

THE USE OF E-LKPD TO IMPROVE THE STUDENTS READING COMPREHENSION IN NARRATIVE MATERIALS

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ABSTRACT

This study examines the effectiveness of E-LKPD learning media in improving the learning outcomes of Grade XI students at SMAN 106 Jakarta. The study involved two classes of 36 students each, selected through purposive sampling. The results show that the experimental class using E-LKPD learning media showed significant improvement in learning outcomes compared to the control class using conventional methods. The experimental class showed a more consistent and homogeneous improvement, with the E-LKPD media helping students to better understand the material, increasing active participation and enabling a more engaged and interactive learning process. In addition, the flexibility of e-LKPDs to provide anytime, anywhere access to learning materials and the ease with which teachers can deliver content and monitor progress contributed to success. This study concludes that e-LKPDs are a significant and effective tool for improving student learning outcomes.

Keywords: *E-LKPD, Reading Comprehension, Narrative Material*

INTRODUCTION

In the face of increasingly difficult future challenges in Indonesia, the government is focusing on preparing the next generation through various means, one of which is education. In the 21st century education landscape, the focus is on teaching students important life skills. These skills include the ability to seek and acquire knowledge independently, which is an important prerequisite for tackling different problems and developing effective solutions. Consequently, educators need to develop the necessary skills to promote students' critical thinking and knowledge acquisition. Despite the important role of education, mastering the English language, which is fundamental to today's scientific and technological advancement, is still a challenge for many Indonesian students. Considering the importance of English proficiency in the global arena, efforts to improve language learning from primary to tertiary level should be intensified.

However, traditional teacher-centered teaching methods are often unable to effectively engage students, resulting in low levels of language proficiency. Improving English language skills is therefore not only an asset for human resources, but also strengthens Indonesia's competitiveness in the global arena. Innovative teaching methods and tools, such as electronic worksheets for students (E-LKPD), are therefore crucial in promoting active learning experiences that meet the demands of modern times.

In addition, improving reading comprehension, particularly of narrative texts, is an important goal given the current weaknesses highlighted by the research findings. Therefore, initiatives to utilize technology and innovative pedagogy, such as those explored in the proposed study on the effectiveness of e-LKPDs in improving reading comprehension, are crucial to advance English language teaching in Indonesia. Through such efforts, educators can open new avenues to promote meaningful learning experiences and equip students with the necessary skills to succeed in an increasingly interconnected world.

In the context of using E-LKPDs, Indonesia's increasingly difficult future challenges demonstrate the need for innovation in education. E-LKPD can be an effective solution to enrich students' learning experience by providing access to interactive and engaging learning materials. With this technology, students can be more actively engaged in the learning process, allowing them to gain a deeper understanding of the subject matter, including reading comprehension in the context of a narrative text. In addition, e-LKPDs offer flexibility in learning as students can access the materials anytime, anywhere. The use of e-LKPDs can therefore not only improve students' understanding of the English language, but also help them to develop independent learning skills, which are essential for overcoming future challenges. Through the continuous improvement and development of learning resources such as e-LKPDs, English language teaching in Indonesia can evolve to meet the demands of an increasingly globally connected world.

The initial research was conducted using observation and interview methods with Grade XI English teachers. From the interview results, data were obtained that showed unsatisfactory test results in English language teaching, especially with narrative text material. The ability to comprehend reading narrative text material is far from good. This is reflected in the average daily test scores in Narrative Text Material, which are below the KKM average. Several findings were obtained from the results of classroom observations, including that the learning process is still teacher-centred, that the teacher has full control over the learning process in the class, so that the students' activity in carrying out the learning process is reduced, that it tends to be monotonous, so that the students lose motivation to work on the material during the middle to last hours of the day.

This research aims to provide valuable insights and strategies to overcome the identified challenges and promote effective learning in the context of English language teaching in Indonesia. Therefore, this research is important to explore and identify more effective and innovative learning methods to improve students' comprehension of narrative text material in English, and the author is interested in conducting a research entitled "The Use of E-LKPD to Improve Students' Reading Comprehension in Narrative Material".

