

Experimental Study: Beelinguapp Effect in Improving High School Students' Reading Comprehension of Procedure Texts

Sindhu Rhineksha Mukti⁽¹⁾, Hesty Puspita Sari⁽²⁾, Nita Sutanti⁽³⁾, Yusniarsi Primasari⁽⁴⁾

^{1,2,3,4}Faculty of Teacher Training and Education, Universitas Islam Balitar, Indonesia

Email: ¹smukti57@gmail.com, ²hestysari1403@gmail.com, ³nitasutanti4789@gmail.com, ⁴primasariyusniarsi@gmail.com

Abstract: This study investigates the impact of utilizing the Beelinguapp application on the reading comprehension skills of tenth-grade students enrolled in class X-10 at SMAN 1 Kademangan. This study employs quantitative and experimental research methodologies, specifically a pre-experimental study characterized by a one-group pretest-posttest design. The research participants comprised a total of 34 students from class X-10 at SMAN 1 Kademangan. The data collection technique was a test carried out before and after treatment using the Beelinguapp application. The findings of the study indicated a notable improvement in the student's capacity to read and comprehend procedural texts following the implementation of the Beelinguapp application.

The study found that the Beelinguapp application significantly improved the reading comprehension ability of procedure texts among 10th-grade students. The results were based on a one-group pretest-posttest design, with a significant improvement observed in the pretest and posttest scores. The success of the application can be attributed to several factors, including the availability of bilingual text, various types of texts, interactive features like quizzes and flashcards, and the ability to accommodate individual learning styles. The research suggests that students can optimally use the Beelinguapp application in learning English, particularly in improving their ability to read and understand procedure texts. It was recommended among others that teachers should consider using Beelinguapp as an innovative learning media and continue developing learning strategies that integrate technology to increase student motivation and learning outcomes.

Tersedia Online di

http://journal.unublitar.ac.id/pendidikan/index.php/Riset_Konseptual

Sejarah Artikel

Diterima pada : 01-12-2024

Disetujui pada : 20-12-2024

Dipublikasikan pada : 07-01-2025

Kata Kunci:

Effectiveness, Beelinguapp, Reading Comprehension, Procedure Text.

DOI:

http://doi.org/10.28926/riset_konseptual.v9i1.1086

INTRODUCTION

The rapid progress of time has established English as the predominant language in global communication. The number of English speakers in the world has reached 1.5 billion people (Eberhard et al., 2023). In Indonesia, English plays the role of a foreign language that is also studied in both formal and informal education. Within formal education, English is included in the curriculum that is studied from elementary school to high school. The main focus of English language learning in formal education in Indonesia is to enhance the four basic skills of writing, reading, speaking, and listening.

Proficiency in reading is an essential skill that students must acquire, because with good reading skills, students can absorb various important information contained in texts or obtain the information they need (Dewi, 2020). Furthermore, Setiawan et al. (2023) state that proficiency in reading is essential for language acquisition as it allows learners to effectively understand and engage with a wide range of written sources, thereby enhancing their vocabulary, grammatical understanding, and general language

abilities. Reading comprehension is crucial in the reading process, as readers must be able to understand the text in order to obtain information from it. Reading comprehension is an individual's ability to understand reading material at various levels of concentration, grasp the content, and apply the knowledge gained from the text (Kurniawan, 2015). With reading comprehension, readers will think critically about the content they read, think creatively about explaining the information they have gathered, and be able to think analytically when concluding the text they have read.

In addition to the numerous benefits of reading, students in Indonesia still face difficulties in reading comprehension. Data from the Programme for International Student Assessment (PISA) in 2022 shows that Indonesian students' reading comprehension levels rank 71 out of 81 countries. This data indicates that Indonesian students' reading comprehension skills are still significantly lacking compared to other countries. Asmilawati (2020) in her research found that students' reading comprehension skills at SMP Wiratama Mandala Ulubelu are still lacking. This is marked by a lack of understanding of the content regarding the material, a lack of vocabulary, a lack of knowledge about text structure, and a lack of student attention because students feel bored studying the material presented. Kaharuddin & Thaib (2023) found that students struggle with reading both texts in their native language and in English, particularly in understanding and obtaining information, comprehending vocabulary, identifying main ideas, and drawing conclusions.

