The Use of Discovery Learning Method
to Teach Reading Narrative Text

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Abstract

The aim of this study is to find out the effectiveness of discovery learning method for teaching reading comprehension to the ninth-grade students of SMPN 11 Pontianak in academic year 2023/2024 and how effective the discovery learning method is. This research used a quasi-experimental method with measurement data collection technique. The instruments used were tests and observation checklists. The population was all ninth-grade students and the sample were taken using convenience sampling techniques. The experimental group was class 9F with 32 students and the control class was 9E with 31 students. The findings showed that discovery learning can improve students' reading comprehension of narrative text abilities. The post-test score was 87.23 which was higher than the pre-test score 63.23. Further, the effect size of the treatment was 0.781 which indicates the discovery learning method has a moderate effect. Additionally, the environment in the classroom also becomes more active according to the result of the observation checklist. The alternative hypothesis of this research is accepted. In short, the use of discovery learning method is effective in teaching reading comprehension of narrative text on ninth grade students of SMPN 11 Pontianak in Academic year 2023/2024. Therefore, the researcher suggest that the discovery learning method can be implemented to teach reading narrative text.

Introduction

As foreign language learners, reading is a skill that becomes necessary for students to learn. Students can better understand a text if they have a strong reading foundation. Particularly through reading comprehension, which calls for

in-depth reading and through knowledge of the material. Reading can help students improve their language abilities because they can pick up new vocabulary from texts. As Harmer (2007, p. 99) stated that "Reading is useful for language acquisition. Provided that students understand what, they read, the more they read, the better they get at it". Trough reading students are introduce to a variety of vocabulary, sentence types, and grammatical structures.

A fundamental ability and important component of human communication and education is reading. Reading is understanding and figuring out what's been read (Blachowicz & Ogle, 2008). It can be concluded that reading comprehension is a cognitive process that incorporates several interrelated steps. The nature of reading is a sophisticated cognitive process that entails deciphering written symbols and creating meaning from text. It is the process through which readers deduce meaning from written material and grasp the author's main point. Researcher decided to use discovery learning method to teach narrative texts in 9th grade junior high school. Because discovery learning provides opportunities for junior high school students to learn independently and develop learning creativity according to their abilities. Discovery refers to learning that occurs when students are instructed to investigate or solve a problem on their own (Cruickshank et al., 2009). In connection with the difficulties that junior high school students in this area face while learning comprehension of narrative texts. Through discovery learning students can learn more fun because several ways will be applied to make students more interested. One of them is given assignments in groups so students can learn to work together in solving problems.

Numerous areas of educational study have studied discovery learning. However, there hasn't been much study done on discovery learning in English-related fields, especially on SMP N 11 Pontianak. Meanwhile, the use of discovery learning has been helpful in improving student's ability for learning in other areas. However, there has never been any research done on the use of discovery learning to teach reading narrative texts, particularly at SMPN 11 Pontianak. The distinctive qualities, requirements, and difficulties of students at SMPN 11 Pontianak may not be the same as discovery learning research conducted in other schools or areas. Discovery learning may be seen and experienced differently by students and teachers depending on the cultural setting of the school, the student needs and the instructional methods.

At the junior high school level, especially grade 9. One of the basic competencies that junior high school students must master based on the 2013 curriculum syllabus is to understand text structure, linguistic elements and social functions. In linguistic elements, researcher focus on the vocabulary in the story. Additionally, students may apply the language features, social function, and text

structure they have studied and analyzed to infer meaning, understand the main idea, and seek for supporting details in the narrative. Narrative text is text that aims to entertain readers and often tells about events that happened in the past, both fiction and non-fiction. In this study, researcher focused on narrative text.

In this study, researcher focused on whether the discovery learning method was effective in increasing reading comprehension to the Ninth-grade students of SMPN 11 Pontianak and how effective it is. In addition, the aim of this research is to find out the effectiveness and how effective the Discovery Learning Method for teaching reading comprehension to the Ninth-grade students of SMPN 11 Pontianak is.

Method

The researcher decided to use quantitative research and conduct quasi-experimental research since the aim of the study is to determine whether the discovery learning method is successful in teaching reading comprehension. A Quasi-experiment is a type of experimental study in which participants are not randomized to groups at random (Creswell, 2023). Pre-test and post-test assessments were used in the quasi-experimental research to determine whether the discovery learning technique improves students' reading comprehension scores.

Table 1. The design of pre-test and post-test for experimental and control groups

Group	Pre-test	Treatment	Post-test
Experiment	O_1	X	O_2
Control	O_1	-	O_2

The total group of subjects that the researcher is interested in is referred to as the population (Stockemer, 2019). The population of this research was all the ninth-grade students of SMPN 11 Pontianak. There were 221 students in total. As a small part of the population, sample is a portion of the population that the researcher investigates in order to collect the findings (Stockemer, 2019). The researcher used convenience sampling because the class or sample was determined by the teacher. Convenience sampling is a non-probability sampling method used in research in which participants are chosen based on their accessibility and availability. Two classes were chosen, class IX F, an experimental class with 31 students, and class IX G, a control class with 32 students.

Table 2. Samples

Group	Treatment	Number of Students
Experimental group A	Using discovery learning strategy	31
Control group B	No treatment	32
Total sample		63

In order to collect data, the researcher used a measurement technique. Researcher conducted tests before and after the treatment was given. The tests were pre- and post- test. The tests were in the form of multiple-choice reading comprehension questions related to narrative text. The test consists of five reading texts to comprehend and there were 30 questions. Besides that, the researcher used an observation checklist to observe student behavior during the treatment.