METHOD

The research employs a quantitative approach, as described by Sugiyono (2015:13), who defines it as research involving numerical data analyzed using statistics. This method enables the measurement of variables through objective instruments, ensuring systematic and accurate data analysis. The quantitative approach is suitable for this study's objectives of hypothesis testing and deriving generalizable conclusions, with data represented numerically to reflect the studied phenomena. Statistical analysis helps identify patterns, relationships, and significant differences between variables. the study

adopts an experimental research type to compare learning outcomes before and after implementing e-LKPD learning media and against students using traditional methods in English narrative material at SMAN 106 Jakarta. The research design involves two groups: the experimental group using e-LKPD and the control group using conventional methods. Pretest and posttest scores measure the effectiveness of e-LKPD by comparing the final test scores of both groups. Sugiyono's Pretest-Posttest Control Group Design (2013:113) involves two randomly selected groups undergoing a pretest to determine initial conditions and differences. An ideal pretest result shows no significant difference between the groups' scores. This design helps assess the impact of e-LKPD on learning outcomes through pretest and posttest comparisons. The research involves two main variables: independent (use of e-LKPD) and dependent (reading comprehension). The independent variable influences changes in the dependent variable. E-LKPD learning uses electronic worksheets to support teaching, providing interactive, accessible, and personalized education through digital devices. Features include interactive quizzes, learning videos, and automatic evaluations for immediate feedback. Learning outcomes, measured through pretest and posttest scores, reflect students' understanding and mastery of the material, assessing the effectiveness of the learning method. The population comprises all XI grade students at SMAN 106 Jakarta, totaling 72 students. The sample includes all students of class XI-A (experimental group) and XI-B (control group), selected using purposive sampling based on similar student numbers and average scores. The research procedure includes three stages: pre-research, planning, and implementation. Pre-research involves initial observation, literature review, obtaining permissions, and determining research subjects. The planning stage involves preparing research instruments. The implementation stage includes conducting pretests, implementing e-learning, posttests, data collection, analysis, and compiling the research report. Data collection techniques involve tests, observations, and documentation. Tests measure student abilities in Indonesian language subjects through pretests and posttests, assessing the learning method's effectiveness. Observations evaluate the implementation of e-LKPD in the classroom. Documentation records data during observation and research implementation, including school documents, student numbers, and learning facilities. Data analysis techniques include normality and homogeneity tests and descriptive statistical analysis with hypothesis testing using the t-test. The normality test, using the Kolmogorov-Smirnov method with SPSS, determines if data distribution is normal. The homogeneity test assesses if population data variances are homogeneous. Descriptive statistical analysis describes pretest and posttest results, measuring student learning outcomes. Hypothesis testing evaluates the effect of the independent variable on the dependent variable using the t-test with SPSS, comparing the significance of each variable to a 5% level..

FINDINGS AND DISCUSSION

The research results provide a detailed discussion of the data obtained from the two study groups, including calculations and analysis, particularly with regard to hypothesis testing. This experimental study was conducted in Class XI of SMAN 106 Jakarta, focusing on the subject of English. Class XI-A, the experimental group, used E-LKPD for learning, while Class XI-B served as the control group without this intervention. The study involved two sessions for each class, with a pretest conducted before the E-LKPD application to collect initial data. The teacher then used the e-learning in several sessions

before conducting a post-test at the end of the lessons. The data from the pre-test and post-test were analyzed to assess the impact of the e-learning on student outcomes. At the beginning, the teacher taught the material using traditional methods, followed by a pre-test. In e-LKPD-based learning, students accessed web applications such as [Liveworksheets](<https://www.liveworksheets.com/>), logged in and used the digital learning materials. The teacher explained the learning objectives, encouraged a positive attitude and presented the learning steps using pictures, animations and videos. In an apperception session, the students' prior knowledge was assessed and after the material was explained, the students completed posttest questions online within 45 minutes. The pretest and posttest results of the study are presented in tables showing the learning outcomes of English subjects at SMA Negeri 106 Jakarta. Data on the pretest and posttest scores of classes XI SMA Negeri 106 Jakarta which became the control group can be seen in Table below.