Furthermore, one of the texts that must be studied in high school is the procedure text. A procedure text is a text that serves to explain how something can be done (Anderson & Anderson, 1997). A procedure text contains detailed steps or processes explained to achieve a desired outcome. Sudarwati et al. (2022) assert that there are two types of procedure texts are manuals and tips. A manual is a type of procedure text that provides a structured sequence of steps aimed at outlining the process of doing something in a sequential order. Tips are a guide that consists of recommendations and warnings, aimed at directing readers towards actions that are considered good and preventing harmful actions. A procedure text consists of three parts: 1) the goal, which states the purpose of the text, 2) materials or ingredients, which contain the components needed in a procedure, and 3) steps, which provide a detailed explanation of the sequence for accomplishing a specific task (Khoiriyah, 2021).

The preliminary study conducted by researchers at SMAN 1 Kademangan has revealed that reading comprehension is still a challenge for 10th-grade students, especially those in class X-10. These findings are based on an interview conducted with the English teacher Mr. AR on April 18, 2024. Based on interviews with teachers, students still face difficulties in comprehending procedure text because they struggle with comprehending sentences due to a lack of vocabulary in English. Additionally, student interest in reading remains low due to the lack of engaging learning media. Further data obtained by the researcher includes a list of 10th-grade students' scores in procedure text reading comprehension. This data reveals that classes X-9 and X-10 have average scores below the school's minimum mastery criterion of 75. The average score for class X-9 is 73.76, and for class X-10 it is 73.64. Therefore, it can be concluded that tenth-grade students, particularly in class X-10, are still facing challenges in comprehending procedure texts.

To address the existing challenges in students' reading comprehension, a method that can enhance their learning motivation is required. One possible approach is to integrate learning media into the teaching and learning process. Hasan et al., (2021) state that learning media is anything used as an intermediary or connector between teachers and students, aimed at stimulating students to be motivated and to actively participate in the learning process. Learning media can include educational applications that can be accessed anywhere. Implementing educational applications in the teaching and learning process has been identified as a promising approach to improve students' abilities (Rohima, 2023). In reading instruction, the application of

various learning strategies such as the use of diverse methods, learning media, and games can be employed to capture students' interest in learning (Pandiangan et al., 2021). The implementation of learning media is crucial because it can enhance students' interest and motivation in learning. Sari & Setiawan (2021) state that the integration of technology into educational activities can have a beneficial effect on both students and teachers. Teachers can develop more innovative and interesting learning methods, thereby improving the overall quality of learning. The integration of appropriate learning applications can create a more interactive, interesting and effective learning environment, thus encouraging students to be more active in learning and achieve better learning outcomes.

One of the learning media that can be used in reading comprehension instruction is the Beelinguapp application (Juliani, 2020). Beelinguapp is a language learning application that offers a variety of bilingual texts that can be tailored to the user's native language and the language they wish to learn (Fajriyani et al., 2022). The Beelinguapp application provides various types of texts including narrative texts, news articles, procedure texts, and more. The features of this application are also very diverse, ranging from vocabulary, weekly goals, quizzes, glossaries, flashcards, and read-aloud. With such a variety of features, this application is very appealing for use in English language learning. A prior study undertaken by Juliiani in 2020 demonstrated that Beelinguapp is efficacious in enhancing students' reading comprehension abilities with narrative texts, as indicated by the rise in students' scores from an average of 46.55 in the pretest to an average of 80.17 in the posttest. These findings indicate that Beelinguapp can effectively enhance students' reading comprehension abilities.

To address the identified issues, it is necessary to adopt learning approaches that incorporate learning technology in the reading comprehension of procedure texts at SMAN 1 Kademangan. In this research, the researcher employed the Beelinguapp application as a tool for teaching reading comprehension of procedural texts. The primary aim of this research was to assess the efficacy of the Beelinguapp application in improving the reading comprehension abilities of students in class X-10. Furthermore, this study sought to shed light on the impact of incorporating the Beelinguapp application into the English language curriculum at SMAN 1 Kademangan. The outcomes of this research hold the promise of contributing significantly to enhancing English language instruction within educational institutions. Furthermore, this research can provide empirical evidence regarding the effectiveness of using technology in language learning, particularly story-based applications like Beelinguapp.