Table 3. Item of Specifications

Narrative Text	Specification
Identifying Structure of Narrative Text	Looking for specific ideas
	Rearranging text structure
Identifying Language Features	Vocabulary
Identifying Social Function	Moral values

Result

It was found that the experimental group's mean score was 87.23 when

comparing the mean scores of the post-test experimental and control groups. Meanwhile, the control group's mean score was 80.38. After comparing the significant value with 0.05, it was found that the significant value of variance was 0.000 (0.000 < 0.05). From comparing the t value with the t_{table}, it was found that the t value was bigger than the t_{table} (3.684 > 1.999). Based on effect size calculations, it was found that there was a moderate effect (0.781) on teaching reading comprehension of narrative text on ninth grade students of SMPN 11 Pontianak in academic year 2023/2024. In conclusion, the use of discovery learning method is effective in teaching reading comprehension of narrative text on ninth grade students of SMPN 11 Pontianak in academic year 2023/2024 with "moderate effect". Which means that the null hypothesis (H_0) was rejected and the alternative hypothesis (H_1) was accepted.

Table 3. Mean Score

Group	N	Minimum	Maximum	Total	Mean	Standard Deviation
Pre-Test of Experimental Group	31	48	76	1960	63.32	7.334
Pre-Test of Control Group	32	32	88	2172	67.88	11.244
Post-test of Experimental Group	31	72	96	2704	87.23	5.602
Post-test of Control Group	32	60	96	2572	80.38	8.761

Table 4. Independent Sample t-test

Levene's Test *for Equality of Variances*	F	2.233
	Sig	0.140
Equal variances assumed		
t		3.684
df		61
Sig. (2-tailed)		.000
Mean Difference		6.851
Std. Error Difference		1.859
95% Confidence Interval of the Difference		

Lower	Upper
3.133	10.569
Equal variances assumed	
t	3.709
df	53.943
Sig. (2-tailed)	.000
Mean Difference	6.851
Std. Error Difference	1.847
95% Confidence Interval of the Difference	
Lower	Upper
3.146	10.555

Effect Size Calculation

$$Es = \frac{87.23 - 80.38}{8.761}$$

$$Es = 0.781$$

Based on the calculation above, researcher found that the effect size was 0.781 which was catagorized as moderate.

Based on the results of observations using checklist, it was found that there were 2 themes:

Theme 1 Active participation

It can be seen from the observation checklist that behavior was found in students who were actively involved in learning English. Even though not all students were active, some showed that they were not as passive as at the beginning. Some students were active in answering questions and asking questions. Besides, students also analyze the structure, linguistic elements and social function of narrative text in groups and then present it by speaking. Here students also show their activeness in analyzing and performing. Also, some students actively asked about something they didn't know. For example, when they found new vocabulary, they asked the researcher about the word.

Theme 2 Students' enthusiasm

Based on the results of observations, students pay attention to the teacher's explanation. It indicates how students' enthusiasm in learning is begin to show up. Next, when students must work together in groups, they are enthusiastic and actively participate in discussing and finding answers. Besides, while presenting the results of discussions in class, students starting to gain confidence.

According to the research, students' engagement is positively impacted by the discovery learning method, and they become more eager to learn and work in groups. This promotes asking questions, responding to teacher explanations, and actively participating in group work. Students gain confidence in their ability to present in front of the class, which is another beneficial outcome of learning.

Discussion

The researcher discovered that students become more engaged in class and active in reading and collaborating with their classmates after the discovery learning method was implemented. The researcher could therefore conclude that the discovery learning method is effective in teaching reading comprehension of narrative text on ninth grade students of SMPN 11 Pontianak. The discovery learning method was then discovered to have a "moderate effect" on reading comprehension of narrative text, according to the result of the effect size calculation. Students become more active in class because discovery learning method stimulates active participation and experience with the subject rather than passively receiving knowledge from the teacher.

The researcher concluded that students become more engaged in class and responsive based on the analysis and research findings. They become more active and capable to collaborate with their classmates, which improves their comprehension of reading narrative texts. It is evident from the post-test mean score, which is higher than the pre-test. To sum up, the use of discovery learning method is effective in teaching reading comprehension of narrative text on ninth grade students of SMPN 11 Pontianak in Academic year 2023/2024.

Conclusion

Based on the analysis, findings, and discussion, the researcher concluded that discovery learning method have a "moderate effect" on teaching reading comprehension of narrative text to ninth grade students of SMPN 11 Pontianak. It has been proven that discovery learning method is more effective than the methods usually used. It is proven that students who previously had low scores have improved. It implies that narrative material can be better understood by students. Through discovery learning stages students comprehend what they read.

Discovery learning method improves students' reading comprehension skills. It can be seen from the pre-test scores that students have relatively low scores and tend to be passive in class. After the discovery learning method was implemented, students became more active and their scores became higher, as can be seen from the post-test and observation checklist analysis results. This shows that discovery learning strategies influence students' reading comprehension. It indicates that the

research's alternative hypothesis is accepted. In short, the use of discovery learning method is effective in teaching reading comprehension of narrative text on ninth grade students of SMPN 11 Pontianak in Academic year 2023/2024.

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