Table 1 Pretest and Posttest Results of Class (Control)

No absen	Jenis Kelamin	Skor Pretest	Skor Posttest	No absen	Jenis Kelamin	Skor Pretest	Skor Posttest
1	P	79	79	19	P	85	86
2	P	80	81	20	P	86	87
3	P	82	83	21	P	88	88
4	L	83	84	22	L	79	79
5	L	85	85	23	L	80	80
6	P	86	88	24	L	82	84
7	P	88	89	25	P	83	85
8	P	79	80	26	P	85	86
9	P	80	80	27	L	86	86
10	L	82	83	28	L	88	88
11	P	83	84	29	P	79	80
12	P	85	88	30	L	80	81
13	L	86	88	31	P	82	83
14	P	88	89	32	L	83	83
15	L	79	80	33	P	85	86
16	L	80	82	34	L	86	87
17	P	82	85	35	P	88	89
18	P	83	85	36	P	79	81

Data on the pretest and posttest scores of classes XI SMA Negeri 106 Jakarta which became the Experiment group can be seen in Table below:

Table 2 Pretest and Posttest Results of Class (Experiment)

No absen	Jenis Kelamin	Skor Pretest	Skor Posttest	No absen	Jenis Kelamin	Skor Pretest	Skor Posttest
1	L	80	81	19	L	88	89
2	L	82	83	20	L	81	82
3	P	85	85	21	P	88	89
4	P	85	85	22	P	79	82
5	L	87	88	23	L	88	88
6	L	88	89	24	L	82	84
7	L	80	81	25	L	85	86
8	L	81	82	26	L	84	85
9	P	83	84	27	L	88	88
10	P	85	86	28	P	81	82
11	L	86	87	29	L	80	83
12	L	80	82	30	L	85	86
13	L	82	83	31	P	82	83
14	L	88	89	32	P	81	81
15	P	85	85	33	P	80	80
16	L	84	86	34	P	88	88
17	P	87	88	35	L	82	84
18	P	80	84	36	P	88	88

From the calculations made in this study, the pretest and posttest scores for each class are presented in Table below:

Table 3 Description of Pretest-Posttest Score of Experiment Class and Control Class

Deskripsi	Experiment Class		Control Class	
	Pretest	Posttest	Pretest	Posttest
Nilai Minimum	79.00	80.00	79.00	79.00
Nilai Maksimum	88.00	89.00	88.00	89.00
Range	9.00	9.00	9.00	10.00
Varians	9.51	7.53	9.57	10.17
Standar Deviasi	3.08	2.74	3.09	3.19
Rata-rata	80.83	84.89	80.33	84.22

The pretest scores of the experimental and control classes have differences in the highest and lowest scores. So, it can be concluded that in the experimental class, the minimum value of students increased from 79 in the pretest to 80 in the posttest. the maximum score also showed an increase from 88 on the pretest to 89 on the posttest. this change indicates that there is an increase in student learning outcomes after using E-LKPD. this increase in minimum and maximum scores shows that E-LKPDs can improve the abilities of both low and high achieving students.

The control class, on the other hand, showed different results. the minimum score remained stable at 79 from pretest to posttest, while the maximum score also did not change, remaining at 89. Nonetheless, the average score of students in the control class increased from 80.33 in the pretest to 84.22 in the posttest. this shows that the conventional learning method is also effective in improving student learning outcomes, but not as much as the experimental class.

The variability of learning outcomes was measured through range, variance, and standard deviation. the range of scores in the experimental class remained at 9, both in the pretest and posttest, indicating consistency in the distribution of student scores. the variance of the scores in the experimental class decreased from 9.51 in the pretest to 7.53 in the posttest, which means that the distribution of scores became more homogeneous after the use of E-LKPD. this is supported by the decrease in standard deviation from 3.08 to 2.74, which indicates that the difference in scores between students is getting smaller.

In the control class, the range of scores increased from 9 in the pretest to 10 in the posttest. the variance also increased from 9.57 to 10.17, indicating an increase in heterogeneity in the distribution of students' scores. the standard deviation, which increased from 3.09 in the pretest to 3.19 in the posttest, indicated that the variation in scores between students was greater after using the conventional learning method.

The average student score in the experimental class increased significantly from 80.83 in the pretest to 84.89 in the posttest. this increase

was greater than the increase in the average score in the control class, which rose from 80.33 in the pretest to 84.22 in the posttest. the difference in the increase in the average score indicates that the use of E-LKPD has a stronger influence in improving student learning outcomes compared to conventional learning methods.