METHOD

In this study, quantitative research methodologies are employed with an experimental research design, namely a pre-experimental study. This method was chosen to answer the research problem that has been formulated. Sugiyono (2013) states that experimental research is a methodological approach aimed at establishing cause-and-effect relationships between variables that are subjected to deliberate manipulation (treatment) and the resulting outcomes, all within a carefully controlled environment. In this study, the researcher utilized a one-group pretest-posttest pre-experimental design, focusing on a single experimental class. This research was conducted at SMAN 1 Kademangan, with the research sample comprising students from class X-10. The selection of this research site was based on considerations and recommendations provided by teachers, including the observation that students' grades in class X-10 were below the school's minimum proficiency criteria, and that students in this class demonstrated a low level of reading interest. The research was conducted during the second semester of the 2023/2024 academic year, involving a sample of 34 students from class X-10 who were designated as the experimental group for the study.

In collecting data, researchers employed data collection methods by conducting tests both before and after the application's implementation. In advance of

administering the pretest and posttest to the experimental group, a pilot test was conducted to establish the validity and reliability of the research instrument. This test was carried out in class X-9 which has class criteria that are equivalent to the experimental class. The test consists of 50 questions comprising procedural text material and is administered within a 90-minute time frame. All 34 students in class X-9 participated in the test.

The research was conducted by administering an initial assessment referred to as a pretest, followed by the implementation of a learning intervention utilizing Beelinguapp, and concluding with a final assessment or posttest. On April 23, 2024, the research commenced by administering a pretest in the experimental student group. The pretest aimed to gauge the students' baseline proficiency in procedure text comprehension. Students are given multiple choice questions with procedure text material with a total of 30 questions with an allocated time of 90 minutes. Each question has a score of 1 point. Students who can answer all the questions correctly get a score of 100.

Following the pretest, the researcher implemented the treatment, utilizing the Beelinguapp application within the context of procedure text reading instruction in the experimental class, or class X-10. The treatment was administered four times, commencing on April 30, 2024, with the final treatment session taking place on May 29, 2024. Throughout the treatment phase, the researcher employed procedure text readings available within the Beelinguapp application. The instructional approach incorporated the KWL method, an acronym representing Know, Want to Know, and Learned. This method constitutes a learning strategy that emphasizes the enhancement of comprehension and active student engagement in the learning process. During the treatment period, an improvement in students' reading comprehension was observed, as evidenced by the results of brief quizzes embedded within the Beelinguapp application, which were completed by the students. The number of students who successfully answered the quizzes increased progressively as the treatment progressed.

To substantiate the findings obtained during the treatment phase, the researcher administered a posttest in the experimental class. The posttest was carried out on May 29 2024. The posttest questions consisted of 30 multiple choice questions which were taken with a time allocation of 90 minutes to complete the test. The posttest was attended by all experimental class students, namely class X-10 with a total of 34 students. The posttest aimed to assess the students' procedure text reading comprehension abilities following the implementation of the Beelinguapp intervention. The posttest results were used to test the effectiveness of implementing the Beelinguapp application in improving the reading comprehension of class X-10 students at SMAN 1 Kademangan.

Upon acquiring the necessary data, the researcher proceeded with data analysis employing parametric statistical tests. Field (2013) states that parametric statistics is a method used to analyze data that is normally distributed. To assess whether the observed data conformed to a normal distribution, the researcher utilized the Shapiro-Wilk normality test to examine the data collected from both the pretest and posttest phases of the study. This statistical procedure allowed for a rigorous evaluation of the data's distributional characteristics. To evaluate the impact of the Beelinguapp application intervention on student performance, the researchers employed a paired sample t-test analysis, comparing data collected from the pretest and posttest phases of the study. The paired sample t-test is employed to evaluate predetermined hypotheses. Specifically, if the p value is <0.05 , the null hypothesis (H_a) asserting a significant impact of using the Beelinguapp application to enhance the reading comprehension accuracy of procedure texts for tenth grade students at SMAN 1 Kademangan is accepted. Conversely, if the p-value exceeds 0.05, the null hypothesis (H_0) is accepted, indicating that there is no statistically significant effect of utilizing the Beelinguapp application on enhancing reading comprehension skills of

procedural texts among tenth-grade students at SMAN 1 Kademangan. Researchers conducted statistical analysis utilizing the IBM Statistical Package for Social Sciences (SPSS) 26 program.

