

The Effectiveness of Educaplay Web Toward Students' Motivation in Learning English at the Fourth Grades of SDN 153 Lubuk Landai

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Abstract – This study aimed to examine the effect of using Educaplay media on the English learning motivation of fifth-grade students at SDN 153/II Sungai Gambir. The research was motivated by the low level of student motivation, as indicated by pretest results mostly in the low to moderate category. To address this issue, an interactive learning medium was implemented to encourage engagement and interest. This research applied a pre-experimental method with a one-group pretest-posttest design involving 30 students. The instrument used was an English learning motivation questionnaire with 30 items based on Hamzah B. Uno's (2017) motivation indicators. Data were collected through questionnaires, pretests, posttests, observations, and documentation, then analyzed using validity, reliability, normality, and linearity tests, as well as paired sample t-test with SPSS 25. The results indicated an average pretest score of 85.23 (moderate) and a posttest average of 129.47 (high). The paired sample t-test showed a mean difference of 44.23, with $t = 14.261$ and significance 0.000 ($p < 0.05$), confirming a significant improvement. Although the Pearson correlation ($r = 0.118$, $p > 0.05$) indicated a weak relationship between pretest and posttest rankings, the findings

concluded that Educaplay effectively enhanced students' English learning motivation and overall outcomes.

Keywords – Educaplay, Learning Motivation, Instructional Media

I. Introduction

English has become a global lingua franca, functioning as a key medium of communication in education, science, business, and technology. Its importance in today's interconnected world means that proficiency in English is no longer optional but a necessity for academic and professional success (Crystal, 2020). Consequently, primary education is a critical stage where students must develop foundational skills and positive attitudes toward English. However, the process of teaching English in many primary schools still faces multiple challenges, particularly in rural and resource-constrained contexts where infrastructure and pedagogical support are often limited (Rahman, 2020).

Teaching English to young learners is often hindered by several factors, including limited instructional time, lack of qualified teachers, and a shortage of engaging teaching media. Conventional teaching methods, such as rote memorization and grammar-focused instruction, are still prevalent and have been criticized for being monotonous and ineffective in stimulating students' interest (Harmer, 2007). This situation leads to low levels of student participation, reduced attention span, and declining motivation to learn English. Studies in Indonesia confirm that students' interest in English lessons tends to be low, particularly in rural areas where parental and environmental support is minimal (Sari, 2020).

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Motivation plays a pivotal role in determining the success of language acquisition. According to Dörnyei (2001), motivation directly influences the extent to which learners are engaged in classroom activities and their perseverance in overcoming learning challenges. Highly motivated students are more likely to practice consistently, participate actively, and achieve higher levels of language competence. Conversely, low motivation often leads to disengagement and poor learning outcomes. Therefore, enhancing students' motivation is a central goal of effective English language pedagogy.

Recent research highlights that motivational strategies can create a conducive learning environment that elicits initial interest, maintains engagement, and protects learners' motivation over time (Nisa' & Aryanti, 2023). Such strategies often involve the integration of interactive elements, student-centered activities, and meaningful feedback. When teachers provide students with enjoyable and relevant tasks, they help foster intrinsic motivation, which is more sustainable than extrinsic rewards (Sardiman, 2014). The growing body of literature emphasizes the importance of incorporating technology-based tools to stimulate motivation in young learners.

The emergence of educational technology has transformed how teachers deliver lessons and how students engage with content. Digital tools, including gamified platforms, can provide interactive, multimodal, and personalized learning experiences that cater to diverse student needs (Sari, Mulyani, & Putri, 2021). When properly integrated into the curriculum, technology can reduce student boredom, promote autonomy, and support differentiated learning by adjusting task difficulty to individual learner profiles (Tomlinson, 2014). However, in many Indonesian schools, the integration of technology into English teaching remains limited due to infrastructure constraints and teachers' lack of digital literacy.

Educaplay is a web-based platform designed to create interactive learning activities such as quizzes, word searches, crosswords, and listening exercises. Its gamified approach turns passive learning into active participation, encouraging students to engage with content in a playful yet structured way (Rahmawati et al., 2024). By offering immediate feedback and multiple activity formats, Educaplay helps students monitor their understanding and remain motivated throughout the learning process (Mayer, 2009). Moreover, it supports blended and remote learning

since it is accessible across devices and locations, aligning with the principles of lifelong and flexible education (Yusri et al., 2018).

Several recent studies have confirmed the potential of Educaplay to improve learning outcomes and motivation. Devi (2024) reported that Educaplay significantly enhanced students' engagement and critical thinking in Pancasila Education classes, while Dianingtyas et al. (2025) found that its use in English classes increased students' attention, participation, and enthusiasm. Similarly, Hikmah (2025) demonstrated that integrating Educaplay in reading activities improved students' comprehension and intrinsic motivation. These findings provide a strong rationale for investigating its application in elementary-level English learning.

