

## USING DISCOVERY LEARNING METHOD TO IMPROVE READING COMPREHENSION OF THE ELEVENTH GRADE STUDENTS OF SMA NEGERI 2 SIGI

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### ABSTRACT

*The objective of this research is to prove that using discovery learning methods can improve reading comprehension of the eleventh grade students of SMA NEGERI 2 SIGI. The research applied pre-experimental design. The data were obtained from pre-test and post-test. The population was class XI students at SMA Negeri 2 Sigi. Consisting of 228 students from eight classes. The sample is class IPS 2 as the experimental group. Sample selection was carried out in cluster random sampling. Tests were used to collect data consisting of pre-test and post-test. The test result showed that the average pretest score obtained by the experimental group is 61.55. Then, the average post-test score for the experimental group is 81.45. By applying the 0.05 level significance, the researcher found the sig value obtained (p) was lower than ( $\alpha$ ) ( $0,000 < 0,05$ ) it means that the hypothesis is accepted or using discovery learning method can improve reading comprehension of grade eleventh students of SMA Negeri 2 Sigi. This research implies that the use of discovery learning encourages students to develop research and reflective skills that can be applied across various situations and for teachers to have additional ways of teaching English to their students, especially by using discovery learning methods.*

**Keywords:** *Comprehension; Discovery Learning; Improve; Reading*

### INTRODUCTION

Reading is the cognitive process of interpreting and understanding written language to extract meaning from a text. It is an essential skill for students, enabling them to gain knowledge and improve their abilities. Nowadays, people read text for exchange and pay for information to learn, have fun, and find answers. For high school students, reading is vital for daily life as it helps them to engage with texts, understand meanings, and acquire various types of knowledge. Reading serves multiple purposes, such as information searching, general comprehension, learning, evaluating, and contributing to both increased understanding and identification of areas of difficulty for students.

Reading comprehension is the ability to understand and make sense of written information. It goes beyond simply reading words on a page; it involves interpreting the meaning of the text, grasping the main ideas, and drawing connections between different pieces of information. An excellent reader not only understands the words but also comprehends the author's intentions, recognizes key details, and can conclude additional meaning.

Based on the Kurikulum 2013 (K13), it is emphasized that teaching reading in senior high school helps the eleventh grade students to have a comprehension of the social function, the structure of the text, and the element of language in the narrative text based on the context of use. In this phase, students can use various types of text, such as narrative, descriptive, recount, and procedure text. In this research, the researcher focuses on the narrative text.

The objective of reading skill is to improve the students ability to understand a text, to help them organize their ideas, to conceive and create meaning, to communicate information and ideas about text, to develop their knowledge of reading text over time, and to make progress in their learning purpose in reading. This research, the researcher focused on the narrative text.

However, after observing students of SMA Negeri 2 Sigi, the researcher identified several challenges in teaching and learning, including students' disinterest to read due to a lack of motivation, difficulties in comprehending texts resulting in mere surface-level reading, and a lack of vocabulary. As a result, the researcher used a discovery learning method to teach reading in order to determine if it can or not increase the students reading comprehension.

To solve the problem, the researcher applied the discovery learning method. Discovery learning is a learning where students learn to find and try to solve the concepts independently (Khabibah 2017:146). In line with the research conducted by (Damayanti 2023) with the title "*Implementing discovery learning in teaching reading comprehension at senior high school*". Students can actively participate in learning through the discovery learning methodology. This method is appropriate to help students to comprehend narrative text. The use of discovery learning as a good method to improve students' reading comprehension (Ni made, 2020). Therefore, the researcher indicated that the use of discovery learning is effective in increasing students' comprehension in reading. In other words, the discovery learning method is effective in understanding and making students more active in the teaching and learning process.

Based on the illustration above, the researcher is interested to conduct study by the title: Using Discovery Learning Method to Improve Reading Comprehension of the Eleventh Grade Students of SMA Negeri 2 Sigi

## METHOD

In this study, the researcher used pre-experimental research to find out the result of the discovery learning method in improving reading comprehension of the eleventh grade students of SMA NEGERI 2 SIGI. The One Group Pretest-Posttest design. This design was used for one experimental group Pre test and Post test.