RESULT AND DISCUSSION

RESULT

The researcher describes the research results in this section. This research focuses on the question of how is the effectiveness of Beelinguapp application to enhance tenth grade students' reading comprehension of procedure text at SMAN 1 Kademangan. To answer this question, researchers carried out research stages to obtain data and carry out data analysis. The initial analysis undertaken by the researcher involved assessing the validity of the questions prior to administering the pretest. To obtain the data required for the validity assessment, the researcher conducted a tryout test in class X-9 at SMAN 1 Kademangan.

Siregar (2013) states that the validity test is a test employed to determine the validity of an instrument. To assess the instrument's validity, a Pearson Product Moment correlation analysis was conducted on 50 items from the pilot test, utilizing SPSS 26 software. In the Pearson Product Moment correlation, the number of respondents influences the validity test. This research involved 34 respondents or students, resulting in a degree of freedom (df) of 32. In this investigation, the validity test was conducted at a 5% significance level, resulting in a critical r-value (r-table) of 0.339, with 32 degrees of freedom. An item is considered valid if its r-value surpasses the r-table value. Conversely, if the calculated r-value falls below the critical r-value (r-table), the item is deemed invalid. The results of the instrument validity test are presented in the table below:

Table 1. Result of Pearson Product Moment Validity Test

No. Item	r-value	r-table	Category
1	.383	0,339	ACCURATE
2	0,210	0,339	INACCURATE
3	.410	0,339	ACCURATE
4	.514	0,339	ACCURATE
5	.379	0,339	ACCURATE
6	.376	0,339	ACCURATE
7	.476	0,339	ACCURATE
8	0,214	0,339	INACCURATE
9	.425	0,339	ACCURATE
10	0,088	0,339	INACCURATE
11	.390	0,339	ACCURATE
12	.427	0,339	ACCURATE
13	0,205	0,339	INACCURATE
14	.379	0,339	ACCURATE
15	0,123	0,339	INACCURATE
16	-0,069	0,339	INACCURATE
17	.440	0,339	ACCURATE
18	.425	0,339	ACCURATE
19	.388	0,339	ACCURATE
20	0,194	0,339	INACCURATE
21	.379	0,339	ACCURATE
22	-0,301	0,339	INACCURATE
23	.422	0,339	ACCURATE
24	.415	0,339	ACCURATE

No. Item	r-value	r-table	Category
25	0,123	0,339	INACCURATE
26	.422	0,339	ACCURATE
27	0,204	0,339	INACCURATE
28	.551	0,339	ACCURATE
29	-0,040	0,339	INACCURATE
30	.360	0,339	ACCURATE
31	.351	0,339	ACCURATE
32	-0,309	0,339	INACCURATE
33	0,119	0,339	INACCURATE
34	0,140	0,339	INACCURATE
35	.441	0,339	ACCURATE
36	.365	0,339	ACCURATE
37	0,048	0,339	INACCURATE
38	.343	0,339	ACCURATE
39	.443	0,339	ACCURATE
40	0,271	0,339	INACCURATE
41	.383	0,339	ACCURATE
42	.360	0,339	ACCURATE
43	.365	0,339	ACCURATE
44	-0,081	0,339	INACCURATE
45	.391	0,339	ACCURATE
46	.379	0,339	ACCURATE
47	.356	0,339	ACCURATE
48	0,192	0,339	INACCURATE
49	0,124	0,339	INACCURATE
50	-0,079	0,339	INACCURATE

The results of the validity test indicated that out of 50 questions, 30 were deemed accurate or valid, while 20 were considered inaccurate or invalid. The subsequent step in this research involved assessing the reliability of the research instrument. Arikunto (2010) asserts that the reliability test serves to evaluate whether an instrument possesses adequate reliability for its use as a data collection tool within a study. For this study, the reliability test was implemented using 30 questions that had been determined as valid from the prior validity assessment. The reliability analysis was performed by applying the Alpha Cronbach formula within the SPSS 26 software. The outcomes of this reliability test on the question instrument are displayed in the table provided below:

