Implementation of Deep Learning Approach with Blooket in Improving Reading Comprehension at SMKN 3 OKU

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Abstract

This research aimed to determine the effectiveness of the Deep Learning Approach with Blooket in improving the reading comprehension of tenth-grade students at SMK Negeri 3 OKU. Blooket is a gamification platform that engages students through interactive game modes, enabling the Deep Learning Approach to be implemented in a mindful, meaningful, and joyful manner during reading comprehension activities. This study employed a quantitative pre-experimental method with a one-group pretest-posttest design. The sample consisted of 35 students from Class X DPIB 2 selected through purposive sampling. The instrument was a 25-item multiple-choice reading comprehension test. Data were analyzed using the Shapiro-Wilk normality test and the Paired Samples T-test. The results showed that the mean score increased from 49.94 on the pre-test to 77.26 on the post-test. The treatment was effective (Sig. 2-tailed = 0.000 < 0.05), indicating significant improvement in students' reading comprehension and a more active, motivating learning environment.

Keywords: Deep Learning Approach, Blooket, Reading Comprehension

INTRODUCTION

In the context of Indonesia's educational changes under the Kurikulum Merdeka, the deep learning approach has become a teaching method that focuses on thoughtful, meaningful, and enjoyable learning to help EFL students develop critical thinking and a better understanding of the material (Fauziati, 2025). This change addresses long-standing issues in English reading comprehension, especially in vocational high schools, where students have difficulty recognizing main ideas, understanding implied meanings, and dealing with new vocabulary from different cultural backgrounds. Traditional ways of teaching often only cover the basics, which can make students lose interest and continue to struggle with their reading skills. This is shown by how EFL learners have trouble telling important details apart and connecting what they read to what they already know.

In the contemporary technology-driven era, where digital tools permeate every aspect of education, high school students' engagement with English reading comprehension is expected to reach elevated levels. Deep learning transcends rote memorization to foster “mindful, meaningful, and joyful” learning experiences, in which educators co-create authentic tasks that connect new knowledge to real-world applications through digital resources (Fauziati, 2025). This approach is especially potent for reading comprehension, as it leverages visual elements such as interactive graphics, multimedia animations, and immersive simulations to

activate prior knowledge, stimulate higher-order thinking, and sustain student motivation (Wahyuni et al., 2024). Empirical evidence indicates that such visually enriched deep learning strategies enhance cognitive processing, emotional investment, and behavioral engagement, leading to superior text interpretation, retention, and inferential skills among teenagers (Siducat, 2025).

Based on preliminary observation at SMKN 3 OKU, students' English reading comprehension was relatively low. The learning media used in the classroom did not optimally integrate digital technology, which made learning activities less interesting and less effective. The researcher also found low student interest and proficiency in English reading comprehension. During lessons where mobile phones are permitted, intended to support digital learning, students frequently succumb to distractions from social media platforms such as TikTok and Instagram, resulting in fragmented attention, passive participation, and suboptimal comprehension outcomes. This phenomenon aligns with the findings of Febriyanti and Handayani (2025), who investigation into mobile phone use among high school students demonstrated that increased intensity of non-academic smartphone activities, including social media, gaming, and entertainment, significantly undermines students' learning concentration and academic achievement.

These conditions indicate the need for an interactive and technology-based learning medium that can support the implementation of the deep learning approach in improving students' English reading comprehension. One such medium is Blooket, a gamified digital platform that allows teachers to design interactive quizzes and games to engage students in meaningful and enjoyable learning activities. Therefore, the researcher is interested in conducting a study entitled “Implementation of Deep Learning Approach with Blooket in Teaching English Reading Comprehension at SMKN 3 OKU.” In light of the background discussed above, the research problem of this study is formulated as follows: Is it effective to use Blooket to implement a deep learning approach for tenth-grade students' reading comprehension at SMK Negeri 3 OKU in the academic year 2025/2026.

METHODOLOGY

This research used a quantitative pre-experimental design, specifically the One-Group Pretest-Posttest Design, to evaluate the effectiveness of Blooket as a gamified platform in improving reading comprehension of tenth-grade students at SMK Negeri 3 OKU (Creswell, 2019).O1 is the pre-test score, X is the implementation of the Deep Learning Approach with Blooket, and O2 is the post-test score administered after the treatment.

Table 1 Sample of the Study

Group	Treatment	N	Assessment Method
X DPIB 2	Deep Learning Approach with Blooket	35	Pre-test & Post-test
X TPM 1	-	35	Tryout

Note. Researcher's purposive sampling result (2026)

The population consisted of all 567 tenth-grade students across 16 classes at SMKN 3 OKU. By using purposive sampling, Class X DPIB 2 (35 students) was selected as the experimental sample because it was taught by a cooperative teacher, had a compatible schedule, and represented a typical vocational class. Class X TPM 1 (35 students) served as the tryout group for instrument testing. The independent variable (X) is the implementation of the Deep Learning Approach with Blooket, involving meaningful, mindful, and joyful

reading activities delivered through interactive game modes. The dependent variable (Y) is students' reading comprehension, measured using pre-test and post-test scores covering main ideas, specific information, vocabulary in context, and pronoun references (Creswell, 2012; Babbie, 2017). Data were collected using a 25-item multiple-choice reading comprehension test, covering four indicators as shown below.