Normality Test Control Class

Tabel 4 One-Sample Kolmogorov-Smirnov Test

		PretestControl
N		36
Normal Parameters ^{a,b}	Mean	83.1667
	Std. Deviation	3.09377
Most Extreme Differences	Absolute	.153
	Positive	.153
	Negative	-.140
Test Statistic		.153
Asymp. Sig. (2-tailed) ^c		.034

Based on table, the significance value on the Control Class Pretest Score (Asymp.sig = 0.34) is greater than the alpha value ($\alpha = 0.05$). Thus, it can be concluded that the Control Class Pretest data is normally distributed.

In the control class posttest, to determine whether the data is normally distributed or not, the Kolmogorov-Smirnov test is used with the IBM SPSS program. The results of the normality test calculation on the control class posttest can be seen in table :

Table 5 Posttest Normality Test Results Control Class One-Sample Kolmogorov-Smirnov Test

		Posttest Control Class
N		36
Normal Parameters ^{a,b}	Mean	84.2222
	Std. Deviation	3.19026
Most Extreme Differences	Absolute	.122
	Positive	.122
	Negative	-.104
Test Statistic		.122
Asymp. Sig. (2-tailed) ^c		.199

Based on table , the significance value on the control class posttest results (Asymp.sig = 0.199) is greater than the alpha value ($\alpha = 0.05$). Therefore, it can be concluded that the data from the control class posttest results are normally distributed.

1) Normality Test Experiment Class

In the pretest results for the experimental class, the normality test using the Kolmogorov-Smirnov method was used to determine whether the data was normally distributed or not. This analysis was carried out with the help of the IBM SPSS program. The results of the normality test calculation for the experimental class pretest can be seen in Table below:

Table 6 Experiment Class Pretest Normality Test Results
One-Sample Kolmogorov-Smirnov Test

		Pretest Experiment
N		36
Normal Parameters ^{a,b}	Mean	83.8333
	Std. Deviation	3.08452
Most Extreme Differences	Absolute	.168
	Positive	.168
	Negative	-.134
Test Statistic		.168
Asymp. Sig. (2-tailed) ^c		.011

Based on table 4.6, the significance value on the control class posttest results (Asymp.sig = 0.11) is greater than the alpha value ($\alpha = 0.05$). Therefore, it can be concluded that the data from the control class posttest results are normally distributed.

Table 7 Experimental Class Posttest Normality Test Results

One-Sample Kolmogorov-Smirnov Test

		Posttest Experiment
N		36
Normal Parameters ^{a,b}	Mean	84.8889
	Std. Deviation	2.74411
Most Extreme Differences	Absolute	.149
	Positive	.115
	Negative	-.149
Test Statistic		.149
Asymp. Sig. (2-tailed) ^c		.041

Based on table 4.6, the significance value on the control class posttest results (Asymp.sig = 0.41) is greater than the alpha value ($\alpha = 0.05$). Therefore, it can be concluded that the data from the control class posttest results are normally distributed.

Table 8 One-Sample Kolmogorov-Smirnov Test

One-Sample Kolmogorov-Smirnov Test		Pretest Control	Posttest Control	Pretest Experiment	Posttest Experiment
N		36	36	36	36
Normal Parameters ^{a,b}	Mean	83.1667	84.2222	83.8333	84.8889
	Std. Deviation	3.09377	3.19026	3.08452	2.74411
Most Extreme Differences	Absolute	.153	.122	.168	.149
	Positive	.153	.122	.168	.115
	Negative	-.140	-.104	-.134	-.149
Test Statistic		.153	.122	.168	.149
Asymp. Sig. (2-tailed) ^c		.034	.199	.011	.041

Based on table regarding the pretest-posttest normality test of the experimental class and control class, the significance value is obtained, namely:

1. Pretest of experimental class: Asymp. Sig. (2-tailed) = 0.011 < 0.05, the data is normally distributed.
2. Posttest of experimental class: Asymp. Sig. (2-tailed) = 0.041 < 0.05, data is normally distributed.
3. Control class pretest: Asymp. Sig. (2-tailed) = 0.034 < 0.05, data is not normally distributed.
4. Control class posttest: Asymp. Sig. (2-tailed) = 0.199 > 0.05, the data is normally distributed.

From the results of the pretest and posttest conducted in the experimental and control classes, it can be concluded that the distribution of these values is normal.