Table 2. Alpha Cronbach Reliability Statistic Results

Reliability Statistics	
Cronbach's Alpha	N of Items
0,824	30

The table above indicates that the instrument's reliability value is 0.824. Heale & Twycross (2015) suggest that reliability is acceptable if the minimum limit is 0.7. Therefore, the reliability test results above show that 0.824 is more than 0.7 so that the data obtained can be declared reliable. Reliable data can be used as an instrument for further research. After the data is declared valid and reliable, the next stage of research is conducting a pretest. The pretest served to gauge the baseline proficiency of students in the experimental group (class X-10) before the introduction of the

Beelinguapp intervention. With a pretest time allocation of ninety minutes, students are instructed to complete a pretest with a total of thirty questions.

Following the administration of the pretest, the experimental group received an intervention involving the use of the Beelinguapp application as a tool for facilitating the learning of procedural texts. The treatment was conducted four times, with one session per week. Upon completion of the treatment phase, the researcher concluded the in-school research activities by administering a posttest in class X-10. The posttest is carried out by giving thirty questions which are done by students with a time allocation of ninety minutes. The posttest was attended by all experimental class students, namely thirty-four students. The data gathered from both the pretest and posttest were organized and presented by the researcher in the following table:

Table 3. Pretest and Posttest Results

No.	Student's Name	Pretest	Posttest
1	AF	56,7	70
2	ACA	73,3	83,3
3	AA	70	76,7
4	AJ	73,3	83,3
5	ADR	76,7	83,3
6	AYPK	76,7	86,7
7	AZA	83,3	90
8	ACT	83,3	86,7
9	BNR	80	86,7
10	BM	66,7	76,7
11	DA	70	76,7
12	DAS	63,3	80
13	DSL	70	76,7
14	DAP	66,7	76,7
15	YET	76,7	83,3
16	FN	73,3	80
17	GP	73,3	80
18	GM	66,7	83,3
19	HGR	56,7	73,3
20	IAZ	76,7	83,3
21	KA	70	80
22	LADJ	83,3	90
23	LPS	80	86,7
24	MFB	66,7	73,3
25	RMA	76,7	83,3
26	RAW	56,7	73,3
27	REP	83,3	86,7
28	TLA	73,3	83,3
29	VAW	66,7	73,3
30	VOD	80	86,7
31	YRH	73,3	80
32	ZDA	80	86,7
33	ZAP	86,7	96,7
34	ARA	66,7	73,3

The table provided displays the pretest and posttest scores collected from the thirty-four participants from the experimental class. The pretest results show that there

are still many students who get scores below the school's minimum completeness criteria. There are twenty students with scores below 75. This suggests that a significant number of students within the class continue to struggle with reading and understanding procedural texts. The posttest results showed that there were six students who got scores below 75. This shows that there is an increase in reading and comprehending procedure texts in this class. For further elaboration regarding the pretest and posttest results, a descriptive statistical table is presented below:

Table 4. Descriptive Statistic of Pretest and Posttest

Descriptive Statistics					
	N	Minimum	Maximum	Mean	
Pretest	34	56,70	86,70	72,6529	
Posttest	34	70,00	96,70	81,4706	

The descriptive statistics table reveals that the lowest scores observed were 56.70 for the pretest and 70.00 for the posttest. In contrast, the highest scores achieved were 86.70 in the pretest and 96.70 in the posttest. These values indicate that there is an increase in the minimum and maximum values from the pretest and posttest. The mean score of the experimental class, which was 72.65 at pretest, also showed an increase after the treatment, reaching 81.47 in the posttest. Once the pretest and posttest data were collected, the researcher proceeded to assess the normality of the data distribution to ascertain whether it adhered to a normal distribution pattern. The normality assumption is a prerequisite for conducting a paired sample t-test. In normality testing, researchers used the Shapiro-Wilk normality test. This test was chosen because it is suitable for samples of less than fifty. Ghozali (2016) asserts that data can be classified as normally distributed if the associated significance value is greater than 0.05. The Shapiro-Wilk test for normality was performed utilizing SPSS 26, and the corresponding results are presented in the accompanying table:

