



## The Effect of Microsoft PowerPoint Interactive Learning Media Application on Reading Comprehension Skills of 3rd Grade Elementary School Students for Indonesian Language Subjects

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**Abstract:** The purpose of this study was to analyze the effect of Microsoft PowerPoint interactive learning media application on the reading comprehension skills of 3rd grade elementary school students in Indonesian. This research method uses a quasi-experimental method with a Nonequivalent Control Group Design approach. The population of the study was the 3rd grade students of SDN Duren Sawit 07 Jakarta, totaling 60 students, divided into an experimental class and a control class. The research instrument used a pretest and posttest. While the data analysis technique used descriptive quantitative. The results of this study indicate that the average value of the experimental class at the pre-test = 56.67 has increased when the post-test is carried out = 82.00, while the results of the average value of the control class at the pre-test = 53, 00 experienced an increase when the post-test was carried out = 73.33. The results of the t-test in this study obtained t count as much as 3.7582 at a significant level = 0.05 and degrees of freedom (dk) = 2.0032. Because the value of t count > t table which is 3.7582 > 2.003 so that it can be achieved H<sub>0</sub> is rejected, meaning that there is a difference in the improvement of students' reading comprehension skills using the Microsoft PowerPoint interactive learning media application using only conventional media.

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## Introduction

Indonesian language is essentially to teach students about good and correct Indonesian language skills which are adjusted to their goals and functions. Language functions and plays a role in human movement activities throughout human existence, this is because language is the only thing owned by humans. The main function is also clear as a communication tool and a means of socializing in social life (Suparlan, 2021).

Learning Indonesian is not only about using Indonesian as a communication tool, but also about understanding its meaning or how to compose accurate words according to the speaking community (Khair, 2018). Learning Indonesian is very important for the development of attitudes, habits, and skills of students at the next stage of development. Indonesian language learning directs students to communicate using Indonesian proficiently and appropriately, is also useful in the use of language that adapts to situations and conditions, as well as the use of appropriate language with linguistic rules.(Kariesma et al., 2014).

One of the activities that must be used in learning activities including learning Indonesian is reading activities. Reading is a tool for students in learning something that is not yet known and is useful for expanding knowledge, students know the basic things around



them, about themselves and the surrounding environment, and helping students explore messages written in a reading text.(Widiasari, 2017). Reading activities cannot be separated from daily activities. That is like reading newspapers, reports, books, notes, text messages, especially now that cellphones and social media are inseparable from everyone's views. Especially for all subjects in school which is the main source that provides students with various kinds of information(Rodli, 2018). For this reason, in achieving the activities as mentioned above, the ability of students to understand and read texts is also needed.

Learning Indonesian requires several skills, including reading, speaking, listening and writing. Reading comprehension is a language skill that must be understood by students. However, reading skills are difficult to achieve if we do not have a sufficient skill in terms of understanding (Komariah et al., 2015) Reading skills are one of the important things in interpreting a word, sentence, or reading text. Every day we cannot be separated from reading activities.(Iswara, 2016). For example, when we read newspapers, messages, novels, notes, reports, and many other writings. Reading can be concluded as the main center that gives students a lot of information about various subjects. That's why students are taught about reading skills in schools. That is, in this case, reading skills in Indonesian subjects are very necessary and must be understood by students to be able to develop in aspects of their lives.(Rodli, 2018).

In this regard, where we know that teaching and learning activities in schools currently use the 2013 Curriculum. The purpose of the 2013 curriculum is to create individuals who have creative, innovative, and productive souls through strengthening consolidated knowledge, attitudes, and skills. Based on the insistence of the 2013 curriculum, one of the knowledge transfer processes that can be used by teachers is to create fun learning activities and make it easier for students to accept learning, namely by using interactive learning media (Arlingga & Widodo, 2021).

The position of the teacher is very important in terms of designing learning activities so that the 2013 curriculum can have a wider scope of material. Based on this problem, as a teacher, he should be able to make himself as a person who is technology literate and keeps up with the pace of the times and is also good at developing innovation and creativity in determining learning media that creates a fun, conducive, effective and meaningful atmosphere for students to make them play an active role in activities. ongoing learning. From here, teachers are required to be creative to use in conveying material to their students so that students can develop or improve reading skills (Haerani, 2017).