Homogeneity test

Table Results of Homogeneity Test

Table 9 Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
Pretest	Based on Mean	.073	1	70	.788
	Based on Median	.099	1	70	.754
	Based on Median and with adjusted df	.099	1	68.502	.754
	Based on trimmed mean	.081	1	70	.777
Posttest	Based on Mean	1.183	1	70	.280
	Based on Median	1.189	1	70	.279
	Based on Median and with adjusted df	1.189	1	68.436	.279

Based on trimmed mean	1.188	1	70	.279
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Based on the results of the Levene test, the pretest data show no significant difference in variance between the control class and the experimental class, with all significance values (mean: 0.788, median: 0.754, median with adjusted df: 0.754, and trimmed mean: 0.777) well above 0.05, indicating a homogeneous variance distribution. For the posttest data, the results of the Levene test (mean: 0.280, median: 0.279, median with adjusted df: 0.279, and trimmed mean: 0.279) also show significance values above 0.05, which confirms that there is no significant difference in variance between the two groups. Therefore, the variance distribution is homogeneous for both the pretest and posttest data.

Descriptive Statistical Analysis

Table 10 Analysis of Experimental Classes

Descriptive Statistics								
	N Statistic	Range Statistic	Minimum Statistic	Maximum Statistic	Mean Statistic	Std. Error Statistic	Std. Deviation Statistic	Variance Statistic
PosttestExperiment	36	9.00	80.00	89.00	84.8889	.45735	2.74411	7.530

The table above shows that the number of valid data in the test class is 36. The minimum value is 80.00 and the maximum value is 89.00. From the results of the treatment (post-test) it is known that the average value (mean) is 84.88 and the standard deviation is 2.744.

The analysis indicates that the posttest scores of the experimental group, which used E-LKPD, show a relatively high level of consistency, with a small range of 9.00 and a standard deviation of 2.74411. The mean score of 84.8889 suggests that the majority of students performed well, with scores clustering closely around the mean. The low standard error of 0.45735 further indicates that the mean is a reliable estimate of the central tendency for this sample. The variance of 7.530 also supports the conclusion that there is a low level of dispersion in the scores, suggesting that the implementation of E-LKPD might have contributed to a consistent performance among students in the experimental group.

CONCLUSIONS

This study shows that the use of E-LKPD learning media effectively improves the learning outcomes of 11th grade students in SMAN 106, Jakarta. This can be indicated by the T-value of the students' post-test scores of 0.148 at df 34, and the significance value of 0.703, which is above the 5% significance level value ($0.703 > 0.05$). In addition, the average score of the experimental class with E-LKPD learning media was 84.88. looking at the students who were allowed to

study with E-LKPD media (experimental class), their pre-test scores were 83.16 points, and their post-test average scores were 84.22 points, while the students who were allowed to study with the traditional method (control class) had a pre-test score of 83.83, which increased to 84.88, indicating that there is a difference in the English subject learning outcomes of the experimental class students and the English learning outcomes of the control class. The use of E-LKPD learning media in English teaching has been shown to be more effective than traditional methods in improving the learning outcomes of 11th grade students in SMAN 106 Jakarta. This is reflected in the higher mean post-test scores of the experimental class (84.88) than the control class (84.22), as well as the more consistent and uniform progress of the experimental class. E-LKPD helps students better understand the material, increase active participation, and strengthen their understanding of the subject matter. In addition, E-LKPD can help align student skills and provide learning flexibility. internal factors (psychological and physical) and external factors (social and non-social) affect students' learning outcomes. The technology used by E-LKPD allows access to materials anytime and anywhere, overcoming the limitations of distance, space and time. It also makes it easier for teachers to provide materials and monitor students' learning progress. The E-LKPD learning method includes narrative texts (discussing texts) that encourage students to learn independently and actively search for information. The teacher plays the role of a facilitator, making the learning process more interactive and interesting. Students are more proactive in learning, improving learning outcomes. The E-LKPD learning method includes narrative texts (discussing texts) that encourage students to learn independently and actively search for information. The teacher plays the role of a facilitator, making the learning process more interactive and interesting. Students are more motivated to learn, improving learning outcomes. the use of E-LKPD has a significant positive impact on students' learning outcomes, both in terms of understanding of the material, active participation, and homogeneity of grades. This study shows that E-LKPD is an effective and flexible learning method that can improve the quality of education in the digital age.

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