Table 5. Normality Test Result

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Pretest	0,122	34	.200	0,953	34	0,156
Posttest	0,149	34	0,053	0,956	34	0,185

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

a. Lilliefors Significance Correction

The Shapiro-Wilk normality test results, as shown in the table, reveal significance values of 0.156 for the pretest and 0.185 for the posttest. Given the predetermined significance level of 0.05, both values exceed this threshold, confirming the normal distribution of the pretest and posttest data. With normally distributed data, a parametric statistical test, specifically the paired sample t-test, can be employed. Pallant (2013) states that the paired sample t-test is designed to compare the means of two measurements obtained from the same group. In this study, a paired sample t-test was utilized to analyze the pretest and posttest scores of the experimental group. The analysis was conducted using SPSS 26 software, and the results of this paired sample t-test are presented in the table below:

Table 6. Paired Sample T-test Result

		Paired Samples Test							
		Paired Differences			95% Confidence Interval of the Difference		T	Df	Sig. (2-tailed)
Pair		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
1	Pretest – Posttest	-8,81765	3,45573	0,59265	-10,02341	-7,61188	-14,878	33	0,000

The paired sample t-test results presented above demonstrate the comparison between the pretest and posttest scores. The mean difference calculated from these paired scores is -8.81. A negative value in the mean implies that the mean of posttest score is higher than the pretest. With a 95% confidence interval it can be believed that the average difference in actual scores between the posttest and pretest lies between -10.02 and -7.61. This interval demonstrates a negative value, indicating a decrease. This further supports the notion that there is a substantial disparity between the pretest and posttest scores, and confirms that the posttest score is much greater.

The two-tailed significance value of 0.000 obtained from the paired pretest and posttest samples is crucial in hypothesis testing. A significance level exceeding 0.05 suggests a negligible difference, leading to the acceptance of the null hypothesis (Ho) and rejection of the alternative hypothesis (Ha). Conversely, a significance level below 0.05 signifies a substantial difference, resulting in the acceptance of Ha and rejection of Ho. In this case, the paired sample t-test yielded a two-tailed significance value of 0.000, which is less than 0.05. Consequently, the alternative hypothesis is accepted, and the null hypothesis is rejected.

The alternative hypothesis of this research is that there is a substantial effect of using the Beelinguapp application to increase the reading comprehension of procedural texts of tenth-grade students at SMAN 1 Kademangan. A significance value below 0.05, as observed in the pretest and posttest results, provides evidence of a notable improvement in student learning outcomes. Thus, the alternative hypothesis (Ha) can be strongly upheld. Based on the findings of the conducted study, the Beelinguapp program demonstrates substantial development in enhancing the reading comprehension skills of tenth grade pupils at SMAN 1 Kademangan.

DISCUSSION

The findings of this study clearly demonstrate a notable improvement in the average score of the experimental class. This research also reveals that the utilization of the Beelinguapp program has a substantial favorable influence in increasing ability to read and understand procedural texts in class X-10 students at SMAN 1 Kademangan. This increase can be observed from the outcomes of the paired sample t-test, which indicates that the significance value for the pretest and posttest pair is 0.000, below the significance level of 0.05. The significance results below 0.05 imply that the alternative hypothesis (Ha) stating a beneficial influence of using Beelinguapp on the ability to read and understand procedural texts is supported. Therefore, researchers believe that the use of the Beelinguapp application could effectively improve the reading comprehension ability of students in X-10 class at SMAN 1 Kademangan.

This favorable outcome is in accordance with prior research conducted by Juliani (2020) which also indicated the efficiency of Beelinguapp in boosting students' reading comprehension skills despite the previous research focused on narrative texts. Current researcher has succeeded in expanding the application of Beelinguapp into the context of procedural texts and strengthening its potential as a valuable tool in language learning. The numerous features incorporated in the Beelinguapp application

such as vocabulary, quizzes, and read-aloud functionalities have significantly impacted students reading comprehension abilities. The interesting and interactive nature of this application has encouraged increased student motivation and active participation in the educational process as stated by Hasan et al. (2021) and Rohima (2023). The integration of technology into the learning environment facilitated by Beelinguapp is in line with the recommendations of Pandiangan et al. (2021) who recommend using a variety of learning methods and media to attract students' interest and improve their learning outcomes.