However, some of the problems regarding improving reading skills did not work, including the teacher-student relationship. The problems that are often found are, first, the low ability of students to master reading skills. This can be seen in their difficulty in determining the topic of a paragraph or text, as well as in the vocabulary contained in the paragraph. Second, the teacher's role in teaching tends to be conventional and the teacher still dominates learning activities that make students passive and also feel bored in class (Susilawati & Suhardi, 2016).

Reading comprehension skills are the absence of obstacles in the reading text between the reader and the idea. While in the reading process, students can visualize and relate their knowledge of the first language they read sequentially in order to understand the meaning of the reading text (Natsir & Anisati, 2016). To understand all types of information in text arrays, it does not only require reading activities but also having the ability to understand the contents (Rodli, 2018).



For this reason, it is necessary to improve the learning process, especially in the content of learning Indonesian in elementary schools so that students' reading abilities increase. Teacher creativity in providing learning materials can greatly help the success of the learning process. In this case, in order to improve learning procedures, media that seems attractive are needed to activate students, foster enthusiasm and interest in teaching and learning activities in the classroom. Because after all, learning media is useful as a tool to achieve learning goals (Budiarti & Haryanto, 2016). The preference for fixing this right is the use of interactive powerpoint media, where the use of this media combines all media elements, for example in the form of text, images, audio, and visuals as well as animations that make learning seem more interesting (Sakiah & Effendi, 2021).

Learning media is a tool or means in the needs of learning activities. Media is stated as anything that is useful in providing information from a source to a recipient which is used to provide convenience in communication and learning (Fajrin et al., 2017). Good teaching materials if the teaching materials increase interest in learning. Multimedia is a digital essence that combines audio (sound), visual (image, text, or animation), and audio (visual). This multimedia media utilizes computer technology (software) (Indrayanti, 2017).

Learning activities in the 2013 curriculum use interactive learning media that are useful as a support for the activities and of course related to students' reading skills, one of which is using interactive powerpoint media (Sabda, 2016). Various studies conducted by experts also reveal the effectiveness of this multimedia in improving students' reading skills resulting in a positive relationship, compared to teaching only through words. Another opinion concludes that PowerPoint acts to create multimedia that is easy to use is also interesting, this of course makes learning high in effectiveness (Hikmat et al., 2020). With PowerPoint, teachers can combine images, audio, text, video, graphics, or animations in the display of learning media which will be delivered to students (Azhar Arsyad, 2011).

After paying attention to the description of the problem above, it is necessary to use Indonesian language learning media that is in line with the needs and characteristics of the students. For example, the effect of using interactive powerpoint media on the reading skills of grade 3 elementary school students in learning Indonesian. Based on direct observations that have been carried out, this study decided to take a population and sample from two classes which felt that the average student reading skill ability was still lacking, which could be seen from the difficulty of students finding paragraph topics, it was necessary to improve the preparation of sentences with standard language, also to the teacher. classes that still only use printed reading texts.

## **Research Method**

This research uses quantitative research with a Quasi Experiment approach. With this experimental trial research, efforts will be made to find quantitative data related to students' success in reading skills, which uses a pre-test-post-test research design which is included in the form of an approach by using a quasi-experimental type of research. This research design does not only assess the results of research seen in one trial, but also assesses the results before using the treatment and after using the treatment.

The test subjects were divided into two classes, the experimental class and the control class. The group from the experimental class is a collection of the population or students who are given treatment using interactive powerpoint while the control class group is a collection of students who are not given treatment.



In this design, there are two classes that will be treated differently. In this study the subjects used were Class III A (Control Class) and Class III B (Experimental Class), SDN Durem Sawit 07 Pagi, with the number of students in both classes 60 students and Class III A 30 students, Class III B totaled 30 students. .Nonequivalent Control Group Design is a sampling technique carried out by researchers. Where in this design to find an effect comparison used in the two classes is not random.

**Table 1. Research design**

Class	Pretest	Treatment	Posttest
Experiment Class	O <sub>1</sub>	X	O <sub>2</sub>
Control Class	O <sub>3</sub>	-	O <sub>4</sub>

This information was obtained through learning exercises using interactive powerpoint learning media in the trial class, especially class III B and ordinary learning in the control class, especially class III A. The instrument that will be used in this research is using pretest and posttest. While the data analysis technique used descriptive quantitative.