## RESULT AND DISCUSSION

Before giving the treatment, the researcher gave a pre-test and post-test to the students. The purpose of the test is to know the students' prior ability reading comprehension. The researcher used SPSS 23 to calculate the data. The pre-test was conducted on April 16th, 2024 .The scores in the pre-test and post-test can be seen in table 1.

Table 1 - Classification scores in Pre-test

Classification		Score	Frequency	Percent
Valid	Very	90-100	-	-
	Good			
	Good	80-89	2	6.9
	Fair	70-79	6	20.7
	Very	40-69	21	72.4
	Poor			
Total			29	100.0

Based on table 1 It was found that the two students are classified good, six students are classified fair, twenty one students are classified into very poor. Overall, the pre-test results showed that most students had very low ability.

After classification the students reading comprehension, the researcher calculated mean score can be seen in table 2

Table - 2 Descriptive Statistics

	N	Minimum	Maximum	Mean
Pre-Test	29	29	80	61.55
Valid N (listwise)	29			

Based on the table the highest score of students was 80, while the lowest score was 29 and the mean score 61,55. Which means that the students' reading comprehension was still low or under the standard passing score of the school was 70.

## 1. The Analysis of Post-Test Reading Comprehension

Table 3 - Classification scores in Post-test

Classification		Score	Frequency	Percent
Valid	Very Good	90-100	4	13.8
	Good	80-89	14	48.3
	Fair	70-79	9	31.0
	Very Poor	40-69	2	6.9
Total			29	100.0

Based on table 3 the students' abilities in the post test. It was found that the four students classified very good (13,8%), fourteen students classified good (48,3%), nine students classification fair (31,0%) and two students classification very poor (6,9%). Overall, the post-test results showed that students' reading comprehension improved significantly.

After classification the students' reading comprehension, the researcher calculated mean score can be seen in table 4

Table 4 - Descriptive Statistics

	N	Minimum	Maximum	Mean
Post-test	29	69	95	81.45
Valid N (listwise)	29			

Based on the table the total students 29, highest score students was 95, while the lowest score was 69 and the mean score 81,45. This means that students' reading comprehension on the post-test improved from 61.55 to 81.45 reaching the school's passing standard.

## 2. The Normality Test

The normality test is used to determine whether the reading comprehension score data from the pretest and posttest results are normally distributed. The hypothesis for the normality test is as follows:

Table 5 - Tests of Normality

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pre-Test	.198	29	.005	.940	29	.102

Post-test	.202	29	.004	.938	29	.091
a. Lilliefors Significance Correction						

Based on the results of the Shapiro-Wilk test analysis with one group, it shows a sig. 0.102 and 0.091, more than 0.05 ( $0.102 > 0,05$ ) and ( $0,091 > 0,05$ ) This indicates that the data for both groups are normally distributed.

### 3. Hypothesis Testing

Table 6- Paired Samples Test

		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
P	Pre-Test -	-					-		
a	Post-test	19.89	13.078	2.428	-24.871	14.922	8.193	28	.000
ir		7							
1									

The test method used is the Paired Sample t-Test with a significance level of 0.05. From the results of data analysis using SPSS version 23, a significance value (2-tailed) of 0.000 was obtained, which is smaller than 0.05 ( $0.000 < 0.050$ ). Therefore, it can conclude that there is a significant difference in reading comprehension between the pretest and posttest data. In other words, the use of discovery learning has a significant effect on the learning interest of eleventh-grade students at SMA Negeri 2 Sigi.

H1: The use of discovery learning can improve the students comprehension in reading narrative text of the eleventh grade students at SMA NEGERI 2 SIGI.

## CONCLUSION

This study aims to prove that the use of the discovery learning method can improve the reading comprehension of eleventh grade students at SMA Negeri 2 Sigi. Based on the data analysis that has been presented, discussed, and presented previously, the results show that the post-test scores of eleventh grade students at SMA Negeri 2 Sigi are higher than the pre-test scores.

This data shows a significant difference between the pre-test and post-test results. In addition, the t-count value is higher compared to the t-table, which means the null hypothesis is rejected and the research hypothesis is accepted. This indicates that students performed better in the post-test after being given the treatment compared to the pre-test. In other words, based

on the research findings, the use of discovery learning can be an effective method to enhance student learning in improving student understanding focusing on the literal level. It can therefore be concluded that the use of discovery learning can improve students' comprehension in reading narrative texts of eleventh grade students at SMA NEGERI 2 SIGI.

