning Technology on Student Learning Motivation

After calculating each variable's scores and final values, the next step is to look for the Influence of Quizizz Based Learning Technology. In this case, the researcher compared the results of Student Learning Motivation. In the Social Studies subject, the Influence of Quizizz-Based Learning Technology on the Results of Student Learning Motivation, without using the influence of Quizizz-based learning technology.

Hypothesis Testing

Based on the hypothesis test results, the calculated t value was 5.3693. The t table value was then determined to be 1.684 after the calculated t value and the table t value were compared at a significance level of α = 5% with Db = n 1 + n 2 -2 = 49. As a result, the hypothesis that Quizizz-Based Learning Technology impacts Social Studies Subjects on the Learning Motivation of Class VII Students in Social Studies Subjects at SMP 1 Southeast Aceh is accepted. The computed t > t table is 5.3693> 1.684. It is determined that the hypothesis has been validated.

3.2 Discussion

Based on the hypothesis test calculation results, this can be proven based on calculations, and it is known that learning motivation using Quizizz Based Learning Technology in Social Studies subjects gets a total score of 1,725, so that an average score

of 90.78 is obtained, which is in the very good category. Details of students getting a score of 66-79 are categorized as good, as 1 person (2%), and students who get a score of 80-100 are categorized as very good, as 18 people (98%). While the motivation of students to learn without using Quizizz Based Learning Technology in Social Studies subjects gets a total score of 1,221, resulting in an average score of 61.05, which is in the sufficient category. Details of students who obtained a score of 40-55 were categorized as lacking, as many as 6 people (30%), students who obtained a score of 56-65 were categorized as sufficient, as many as 9 people (45%), students who obtained a score of 66-79 were categorized as good, as many as 5 people (25%).

Using Quizizz -Based Learning Technology in Social Studies Subjects shows that students' learning motivation increases. At the same time, students who have been taught without using Quizizz Based Learning Technology in Social Studies Subjects seem to have great difficulty understanding the lesson and are not motivated to learn.

Previous research has demonstrated that using interactive digital media in learning positively impacts student motivation and learning outcomes across various subjects and educational levels. One of the most effective platforms is Quizizz, a gamified learning tool that offers interactive quizzes in a fun and competitive format. Several studies have shown that integrating Quizizz into learning enhances student engagement, learning interest, and cognitive performance.

A study by Elvira Maulidya, Kiki Aryaningrum, and Ali Fakhrudin (2023) conducted at SD Muhammadiyah 16 Palembang aimed to investigate the differences in fourth-grade students' interest in learning mathematics before and after using Quizizz-based gamification. The research addressed the problem of low learning interest due to using unengaging online learning media and conventional teaching methods, such as lectures and individual assignments. Using a quantitative experimental approach and involving all fourth-grade students as participants, the study found that the *t-count* value of 6.104 was significantly higher than the *t-table* value of 2.000 at a 5% significance level, indicating a significant difference in learning interest between the experimental and control groups. The N-Gain score in the experimental class was 0.77 (high category), compared to 0.50 in the control group. These results confirmed that Quizizz-based gamification effectively increased students' interest in mathematics.

In a related study, Nafisa Risma Zuhara, Kasmadi Imam Supardi, and Endang Susilaningsih explored the effects of a Problem-Based Learning model integrated with Quizizz assessments on students' cognitive learning outcomes. The study was motivated by the continued use of conventional teaching methods in science classes, which rely heavily on lectures, note-taking, and memorization—approaches that often fail to optimize student understanding. Using a quasi-experimental approach with a pretest-posttest control group design, the researchers found that students in the experimental group who learned through the Problem-Based Learning model with Quizizz showed significantly better cognitive outcomes than those in the control group. This indicates that combining student-centered instructional strategies with digital assessments can result in more effective learning[26].