Table 2 Test Specification

No	Indicator	Number of Items
1	Identifying Main Idea	5
2	Identifying Specific Information	10
3	Identifying Reference	5
4	Understanding Vocabulary in Context	5
	Total	25

Note. Adopted from Alur Tujuan Pembelajaran (ATP) SMKN 3 OKU F-X academic year 2025/2026

Validity was tested using the Point-Biserial Correlation method on 35 tryout items (Arikunto, 2014). With df = 33 and $\alpha = 0.05$, the critical r-table value was 0.334; items with rcalculated > 0.334 were considered valid. Out of 35 items tried out, 25 items met the validity criterion and were retained as the final research instrument, while 10 items were excluded. Content validity was also established following Fulcher and Svalberg (2018) to ensure the items proportionally represented the reading skills taught.

Reliability was measured using Cronbach's Alpha which assesses internal consistency; a coefficient above 0.70 is considered acceptable and above 0.80 is considered good (Field, 2018; Taber, 2018). The analysis using SPSS 27.0 showed a Cronbach's Alpha of 0.856 for the 25 items, indicating that the instrument was reliable and consistent.

RESULT AND DISCUSSION

1. Descriptive Statistical Analysis

Before the treatment, students were given a pre-test consisting of 25 items. The results showed an average score of 49.9, indicating that most students had low reading comprehension.

Table 3 Pre-test Score Categories

Score Range	Category	Frequency	Percentage
80–100	Excellent	0	0%
70–79	Good	0	0%
60–69	Sufficient	7	20%
50–59	Poor	9	26%
0–49	Very Poor	19	54%
	Total	35	100%

The treatment was conducted over four meetings using the Deep Learning Approach integrated with Blooket. In Meeting 1, students were introduced to descriptive text and

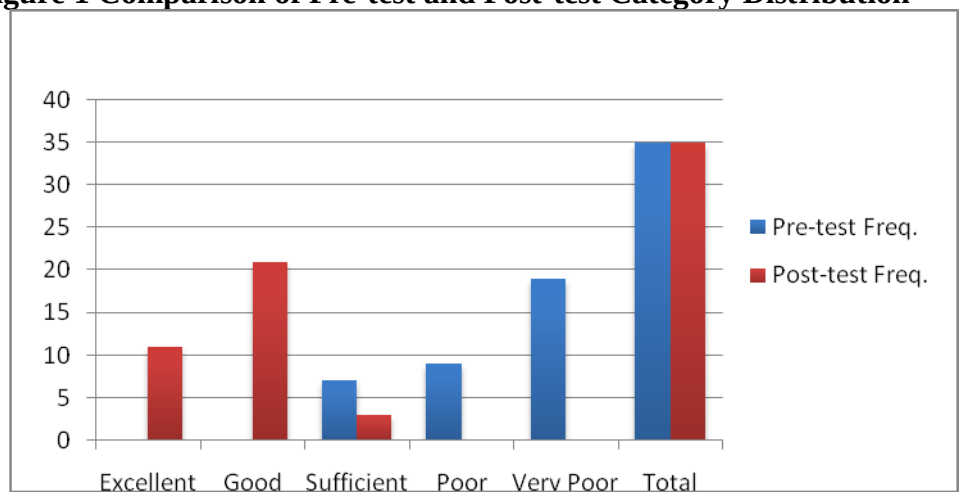
identified main ideas and details before playing a related Blooket game. In Meeting 2, students practiced scanning and skimming techniques through a competitive Blooket activity, improving their understanding of specific information. In Meeting 3, students learned to guess unfamiliar vocabulary from context, showing better vocabulary comprehension and increased motivation. In Meeting 4, a comprehensive review of all materials was conducted through a final Blooket session, with students showing greater confidence and independence before the post-test.

Table 4 Post-test Score Categories

Score Range	Category	Frequency	Percentage
80–100	Excellent	11	32%
70–79	Good	21	60%
60–69	Sufficient	3	8%
50–59	Poor	0	0%
0–49	Very Poor	0	0%
	Total	35	100%

After the treatment, students were given a post-test with the same format as the pre-test. The results showed an average score of 77.2, indicating a considerable improvement in reading comprehension.

Figure 1 Comparison of Pre-test and Post-test Category Distribution



In the pre-test, no students reached the Good or Excellent categories, while 19 students were categorized as Very Poor and 9 as Poor. In the post-test, 11 students reached the Excellent category and 21 reached Good, while none remained in the Poor or Very Poor categories.

2. Inferential Statistical Analysis

a. Normality Test. The Shapiro-Wilk test was used because the sample size was fewer than 50. The significance values were 0.289 (pre-test) and 0.052 (post-test), both greater than 0.05, indicating that the data were normally distributed and eligible for a parametric test.

b. Paired Samples Statistics. The average pre-test score was 49.94, while the average

post-test score increased to 77.26, showing an improvement in students' reading comprehension after treatment.