**Results and Discussion**

This study uses multiple choice tests as a means of measuring whether there is a positive influence on the results of students' reading skills through the use of interactive powerpoint. Researchers used treatment, namely learning using interactive powerpoint specifically in the experimental class, while the control class did not use interactive powerpoint-based practicum. After being given treatment to both classes, and each class was given a pretest first to determine the initial state of students' reading skills. After knowing the pretest results are quite significant, the post test will be carried out in both classes with different treatments.

The items used by the researcher were 10 multiple choice questions using questions related to testing the reading comprehension skills of 3rd grade elementary school students. The results of the validity test using the product moment, namely 10 valid questions, and the reliability test using the Cronbach Alpha formula, obtained r-count = 0.556 > r-table = 0.361 so that it was declared reliable.

**Table 2. Validity Test Table**

Information	Question Points	Amount
Valid	1,2,3,4,5,6,7,8,9,10	10

The acquisition of descriptive statistical tests for each pretest-posttest from the experimental class and control class is used to provide an overview of the minimum, maximum, average, and standard deviation values. The average value of the experimental class at the pre-test = 56.67 experienced an increase when the post-test was carried out = 82.00, while the average value of the control class at the pre-test = 53.00 experienced an increase when the post-test was carried out = 73.33. It can be concluded that this interactive powerpoint learning media can improve students' reading comprehension skills.

**Table 3. Descriptive Statistics**

	N	Minimum	Maximum	mean	Std. Deviation
Pre-Test Experiment	30	20	90	56.67	17,087
Post-Test Experiment	30	50	100	82.00	13,995
Pre-Test Control	30	20	90	53.00	20197
Post-Test Control	30	50	100	73.33	16,046
Valid N (listwise)	30				



Normality test is used to determine whether the data can be used with a normal distribution or not. The results of the normality test using the Liliefors test are as follows:

**Table 4. Test of Normality**

	Class	Kolmogorov-Smirnova			Shapiro-Wilk		
		Statistics	df	Sig.	Statistics	df	Sig.
Student learning outcomes	PreTestExperiment	.144	30	.114	.964	30	.384
	PostTestExperiment	.183	30	.012	.919	30	.025
	PreTestControl	.140	30	.137	.922	30	.030
	PostTestControl	.164	30	.039	.918	30	.024

a. Lilliefors Significance Correction

\* Normal data because the Significant value is greater than 0.05

Based on the information in the table above, it is known that the significance value (Sig.) for all data both on the Kolmogorof-Smirnov and Shapiro-Wilk tests > 0.05, it can be concluded that the two studies are normally distributed.

**Table 5. Test of Homogeneity of Variance**

		Levene Statistics	df1	df2	Sig.
Student learning outcomes	Based on Mean	1.325	1	58	.254
	Based on Median	.789	1	58	.378
	Based on Median and with adjusted df	.789	1	57.206	.378
	Based on trimmed mean	1.251	1	58	.268

\* Homogeneous data because Based on Mean is more than 0.05

Next is the calculation of the homogeneity test with a significant level ( $\alpha = 0.05$ ). This homogeneity test is useful for knowing whether several population variants are the same or not (Usmadi, 2020). Based on the table above, the value of  $0.254 > 0.05$ , it can be concluded that the variance of the experimental class post-test data and also the control class's post-test data is the same or homogeneous.

After the information is stated to be conveyed normally and also homogeneous, then the next step is to test the hypothesis using the t-test. From the results of the requirements analysis test, it can be seen that the Post-Test is normally distributed and homogeneous, so the t-test can be used to test the hypothesis. The results of the t-test in this study obtained t count as much as 3.7582 at a significant level = 0.05 and degrees of freedom (dk) = 2.0032. Because the value of t count > t table which is  $3.7582 > 2.003$  so that it can be achieved  $H_0$  is rejected, meaning that there is a difference in the improvement of students' reading comprehension skills using interactive PowerPoint using only conventional media.

Based on the results of the study, it was proven that the use of interactive learning media microsoft powerpoint there was an increase in the reading skills of grade 3 students at SDN Duren Sawit 07, this was proven in the post-test control and experimental classes as shown in the table below. In the results of the Post-Test there are differences, the maximum score of the Post-Test which the average value is obtained from the experimental class is 82 and the control class is 73,333.