Another study by Vina Anggraini and Vera Yuli Erviana addressed low motivation and learning outcomes in sixth-grade science classes due to the lack of integration of

interactive learning media and limited adaptation to modern educational demands. This quantitative research used an experimental design, measuring motivation through questionnaires and learning outcomes through pre-test and post-test evaluations. The study involved 62 students from two classes (A and C). The analysis using *independent sample t-tests* via SPSS 26 showed that students in the experimental group experienced a notable increase in motivation scores from 72.66 to 78.53 after using Quizizz, outperforming the control group. Learning outcomes improved from an average pre-test score of 68.6 to a post-test average of 74.7. The study concluded that Quizizz had a significant positive effect on both motivation and learning outcomes.[27]

These three studies support the conclusion that using digital, gamified platforms like Quizizz can enhance the quality of education in both affective (motivation and interest) and cognitive (achievement) domains. Although previous research has primarily focused on science and mathematics in elementary schools, it shares a common concern regarding the overuse of conventional teaching methods that leave students disengaged and passive.

Therefore, the current study titled *"Impact of Quizizz-Based Learning on Student Motivation in Social Studies"* aims to fill the gap by specifically examining the effect of Quizizz on students' motivation in the context of social studies (IPS)—a subject often perceived as theoretical and less engaging. Through a quantitative approach and experimental method, this study seeks to provide empirical evidence that digital learning innovations such as Quizizz are applicable in STEM subjects and highly effective in enhancing student motivation in social subjects. This research expands the scope of educational technology integration. It offers practical recommendations for teachers, curriculum planners, and policymakers to adopt interactive digital tools more actively in the classroom to foster student engagement and improve learning outcomes comprehensively and sustainably.

4. CONCLUSION

Several important conclusions can be drawn based on the data analysis conducted in this study. Quizizz-based learning technology in social studies lessons has proven to significantly enhance students' learning motivation. This is evident from the average score of the experimental group, which reached 90.78, placing student motivation in the "very good" category. Among the 19 students in the experimental class, 18 students (98%) scored in the 80–100 range, categorized as very good, while only one student (2%) scored in the good category (66–79). These results clearly indicate that integrating Quizizz into the learning process makes learning more engaging and encourages students to participate actively and maintain their focus throughout the lesson.

In contrast, students taught without using Quizizz-based learning technology demonstrated considerably lower motivation, with an average score of 61.05. The distribution of scores shows that 6 students (30%) fell into the "less" category (40–55), 9 students (45%) were in the "sufficient" category (56–65), and only 5 students (25%) reached the "good" category (66–79). None of the students in this group reached the "very

good" category, highlighting a clear gap in engagement and motivation between students exposed to interactive digital tools and those taught through conventional methods.

Furthermore, the hypothesis testing using an independent sample t-test supports the effectiveness of the Quizizz-based approach. The calculated t-value was 5.3693, significantly higher than the t-table value of 1.684 at the 5% significance level with 37 degrees of freedom. This indicates that the null hypothesis is rejected and the alternative hypothesis is accepted, confirming that Quizizz-based learning technology significantly influences students' learning motivation in social studies.

These findings carry important implications for educational practice. Teachers are strongly encouraged to adopt interactive digital tools like Quizizz to enhance student engagement and motivation, especially in subjects like social studies that are often perceived as abstract or less engaging. For curriculum planners and education policymakers, this study supports the integration of gamified and technology-based learning strategies into the national curriculum to meet the needs of modern learners who are increasingly comfortable with digital environments.

However, this study is not without limitations. The sample size was relatively small and limited to a single school in Southeast Aceh, which may affect the generalizability of the findings. Future research should be conducted with a larger and more diverse sample, across various subjects and educational levels, further to explore the impact of Quizizz and similar platforms. Additionally, longitudinal studies may help assess the long-term effects of gamified learning tools on motivation and academic performance.

In conclusion, Quizizz-based learning significantly increased students' motivation in social studies. Teachers should integrate interactive digital tools into their instructional strategies to foster higher levels of student engagement. While the results are promising, broader and deeper research is needed to reinforce these findings and support policy-level educational reforms in the digital age.