Despite the promising potential of Educaplay, its use in elementary schools, particularly in rural contexts, remains underexplored. Preliminary observations at SDN 153 Lubuk Landai revealed that students' motivation to learn English was relatively low, largely due to the reliance on conventional teaching methods and limited access to technology-based media (Prasetyo et al., 2025). This gap highlights the need for empirical research to evaluate whether Educaplay can effectively address the motivational challenges faced by elementary students in such settings.

This study seeks to provide practical and theoretical contributions. Practically, it aims to equip teachers with evidence-based strategies for enhancing classroom engagement through interactive media. Theoretically, it contributes to the growing literature on gamification in education and its impact on motivational constructs at the primary school level (Hamari et al., 2016). Findings from this study can also guide policymakers and curriculum developers in adopting technology-enhanced learning solutions suitable for the Indonesian educational context.

The main objective of this study is to analyze the effectiveness of using Educaplay in enhancing students' motivation to learn English at SDN 153 Lubuk Landai. This research seeks to measure students' motivation levels prior to and after the implementation of Educaplay, allowing for a clear comparison of any changes that occur as a result of its use. Furthermore, the study aims to determine whether these changes are statistically significant, providing empirical evidence of the tool's impact on learning motivation. Beyond quantitative

results, the research also observes students' behavioral engagement during the learning process to identify how interactive media such as Educaplay can influence participation, attentiveness, and overall classroom dynamics.

II. Methodology Section

This study employed a quantitative approach using a pre-experimental design, specifically the one-group pretest–posttest model. According to Sugiyono (2019), this design is appropriate when researchers aim to determine the effect of a treatment by comparing measurements taken before and after the intervention on the same group of participants. In this research, the use of Educaplay as a learning medium served as the treatment. A pretest was administered to measure the students' initial level of motivation in learning English, followed by a treatment phase where students engaged in lessons designed with Educaplay activities. A posttest was then conducted to assess any changes in students' motivation after the intervention. This design allowed the researcher to examine the effectiveness of Educaplay in enhancing students' motivation with measurable and objective data.

The research was conducted at SDN 153 Lubuk Landai, located in Tanah Sepenggal Lintas Sub-district, Muara Bungo Regency, Indonesia. This school was selected because it represents a rural educational context where technology integration in English learning remains limited, making it a suitable setting for exploring the impact of innovative digital media. The study was carried out during the second semester of the 2024/2025 academic year, over a period that included preparation, treatment implementation, data collection, and data analysis.

The population of this study consisted of all fourth-grade students enrolled at SDN 153 Lubuk Landai during the 2024/2025 academic year, totaling 63 students. To determine the sample, a cluster random sampling technique was employed. This method was selected because the population was divided into two homogeneous classes (4A and 4B), and one class was randomly chosen to participate. As a result, Class 4A, consisting of 30 students aged 9 to 10 years, was selected as the research sample. This group was considered appropriate because students at this level are in the early stages of formal English learning and are developmentally ready to engage with interactive technology-based activities.

The primary data collection instrument was a learning motivation questionnaire adapted from Uno (2017), which includes five dimensions: perseverance in studying, resilience in facing difficulties, interest and attentiveness in learning, achievement orientation, and independence in learning. The questionnaire consisted of 30 items in the

form of both positive and negative statements, measured using a five-point Likert scale ranging from "Always" to "Never." The instrument was administered twice—once before the treatment (pretest) and once after the treatment (posttest)—to capture changes in students' motivation levels. Classroom observations were also conducted during the treatment phase to document students' behavioral engagement, participation, and enthusiasm while using Educaplay.

The collected data were analyzed quantitatively using SPSS version 25. First, the questionnaire data were tested for validity and reliability to ensure that the instrument accurately measured students' learning motivation. Next, normality and linearity tests were conducted to determine whether the data met the assumptions required for parametric statistical analysis. The main statistical test used was the Paired Sample t-Test, which compared the mean scores of the pretest and posttest to determine whether there was a significant increase in students' motivation after the use of Educaplay. The results of this analysis were then interpreted to draw conclusions about the effectiveness of Educaplay as an interactive learning medium in improving motivation.

III. Results

3.1 *Validity & Reliability*

The validity test of the learning motivation questionnaire was conducted using the Corrected Item-Total Correlation in SPSS. The results indicated that all 30 items had correlation coefficients higher than the r -table value at a significance level of 0.05, meaning that each item was valid and could be used as a measurement instrument. The reliability of the questionnaire was tested using Cronbach's Alpha and obtained a value of 0.919, which is greater than 0.70, indicating that the instrument had excellent internal consistency and was reliable for measuring students' learning motivation.