Table 5Paired Samples Statistics

	Mean	N	Std. Deviation
Pre-test	49.94	35	10.01
Post-test	77.26	35	5.11

0.017), indicating a positive relationship and consistency in students' performance.

Table 6 Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Pretest and Posttest	35	.402	.017

d. Paired Samples t-Test. The mean difference between pre-test and post-test was -27.31, with a significance value (2-tailed) of 0.000 (< 0.05), indicating a statistically significant improvement in students' reading comprehension after the treatment.

Table 7 Paired Samples t-Test

Pair	Mean Diff.	Std. Deviation	t	df	Sig. (2-tailed)
Pre-test – Post-test	-27.31	9.23	-17.51	34	0.000

Based on the results of the paired-samples t-test, the significance value (Sig. = 0.000) was lower than the predetermined significance level ($\alpha = 0.05$). Therefore, the alternative hypothesis (Ha) was accepted, while the null hypothesis (H_0) was rejected. Prior to the treatment, the students' mean pre-test score was 49.94, indicating a low level of reading comprehension. The results suggest that many students experienced difficulties in identifying main ideas, locating specific information, interpreting references, and understanding vocabulary in context.

After four meetings of learning through the Deep Learning Approach integrated with Blooket, students' average score increased to 77.26, with most students achieving the Good and Excellent categories. This improvement indicates that students became more capable of understanding descriptive texts and answering reading comprehension questions accurately.

The statistical analysis supports these findings. The Shapiro–Wilk test indicated that both the pre-test and post-test scores were normally distributed (Sig. = 0.289 and 0.052, respectively), satisfying the assumptions required for parametric analysis. Furthermore, the paired-samples t-test revealed a statistically significant difference between the pre-test and post-test scores (Sig. = 0.000 < 0.05). These findings demonstrate that the implementation of the Deep Learning Approach assisted by Blooket significantly improved the English reading comprehension of students at SMK Negeri 3 OKU.

3. Discussion

The findings further demonstrate that integrating the Deep Learning Approach with Blooket not only improved students' test scores but also promoted active participation throughout the learning process. During the four meetings, students became more confident in identifying main ideas, locating specific information, interpreting references, and understanding vocabulary in context. The game-based environment encouraged students to respond immediately to reading tasks, receive direct feedback, and learn collaboratively through classroom interaction. These conditions are consistent with the principles of meaningful, mindful, and joyful learning, where students actively construct knowledge by connecting prior experiences with new information.

The significant rise in the average score after the test suggests that using technology in teaching can successfully tackle typical reading challenges faced by students in vocational high schools. The competitive yet supportive environment fostered by Blooket helped keep students motivated and less anxious during reading activities. The results also back up earlier research that shows gamification boosts participation, helps maintain focus, and leads to better reading comprehension in English as a Foreign Language classes. Therefore, integrating the Deep Learning Approach with interactive digital platforms offers a practical solution for English teachers aiming to enhance both students' motivation and their comprehension skills in vocational education.

The positive change seen in this study can also be understood by combining teaching methods with the use of digital game elements. The Deep Learning Approach focuses on linking existing knowledge with new information in a meaningful way, while Blooket offers instant feedback, encourages active involvement, and supports consistent practice. These features allowed students to understand descriptive texts in a more thorough way, rather than just recalling separate facts. Students slowly showed more confidence in recognizing the main idea, finding specific details, understanding references, and guessing word meanings based on the surrounding text.

These results align with earlier research that has shown gamified learning settings can boost motivation, involvement, and reading success in English as a Foreign Language classes. Interactive quizzes help students stay attentive during lessons, and immediate scoring along with friendly classroom competition keep them excited and engaged. The friendly environment also helps students learn from each other as they talk about solutions and methods before and after every activity, which leads to better understanding and more confidence in taking part.

From an educational standpoint, the results suggest that English teachers in vocational high schools should combine technology with suitable teaching methods, rather than using digital tools solely for showing content. The use of the Deep Learning Approach along with Blooket enables teachers to create learning experiences that are thoughtful, significant, and enjoyable, while ensuring that curriculum goals remain the focus. This integration helps students develop as active readers by enabling them to create meaning, check their understanding, and use reading strategies on their own.

Future research should consider using experimental or quasi-experimental methods with control groups and larger sample sizes to offer more reliable evidence about the effectiveness of this approach. Researchers might also examine how it affects other English language skills like listening, speaking, or writing, and they could compare various gamification platforms to see how they differ.

CONCLUSION

Based on the findings and discussion, the implementation of the Deep Learning

Approach schools. integrated with Blooket significantly improved the reading comprehension of tenth-grade students in Class X DPIB 2 at SMK Negeri 3 OKU. The gamified approach created a meaningful, mindful, and joyful learning environment that engaged students, strengthened critical thinking, and sustained motivation, resulting in better performance in identifying main ideas, specific information, references, and vocabulary in context. These findings confirm that the Deep Learning Approach with Blooket is an effective, technology-enhanced, student-centered instructional strategy, and English teachers are encouraged to adopt it to create more engaging and effective reading lessons in vocational high

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