REFERENCES

[1] V. Abdillah, R., Kuncoro, A., Erlangga, F., & Ramadhan, "Pemanfaatan Aplikasi Kahoot! dan Quizizz Sebagai Media Pembelajaran Interaktif Berbasis Gamifikasi," *Jurnal Pendidikan Sains dan Komputer*, vol. 1, no. 9, pp. 92–102, 2022.

[2] S. Pratiwi, "Pendidikan Gizi di Pesantren: Meningkatkan Kesadaran Santri," *Jurnal Ilmu Gizi*, vol. 10, no. 2, pp. 112–120, 2021.

[3] Eflania Jedina *et al.*, "Kesadaran Mahasiswa Universitas Katolik Widya Mandira Kupang Kampus Merdeka dalam Membuang Sampah pada Tempatanya," *JPGENUS: Jurnal Pendidikan Generasi Nusantara*, vol. 1, no. 2, pp. 135–140, 2024, doi: 10.61787/cs2pye35.

[4] C. Wijaya and A. Aida Ritonga, "Implementasi Kebijakan Pengembangan Kurikulum di Madrasah Aliyah Negeri 2 Model Medan," *Edukasi Islami: Jurnal Pendidikan Islam*, vol. 12, no. 1, pp. 1103–1116, 2023, doi: 10.30868/ei.v12i01.4571.

[5] G. R. Pasaribu, S. H. Daulay, and Z. Saragih, "Implementation Picture and Picture Strategy To Increase Students' Ability in Vocabulary At Man 3 Medan," *PRIMACY Journal of English Education and Literacy*, vol. 2, no. 1, pp. 12–20, 2024, doi: 10.33592/primacy.v2i1.3439.

[6] R. Adawiyah, "Penerapan Quizizz: Inovasi Pendidikan Di Era Digital Dalam Meningkatkan Keterlibatan Dan Pembelajaran Aktif Siswa," *Academia*, 2023.

[7] Adi, "Pengaruh Bimbingan Konseling terhadap Motivasi Belajar Siswa SMA Negeri 1 Purworejo," *Prosiding Seminar Nasional Bimbingan dan Konseling Universitas Ahmad Dahlan*, vol. 1, no. 1, pp. 1–9, 2021.

[8] G. R. Pasaribu, "Implementing Google Classroom in English Learning At Stit Al-Ittihadiyah Labuhanbatu Utara," *E-Link Journal*, vol. 8, no. 2, p. 99, 2021, doi: 10.30736/ej.v8i2.483.

[9] I. R. Julianto and A. S. Umami, "Peranan Guru dalam Pengimplementasian Profil Pelajar Pancasila dan Implikasinya pada Pembelajaran Bahasa Indonesia," *Prosiding Samasta: Seminar Nasional Bahasa dan Sastra Indonesia*, pp. 208–2016, 2023.

[10] Wasono, *Strategi Dalam Meningkatkan Semangat Belajar Siswa*. Bogor: Guepedia, Guemedia Group, 2021.

[11] E. Erna, *Permainan dalam Pembelajaran sebagai Motivasi Belaar di Era New Normal*. Lombok: Yayasan Insan Cendekia Indonesia Raya., 2022.

[12] G. R. Pasaribu, R. Arfianty, and J. Bunce, "Exploring Early Childhood Linguistic Intelligence Through English Language Learning Methods," *Innovations in Language Education and Literature*, vol. 1, no. 2, pp. 68–73, 2024, doi: 10.31605/ilere.v1i2.4337.

[13] R. M. Vidia, D. Tiirtheshvara, G. R. Dantes, and G. Indrawan, "The Impact of the Quizizz Application on Students ' Self- Efficacy," vol. 10, no. 12, pp. 11249–11256, 2024, doi: 10.29303/jppipa.v10i12.9456.