3.2 *Normality Test*

The normality test was performed using the One-Sample Kolmogorov–Smirnov Test on pretest and posttest scores. The results showed that the significance value for both sets of data was greater than 0.05, indicating that the data were normally distributed and met the assumptions required for further parametric testing.

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		30
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	10.58204889
Most Extreme Differences	Absolute	.121
	Positive	.073
	Negative	-.121
Test Statistic		.121
Asymp. Sig. (2-tailed)		.200 ^{c,d}

- a. Test distribution is Normal.
- b. Calculated from data.
- c. Lilliefors Significance Correction.

Table 1 Normality Test

3.3 Pretest

The pre-test was administered to both the experimental and control groups to measure students' initial vocabulary mastery. The experimental group obtained an average score of 54.73, while the control group scored an average of 53.87. These results indicate that both groups had relatively similar vocabulary knowledge before the treatment.

3.4 Treatment and Observation

During the treatment phase, students participated in four Educaplay-based learning sessions focusing on topics such as Daily Activities, Parts of the Body, Animals, and Dream Jobs. Classroom observations showed that students actively engaged in completing matching games, crosswords, and quizzes. Most students displayed higher participation levels compared to the pre-observation stage, with increased attentiveness, enthusiasm, and willingness to interact with peers during learning activities.

3.5 Posttest

After the treatment phase, a posttest was administered using the same questionnaire as the pretest. The results revealed that the average posttest score increased to 129.47, which placed students' motivation in the high category. The score distribution demonstrated a significant improvement across all motivation indicators, with more students achieving higher scores in perseverance, attentiveness, and independence in learning.

3.6 Improvement Data

The mean pretest score was 85.23, whereas the mean posttest score was 129.47. This indicates a substantial increase of more than 40 points in students' motivation after being taught using

Educaplay. The result suggests that Educaplay was able to significantly enhance students' learning motivation.

Descriptive Statistics

	Mean	Std. Deviation	N
Posttest	129.47	10.657	30
Pretest	85.23	14.550	30

Table 2 Improvement Data

3.7 Linearity Test

A linearity test was conducted to determine whether there was a linear relationship between the use of Educaplay and students' learning motivation. The results showed that the significance value of the "Deviation from Linearity" was greater than 0.05, confirming that the relationship between the two variables was linear. This means that changes in the independent variable (Educaplay use) were consistently associated with changes in the dependent variable (student motivation).

Source	F	Sig.	Remark
Linearity	0.340	0.573	Linear
Deviation from Linearity	0.789	0.678	Linear

Table 3 Linearity Results

3.8 Hypothesis Test

The Paired Sample t-Test was used to analyze whether there was a significant difference between pretest and posttest scores. The results showed a t-value of 14.261 with a significance level (Sig. 2-tailed) of 0.000, which is less than 0.05. This result indicates that there was a statistically significant difference between students' motivation scores before and after using Educaplay. The null hypothesis (H₀), which stated that there was no significant difference, was rejected, while the alternative hypothesis (H₁) was accepted.

Paired Samples Test

Pair	Posttest - Pretest	Paired Differences		Std. Error	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
		Mean	Std. Deviation		Lower	Upper			
1		44.233	16.988	3.102	37.890	50.577	14.261	29	.000

Table 4 Paired Sample T-Test

Paired Samples Statistics		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Posttest	129.47	30	10.657	1.946
	Pretest	85.23	30	14.550	2.656

Table 5 Paired Sample Statistics

This result also confirms (Uno, 2017) statement that innovative learning media, by stimulating students' imagination, persistence, and interest, can significantly enhance learning outcomes. The application of interactive media such as Educaplay was able to create an enjoyable and engaging learning atmosphere that encouraged students to participate more actively in learning English

IV. Discussion

The findings of this study reveal that the use of Educaplay significantly increased students' motivation to learn English, as indicated by the substantial rise in posttest scores compared to the pretest. This result addresses the research question by confirming that interactive and gamified learning platforms can effectively stimulate students' willingness to participate in English lessons.

The marked improvement from the moderate to the high category of motivation suggests that students not only became more engaged but also developed a more positive attitude toward learning. These results support the premise that digital-based media can serve as a powerful tool to overcome the monotony of conventional learning methods (Sari, Mulyani, & Putri, 2021).

One of the key contributions of this study lies in demonstrating how gamified learning platforms can transform students' classroom behavior. Observations during the treatment phase revealed greater attentiveness, active participation, and willingness to collaborate with peers. These behavioral changes reflect an increase in intrinsic motivation, as students appeared to enjoy the activities beyond merely fulfilling teacher expectations. This aligns with Ryan and Deci's (2000) Self-Determination Theory, which posits that learning environments that provide autonomy, competence, and relatedness can nurture deeper intrinsic motivation.