The effectiveness of Beelinguapp in improving reading comprehension skills can be attributed to several factors. Bilingual texts in applications that can be adapted to the user's native and target languages provide support and assistance for learners, facilitating understanding and mastery of vocabulary (Fajriyani et al., 2022). Additionally, interactive features such as quizzes and flashcards encourage active learning and strengthen student understanding. This is in line with the views of Kurniawan (2015) who emphasizes the importance of active understanding and the ability to apply knowledge from texts in the reading process. Increasing students' reading comprehension abilities can also be associated with increasing their learning motivation. Beelinguapp, with its interesting and interactive features, succeeds in creating a fun learning environment and motivating students to learn more actively. This is consistent with Dewi's (2020) assertion that increased learning motivation enhances reading proficiency.

Overall, this research provides strong evidence of the positive impact of the Beelinguapp application in improving the reading comprehension ability of procedure texts in class 10 students at SMAN 1 Kademangan. These results demonstrate how technology-based methods can enhance language learning outcomes and emphasize the value of Beelinguapp as a versatile and effective tool for enhancing reading comprehension skills. The implications of this research go beyond the specific context of SMAN 1 Kademangan, showing that Beelinguapp can be a valuable asset for language learners in a variety of educational settings. Future research could explore the effectiveness of these applications in different contexts, with diverse learner populations, and across different text genres.

CONCLUSION

This study utilizes an experimental research design, specifically a one-group pretest-posttest design. This research utilized as an experimental class, namely class X-10 at SMAN 1 Kademangan. The results of this research indicate that the implementation of the Beelinguapp application has a substantial favourable influence on improving the reading comprehension ability of procedure texts among 10th-grade students at SMAN 1 Kademangan. This marked improvement is underscored by the paired sample t-test results, where the two-tailed significance value of 0.000 is considerably lower than the established significance threshold of 0.05. The outcomes clearly illustrate that the utilization of the Beelinguapp application has a considerable positive influence on boosting reading comprehension skills. This supports the validity of the alternative hypothesis (H_a) that proposes a positive impact of using Beelinguapp on the reading comprehension skills of procedural texts. The increase in students' reading comprehension skills is also reflected in the increase in the average pretest and posttest scores. The initial average score of 72.65 observed in the pretest showed a marked improvement, reaching 81.47 in the posttest. This shows real progress in implementing the Beelinguapp application in learning procedure texts in grade ten at SMAN 1 Kademangan.

Beelinguapp's success in improving reading comprehension skills can be attributed to several factors. The first factor is the availability of bilingual text in the application that can be adapted to the user's native and target language so that it can provide support and assistance for students and facilitate understanding and mastery of vocabulary. The next factor is the availability of various types of texts, including

procedure texts within the application allowing for targeted practice and skill development in a particular genre or focus of material. In addition, Beelinguapp's interactive features such as quizzes and flashcards can encourage active learning and strengthen students' understanding of the material being studied. Furthermore, the application's ability to accommodate individual learning styles and preferences through features such as read-aloud and adjustable reading speed can simplify the student learning process so that students become more enthusiastic in learning.

Based on the research results, students are expected to be able to utilize the Beelinguapp application optimally in learning English, especially in improving their ability to read and understand procedure texts. Teachers are also advised to consider using Beelinguapp as an innovative and interesting learning media in teaching reading comprehension, as well as continuing to develop learning strategies that integrate technology to increase student motivation and learning outcomes. It is recommended that future research endeavors explore the efficacy of Beelinguapp in a wider range of educational settings, including varying grade levels, diverse student demographics, and different text types. Further researcher is also expected to explore the long-term impact of using Beelinguapp on reading comprehension and overall English language skills. Thus, this research provides a substantial contribution to the development of novel and technology-based language learning approaches. this study paves the way for future investigations into the potential of this application to enhance the overall language learning experience.