[14] G. R. Pasaribu, S. H. Daulay, and Z. Saragih, "The implementation of ICT in teaching English by the teacher of MTS Swasta Al-Amin," *English Language and Education Spectrum*, vol. 3, no. 2, pp. 47–60, 2023, doi: 10.53416/electrum.v3i2.146.

[15] N. S. Utara, G. R. Pasaribu, T. S. Sinar, T. T. Zein, and R. Sofyan, "Lecturer ' s Speech Acts in Learning English Language Universitas Islam," in *TALENTA Conference Series*, 2022. doi: 10.32734/lwsa.v7i2.2088.

[16] M. P. Susanto Ahmad, *Bimbingan dan Konseling di Sekolah : Konsep, Teori, dan Aplikasinya. Kencana*. Kencana, 2018.

[17] A. Anyan, A. E. Setyawan, and D. Suryani, "Pengembangan Media Pembelajaran Interaktif Berbasis Quizizz Untuk Meningkatkan Motivasi Belajar Siswa SMK," *VOX EDUKASI: Jurnal Ilmiah Ilmu Pendidikan*, vol. 15, no. 1, pp. 68–78, May 2024, doi: 10.31932/ve.v15i1.3322.

[18] Hanifia Sugira and C. Amelia, "Upaya Meningkatkan Membaca Cepat Siswa Melalui Metode SAS (Structural Analytic Syntactic) Kelas II SDN 3 Kutacane Perapat Timur," *Genderang Asa: Journal of Primary Education*, vol. 3, no. 2, pp. 60–75, Dec. 2022, doi: 10.47766/ga.v3i2.740.

[19] G. Rahis Pasaribu and U. Sidabutar, "Teacher ' s Strategy in Online Learning in English Courses at SMP Al-Afkari," *Journal of Literature and Education*, vol. 1, pp. 51–56, 2023.

[20] R. Adawiyah, "Penerapan Quizizz: Inovasi Pendidikan Di Era Digital Dalam Meningkatkan Keterlibatan Dan Pembelajaran Aktif Siswa," *Academia*, 2023.

[21] C. Pranoto, "Penggunaan Media Digital Untuk Meningkatkan Hasil Belajar Ips Siswa Kelas V Di Sdn Mojorejo 01 Kecamatan Junrejo Batu," *Jurnal Pendidikan Taman Widya …*, vol. 1, no. 3, pp. 654–677, 2022.

[22] A. Anyan, A. E. Setyawan, and D. Suryani, "Pengembangan Media Pembelajaran Interaktif Berbasis Quizizz Untuk Meningkatkan Motivasi Belajar Siswa Smk," *VOX EDUKASI: Jurnal Ilmiah Ilmu Pendidikan*, vol. 15, no. 1, pp. 68–78, May 2024, doi: 10.31932/ve.v15i1.3322.

[23] A. Hartono, "Pengaruh Lingkungan Belajar Terhadap Motivasi Santri di Pesantren," *Jurnal Pendidikan Islam*, vol. 5, no. 1, pp. 45–60, 2019.

[24] D. Abdul Aziz, "Pengenalan media digital pada masa pandemi di yayasan domyadhu (dompet yatim dhuafa)," *Kreatifitas Mahasiswa Informatika*, vol. 2, pp. 534–537, 2023.

[25] Sugiyono, "Metode Penelitian Kualitatif Dan R&D," *Alfabeta*, p. 222, 2010.

[26] N. R. Zuhara, K. I. Supardi, and E. Susilaningsih, "The Effect of The Problem Based Learning Model Using Quizizz Evaluation o n Student ' s Cognitive Science Learning Outcomes in Elementary School," vol. 9, no. 4, pp. 364–376, 2020.

[27] V. Y. Erviana, "The Use of Quizizz Application to Improve Motivation and Learning Outcomes in Science Subjects of 6th-Grade Students," vol. 2, no. 03, pp. 159–169, doi: 10.56741/ijlree.v2i03.406.