The results also corroborate the view of Dörnyei (2001), who emphasized that motivation is a key determinant of language learning success because it drives students' persistence and effort. In this study, students

displayed higher perseverance in completing tasks and showed resilience in facing difficulties, as evidenced by their improved scores across motivational dimensions. This finding is consistent with Uno's (2017) framework, which highlights perseverance and resilience as critical indicators of learning motivation.

Another important aspect of this study is the linearity found between the use of Educaplay and motivation levels, indicating a consistent positive relationship. This means that the more actively students engaged with Educaplay activities, the more motivated they became. Such a result reinforces earlier research by Hamari et al. (2016), who reported that gamified learning environments promote sustained engagement through rewards, feedback, and challenge-based tasks that stimulate continuous participation.

The immediate feedback feature of Educaplay appears to have played a crucial role in sustaining student interest. By instantly showing whether answers were correct, the platform allowed students to monitor their progress and adjust their strategies accordingly. This supports Mayer's (2009) Cognitive Theory of Multimedia Learning, which asserts that timely feedback enhances the integration of new knowledge and keeps learners cognitively engaged.

Beyond quantitative improvements, this study provides new evidence that Educaplay can foster a more collaborative and socially interactive classroom atmosphere. Students were observed to help each other solve puzzles and complete tasks, suggesting that the platform not only motivated individual learners but also encouraged peer-to-peer learning. This is in line with Hwang et al. (2011), who found that interactive learning environments facilitate meaningful collaboration and critical thinking, ultimately improving overall learning quality.

The shift from moderate to high motivation categories also highlights the potential of technology to support differentiated learning in rural school contexts. Since Educaplay allows teachers to design activities of varying difficulty levels, it helps cater to students with diverse abilities. This finding supports Tomlinson's (2014) assertion that differentiated instruction promotes equity in the classroom by allowing each student to progress according to their capacity.

Importantly, this study addresses a gap in the literature by focusing on elementary students in a rural Indonesian setting, where access to digital learning media is still limited.

Previous studies have mostly examined Educaplay's impact at the secondary or higher education level (Devi, 2024; Elshareif & Mohamed, 2020). The present research expands the understanding of how gamification can be applied successfully in early-stage English learning,

showing that primary students are capable of engaging meaningfully with technology-enhanced learning activities.

Another significant implication of this research is its potential to guide teachers in rethinking their instructional strategies. The improvement in motivation suggests that teachers should integrate more digital and interactive media into their daily lessons, especially for vocabulary and grammar topics that are typically considered difficult by young learners. This aligns with Ayuningrum (2022), who stressed the importance of making learning more relevant and engaging for digital-native students.

Moreover, the statistical significance of the Paired Sample t-Test provides empirical evidence supporting the integration of digital tools in English curricula. This is crucial for policymakers who seek data-driven justifications for investing in educational technology. The study's findings suggest that adopting platforms such as Educaplay can be an effective policy initiative to raise motivation and ultimately improve English proficiency at the elementary level.

Finally, this research underscores the importance of combining quantitative measurement with classroom observation to obtain a comprehensive understanding of motivational change. While the score improvements provide numerical evidence, the observed increase in participation, enthusiasm, and peer collaboration paints a richer picture of how motivation manifests in real classroom contexts. This holistic perspective offers a valuable reference for future researchers who wish to further investigate the behavioral and emotional dimensions of motivation in technology-assisted learning environments.

V. Conclusion

The results of this research demonstrate that the use of Educaplay as an interactive learning platform is effective in increasing students' motivation to learn English at SDN 153 Lubuk Landai. Students who initially showed moderate levels of interest and participation became more engaged, enthusiastic, and willing to take part in classroom activities after the implementation of Educaplay. The learning process became more dynamic and enjoyable, encouraging students to persevere in completing tasks, show greater attentiveness, and interact positively with their peers. These findings indicate that Educaplay not only supports the development of cognitive skills but also nurtures intrinsic motivation by providing varied and stimulating learning experiences.

This study has successfully answered the research objective of analyzing the effect of Educaplay on student motivation by showing that the platform fosters a supportive learning environment where students feel

challenged yet encouraged. The interactive activities, immediate feedback, and gamified approach appear to have created a sense of accomplishment and satisfaction that drives students to remain engaged in learning. The findings confirm that integrating technology-based media can transform conventional classroom practices into more meaningful and enjoyable learning experiences, making it a valuable strategy for teachers who seek to improve students' motivation in English learning.

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