## **REFERENCES**

- Arnaz, Y., & Adnan, A. (2021). Students' Perception of Discovery Learning in Microteaching Class. *Journal of English Language Teaching*, Vol 10(3) 449-461.
- Asrul, N. (2023). Enhancing Students' Reading Comprehension Through Discovery Learning Method At The Seventh Grade of SMP 3 Harapan Deli Serdang. *PEDAGOGI: Jurnal Ilmiah Pendidikan*, Vol 126-131.
- Burais, L., Ikhsan, M., & Duskri, M. (2016). Peningkatan kemampuan penalaran matematis siswa melalui model discovery learning. *Jurnal Didaktik Matematik*, Vol 3(1) 77-85.
- Carnine, (1990). *Instruction Reading*. Colombus Chio: Meril Publishing Company.
- Damayanti, T., Baa, S., & Amin, F. H. (2023). Implementing Discovery Learning in Teaching Reading Student Comprehension at Senior High School. *IDEAS Journal of Language Teaching and Learning, Linguistics and Literature*, Vol 11(1) 77-91.
- Everatt, J. (1999). *Reading and dyslexia: Visual and attentional processes*. New York, NY: Routledge.
- Gunawan, Kosim, & Lestari, P. S. (2020). Instructional Materials for Discovery Learning with Cognitive Conflict Approach to Improve Vocational Students' Achievement. *International Journal of Instruction*, Vol 433-444.
- Hosnan. (2014). *Pendekatan Saintifik dan Kontekstual dalam Pembelajaran Abad 21*. Bogor: *Ghalia Indonesia*.

- Kurniadi, P., Regina, R., & Rezeki, Y. S. (2020). The Use of Discovery Method in Teaching Reading Comprehension on Narrative Text. *Journal of English Education Program*,1(1),37–49.
- Muliati, M., & Syam, U. (2020). Promoting Discovery Learning Method For EFL Students In Reading Comprehension. *Exposure: Jurnal Pendidikan Bahasa Inggris*, Vol 12 (1) 370-382.
- Moreillon, J. (2007). Collaborative strategies for teaching reading comprehension : maximizing your impact. *USA:American Library Association*.
- Musdalifah, P. A. (2021). The Effect of Discovery Learning Method on Students' Reading Comprehension (Quasi Experimental Design at the Eleventh Grade Students' of MA Ja-alHaq Bengkulu city) (*Doctoral dissertation, UIN FAS Bengkulu*).
- M, U., Degeng, I. S., Utaya, S., & Kuswandi, D. (2022). The Influence of JIGSAW Discovery Learning on Learning Discipline and Learning Outcomes. *Pegem Journal of Education and instruction*, Vol 12(1) 166-178.
- Asrul, N. (2023). Enhancing Students' Reading Comprehension Through Discovery Learning Method At The Seventh Grade of SMP Harapan Deli 3 Serdang. *PEDAGOGI: Jurnal Pendidikan Ilmiah*. Vol 9(2) 126-141
- Permendikbud Republik Indonesia Nomor 69 (2013). *Tentang Kerangka Dasar dan Struktur Kurikulum Sekolah Menengah Atas/Madrasah Aliyah*.
- Ristanto, R. H., Ahmad, A. S., & Komala, R. (2022). Critical Thinking Skills of Environmental Changes: A Biological Instruction Using Guided Discovery Learning-Argument (GDL-AM). *Department of Biology Education*, Vol 9(1) 173-191.
- Sugiyono, & Ismiati, R. (2023). Literature Review The Influence of using Discovery Learning Method On The Students' Reading skills. *Jurnal Tulip, Tulisan Ilmiah Pendidikan*, Vol 12(1) 95-108.

- Usman, M., I. I. N., Utaya, S., & Kuswandi, D. (2022). The Influence of JIGSAW Learning Model and Discovery Learning on Learning Discipline and Learning Outcomes. *Pegem Egitim ve Ogretim Dergisi*, Vol 12(2) 66–178.
- Winardi, E. W., Hambali, D., & Winandari, E. P. (2020). Analysis of Language and Scientific Literacy Skills for 4th Grade Elementary School Students through Discovery Learning and ICT Media. *International Journal of Intruction*, Vol 13(2) 213-222.
- Westwood, P. (2008). What Teachers Need To Know About Teaching Methods. *Australia: Ligare*