**Table 6. Post-Test Results Table**

Min-max value (Post-Test)	Experiment Class	Control Class
50	1	4





60	3	7
70	5	6
80	9	4
90	8	6
100	6	3
Total value	2460	2200
Average post-test results	82	73.333

After the implementation of Microsoft PowerPoint interactive learning media, the reading comprehension skills of 3rd grade elementary school students in Indonesian subjects have increased. The results of this study are supported by research conducted by Nilamsari Damayanti Fajrin (2017) research shows reading comprehension skills increase after using powerpoint media.

In carrying out the research, there were 2 classes studied, namely class 3A as the control class and 3B as the experimental class. This study uses an interactive powerpoint that contains learning materials for Indonesian Class 3, Theme 6 (Energy and its Changes) and Sub Theme 2 (Energy Change). So the interactive powerpoint referred to here is the method used by the teacher in presenting lessons that give birth to interactive situations in the classroom using powerpoint media. (Fajrin et al., 2017).

In this study, the researcher used 10 multiple choice questions which had been tested for validity and reliability. The items used by the researcher were 10 multiple choice questions using questions related to testing the reading comprehension skills of 3rd grade elementary school students. The results of the validity test using the product moment are 10 valid questions, and the reliability test using the Cronbach Alpha formula obtains  $r\text{-count} = 0.556 > r\text{-table} = 0.361$  so that it is declared reliable.

Furthermore, the acquisition of descriptive statistical tests foreach pretest-posttest from the experimental class and the control class were used to provide an overview of the minimum, maximum, mean, and standard deviation values. The average value of the experimental class at the pre-test = 56.67 experienced an increase when the post-test was carried out = 82.00, while the results of the average value of the control class at the pre-test = 53.00 experienced an increase when the post-test was carried out = 73.33. It can be concluded that interactive PowerPoint media can improve students' reading comprehension skills. Results of research conducted by (Dias, 2021) also experienced an increase in reading skills where the results obtained 81.38 for cycle two, and the success indicator was 92.317% 85% that it was stated that there was a big influence on students' reading skills after using interactive PowerPoint media.

### Conclusion

The conclusion of this study shows that the use of Microsoft PowerPoint interactive learning media can improve students' reading comprehension. Students respond well and enthusiastically when using this interactive PPT during learning. Students are more focused on the material presented by the teacher through this interactive slide show. Based on the data and tests conducted, the average value of the two classes, the experimental class and the control class, increased after the pre-test and post-test were carried out. Where the average of the experimental class at the pretest = 56.67 increased at the posttest = 82.00, and the control class average at the pretest = 53.00 increased to the posttest = 73.33. Therefore, the use of



interactive powerpoint media in the classroom can improve the reading skills of third grade students at SDN Duren Sawit 07 Pagi.

### Recommendation

Recommendations that can be conveyed from the results of this study are; (1) For educators, especially teachers at SDN Duren Sawit 07, it is recommended to provide more innovations in classroom teaching, for example in carrying out learning activities teachers should use interactive powerpoint learning media as a focus for students in receiving learning material in class, which increases interest and student motivation in learning activities. (2) In further research, this research is expected to be considered and can be continued by using this learning media. In addition, other researchers can improve this research by using other methods as well as interactive PowerPoint media or other innovative media.