REFERENCES

- Anderson, M., & Anderson, K. (1997). *Text Types in English*. Mcmillan.
- Arikunto, S. (2010). *Prosedur Penelitian Suatu Pendekatan Praktik*. Rineka Cipta.
- Asmilawati, S. (2020). *AN ANALYSIS OF STUDENTS' PROBLEM IN READING COMPREHENSION THROUGH QUESTIONING TECHNIQUE*. Raden Intan State Islamic University.
- Dewi, I. P. (2020). Pengaruh Kemampuan Membaca dan Motivasi Belajar Terhadap Prestasi Belajar Bahasa Inggris Siswa SMK Swasta di Karawang. *JUDIKA (Jurnal Pendidikan Uniska)*, 8(2), 227–233.
- Eberhard, D. M., Simons, G. F., & Fennings, C. D. (2023). *Ethnologue: Language of the World* (Twenty-sixth edition). SIL International.
- Fajriyani, W., Harmayanthi, V. Y., & Risnawati, Y. (2022). *The Implementation of Beelinguapp in Learning Teaching Process: Can It Enhance Students' Speaking Skill?* <https://doi.org/10.37640/ice.01.240>
- Field, A. (2013). *Discovering Statistics Using IBM SPSS statistics*. Sage.
- Ghozali, I. (2016). *Aplikasi Analisis Multivariate dengan Program IBM SPSS 23*. Badan Penerbit Univesitas Diponegoro.
- Hasan, M., Milawati, Darodjat, Khairani, H., & Tahrim, T. (2021). *Media Pembelajaran*. Tahta Media Grup.
- Heale, R., & Twycross, A. (2015). Validity and reliability in quantitative studies. *Evidence Based Nursing*, 18(3), 66–67. <https://doi.org/10.1136/eb-2015-102129>
- Juliani, H. (2020). *THE EFFECT OF BEELINGUAPP APPLICATION TOWARD STUDENTS' READING COMPREHENSION USING KWL STRATEGY ON NARRATIVE TEXT OF EIGHTH GRADE AT SMPN 3 ROKAN IV KOTO*. Universitas Islam Riau.
- Kaharuddin, N. N., & Thaib, D. R. (2023). Students' Difficulties in Reading Comprehension at the Ninth Grade MTs Negeri 1 Manado. *Journal of English Language Teaching, Linguistics, and Literature Studies*, 3(2), 132–141. <http://dx.doi.org/10.30984/jeltis.v3i2.2735>
- Khoiriyah, N. (2021). *Genre Text*. Guepedia.
- Kurniawan, Y. I. (2015). *THE EFFECT OF THINK ALOUD STRATEGY IN TEACHING READING OF DESCRIPTIVE TEXT ON THE EIGHTH GRADE AT SMP ISLAM MANABUL ULUM GRESIK*.

- Pallant, J. (2013). *SPSS Survival Manual: A Step by Step Guide to Data Analysis Using IBM SPSS* (5th ed.). McGraw-Hill Education.
- Pandiangan, T., Gaol, S. P. L., & Saragih, E. (2021). Reading Teaching Strategies Applied by English Teachers In Senior High School. *Jurnal Pendidikan LLDIKTI Wilayah 1 (JUDIK)*, 1(02).
- PISA 2022 Results (Volume I)*. (2023). OECD. <https://doi.org/10.1787/53f23881-en>
- Rohima, N. (2023). *Penggunaan Media Pembelajaran Untuk Meningkatkan Keterampilan Belajar Pada Siswa*.
- Sari, H. P., & Setiawan, W. H. (2021). Peningkatan Teknologi Pendidik Pesantren Anak Sholeh melalui MEMRISE: Coaching & Training. *Prima Abdika: Jurnal Pengabdian Masyarakat*, 1(3), 81–90.
- Setiawan, R. R., Sari, H. P., Sutanti, N., & Supriyono, S. (2023). Visual Novel Games as A Learning Medium in Developing Reading Skills of Grade X. *Prosiding Seminar Nasional Pendidikan FPMIPA*, 1(1), 175–184.
- Siregar, S. (2013). *Metode Penelitian Kuantitatif: Dilengkapi Perbandingan Perhitungan Manual & SPSS*. Kencana.
- Sudarwati, T. M., Grace, E., Utami, T., & Priyanto, D. W. (2022). *Pathway to English*. Erlangga.
- Sugiyono. (2013). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. ALFABETA, CV.