### References

- Arlingga, G. K. Y., & Widodo, A. (2021). Pengembangan Media Video Tutorial Pembelajaran Mikrokontroler Arduino Pada Mata Pelajaran Teknik Pemrograman Mikroprosesor dan Mikrokontroler di SMK. *Edukatif: Jurnal Ilmu Pendidikan*, 3(5), 2638–2651. <https://edukatif.org/index.php/edukatif/article/view/866>
- Azhar Arsyad. (2011). Media pembelajaran. *Academia - Accelerating the World's Research*, 36(1), 9–34.
- Budiarti, W. N., & Haryanto. (2016). Pengembangan Media Komik Untuk Meningkatkan Motivasi Belajar Dan Keterampilan Pemahaman Siswa Kelas IV. *Jurnal Prima Edikasia*, 4(Juli), 233–242.
- Dias, A. A. (2021). Peningkatan Keterampilan Membaca Puisi Menggunakan Media Power Point Interaktif pada Siswa SD Kelas II SDN 1 Teras Kec. Teras Kab. Boyolali Tahun Ajaran 2020/2021. *Kalam Cendekia: Jurnal Ilmiah Kependidikan*, 9(1), 1–6. <https://doi.org/10.20961/jkc.v9i1.53777>
- Fajrin, N. D., Zainuddin, M., & Gipayana, M. (2017). Pembelajaran Keterampilan Membaca Pemahaman Berbasis PIRLS Berbantuan Media Powerpoint Interaktif di SD. *Prosiding 2017*, 396–401. <http://repository.um.ac.id/id/eprint/63171>
- Haerani, W. E. (2017). *Pengembangan Media Pembelajaran Power Point Interaktif Mengacu Pada Kurikulum SD 2013 Subtema Gaya Dan Gerak Kelas IV*. 273. <http://repository.usd.ac.id/id/eprint/12385>
- Hikmat, A. S., Darmawan, D., & Asy'ari, L. (2020). *Penggunaan Multimedia Presentasi PowerPoint 2016 Untuk meningkatkan Hasil Belajar Pada Pembelajaran Membaca Pemahaman Teks Prosedur Bahasa Inggris*. 5, 927–938.
- Indrayanti, R. (2017). Pengembangan Media Pembelajaran Powerpoint Interaktif Materi Penyesuaian Makhluk Hidup Terhadap Lingkungan Untuk Siswa Kelas V. *Universitas Sanata Dhama*.
- Iswara, P. D. (2016). Pengembangan Materi Ajar Keterampilan Mendengarkan dan Membaca. *Ejournal UPI*, 3(1), 89–97. <https://doi.org/10.17509/mimbar-sd.v3i1.2359>
- Kariesma, I. K. W., Zulaikha, S., & Ganing, N. N. (2014). Pengaruh Model Pembelajaran Circ Bermedia Powerpoint Terhadap Keterampilan Membaca Pada Bahasa Indonesia Kelas IV SD Gugus I Kuta Badung. *E-Journal Mimbar PGSD Universitas Pendidikan Ganesha Jurusan PGSD*, 2(1), 1–11.



- Khair, U. (2018). Pembelajaran Bahasa Indonesia dan Sastra (BASASTRA) di SD dan MI. *AR-RIYAH: Jurnal Pendidikan Dasar*, 2(1), 81.
- Komariah, E., Ramadhona, P. A. R., & Silviyanti, T. M. (2015). Improving reading comprehension through Reciprocal Teaching Method. *Studies in English Language and Education*, 2(2), 88. <https://doi.org/10.24815/siele.v2i2.2693>
- Natsir, Y., & Anisati, A. (2016). The Matters in Teaching Reading Comprehension to EFL Students. *Studies in English Language and Education*, 3(1), 68. <https://doi.org/10.24815/siele.v3i1.3390>
- Rodli, M. (2018). Penggunaan Metode Reciprocal Teaching Dalam Meningkatkan Kemampuan Reading Comprehension Siswa Kelas X Madrasah Aliyah Negeri Mojokerto Tahun Pelajaran 2016-2017. *Jurnal Diklat Keagamaan*, 12(2), 121–127.
- Sabda, S. (2016). Pengembangan Kurikulum. *Cetakan Ke-1. Bandung: PT Refika Aditama*, 22.
- Sakiah, N. A., & Effendi, K. N. S. (2021). Analisis Kebutuhan Multimedia Interaktif Berbasis PowerPoint Materi Aljabar Pada Pembelajaran Matematika SMP. *JP3M (Jurnal Penelitian Pendidikan Dan Pengajaran Matematika)*, 7(1), 39–48. <https://doi.org/10.37058/jp3m.v7i1.2623>
- Suparlan, S. (2021). Keterampilan Membaca pada Pembelajaran Bahasa Indonesia di SD/MI. *Fondatia*, 5(1), 1–12. <https://doi.org/10.36088/fondatia.v5i1.1088>
- Susilawati, T. M., & Suhardi. (2016). Hubungan Antara Penguasaan Kosakata dan Ketepatan Menemukan Gagasan dengan Keterampilan Membaca Pemahaman. 3(1), 112–121.
- Usmadi, U. (2020). Pengujian Persyaratan Analisis (Uji Homogenitas Dan Uji Normalitas). *Inovasi Pendidikan*, 7(1), 50–62. <https://doi.org/10.31869/ip.v7i1.2281>
- Widiasari, M. U. (2017). Upaya Meningkatkan Kemampuan Membaca Pemahaman Siswa Melalui Metode PQ4R Pada Pelajaran Bahasa Indonesia Di Kelas IV MI Islamiyah Sumberrejo Batanghari Lampung Timur Tahun 2016/2017. *PGMI (Pendidikan Guru Madrasah Ibtidaiyah)*.