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Research Article

Application of Discovery Learning Model in Learning to Analyze the Structure of Negotiation Text in Class X Students of SMAN 1 Suranenggala

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Abstract
This research demonstrates that the discovery learning approach effectively enhances Grade X students' abilities to analyze negotiation texts at SMAN 1 Suranenggala. The study arose from teachers' difficulties in managing group discussions and helping students understand text structures during lessons. The researchers sought to evaluate how discovery learning influences students' negotiation text analysis skills. Using a quasi-experimental design with pre- and post-tests, the study compared two groups of 30 students each: X MIPA 1 received discovery learning instruction (experimental group), while X MIPA 2 used traditional discussion methods (control group). Data collection involved testing, observation, and documentation procedures. The findings indicated that students in the experimental group achieved an average post-test score of 76.16, compared to the control group which scored 70.16. The statistical examination produced a t-value of 3.516, surpassing the t-table of 2.001, indicating a notable distinction between the two groups. These results validate that discovery learning significantly improves students' proficiency in analyzing negotiation texts.

Keywords: Discovery Learning, Instructional Strategy, Student Learning Outcomes, Text Structure Analysis

1. Introduction

Indonesian language learning in the school environment has a very crucial role, function, and position as a medium to hone students' abilities in using language in daily life. The 2013 Curriculum encourages students to take a more active and innovative approach when it comes to comprehending negotiation texts. In the learning process regarding negotiation texts, one of the activities that can support students in communicating with Indonesian language is honing the use of polite and effective language. Therefore, Indonesian language teaching is aimed at improving students' abilities to interact, both orally and in writing.

The quality of the learning process is influenced by the chosen learning model, which needs to be both relevant and effective in order to meet teaching objectives and provide guidance for learning designers when organizing and executing learning activities. A learning model is a method or approach used by educators to assist in creating educational activities that engage students in receiving knowledge during the learning process, with the aim of successfully reaching teaching goals (Rusman, 2011). The incorporation of learning models is essential to emerge as a key element in education and achievement during the educational journey. It is important that the content delivered corresponds with the learning model employed. The discovery learning model is often used as an illustration of a common learning framework. According to Mubarok & Sulistyo (2014), discovery learning involves teachers setting up situations that challenge students to ask questions, discover answers, and experiment on their own. This method aims to enhance students' understanding of the subject matter.

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Prior research has shown that the Discovery Learning approach has a beneficial impact on enhancing both student academic performance and participation. Elvadola et al. (2022), through a meta-analysis, concluded that Discovery Learning is effective at the elementary school level in enhancing student activity and achievement. Sunarto & Amalia (2022) emphasized that this model promotes student independence, critical thinking, creativity, and comfort in learning, as teachers act more as facilitators. Winarti et al. (2021) explored the use of Discovery Learning based on edutainment in physics learning and found it to be effective in making learning more engaging and meaningful, although it requires more time and is less suitable for large classes. Hermawan & Saefurahman (2024), through a study done in a vocational high school using classroom action research found that the use of Discovery Learning resulted in higher levels of student involvement and achievement after two rounds of implementation. Similarly, Sholikhan et al. (2023) found that the application of the Discovery Learning model at the junior high school level increased students' motivation and critical thinking skills.

Despite various studies confirming the effectiveness of the Discovery Learning model across different education levels and subjects, research specifically focused on its application in teaching negotiation text structure at the senior high school level remains limited. In fact, the ability to analyze negotiation texts is a key competency in Indonesian language learning, requiring critical and analytical thinking. One relevant material for applying this model is the Grade X negotiation text in KD 3.11, which includes analyzing language features and text structure such as orientation, submission, offer, agreement, and closing. According to Kosasih & Kurniawan (2019), negotiation is a decision-making process between two or more parties to reach mutual satisfaction. The goal of KD 3.11 is for students to analyze the structure and content of negotiation texts, both oral and written, while using correct and appropriate Indonesian. The goal of this research is to address a gap in existing studies by exploring the potential of the Discovery Learning approach in enhancing students' ability to analyze negotiation texts at SMAN 1 Suranenggala.

Based on interviews with Indonesian language teachers at SMAN 1 Suranenggala for grade X, it was revealed that during the learning process regarding negotiation texts, teachers experience difficulties in overcoming problems. Especially when students are faced with group assignments involving discussions, teachers find it difficult to stimulate students' creativity in dialogue. As a result, most of the scores obtained by students remain low and below the minimum completeness standard. Several factors that influence this include low student activity levels, laziness in thinking, lack of motivation to analyze negotiation texts, minimal confidence when learning to analyze these texts, and insufficient understanding of the material being taught.

Researchers are looking into ways to improve students' understanding of negotiation texts by investigating innovative teaching methods that can capture students' interest and enhance their abilities. One approach under consideration is the discovery learning model, which promotes students to actively pursue knowledge on their own while learning. The teacher in this situation acts as a guide who introduces learning in a way that encourages students to investigate further. By implementing this approach, it is believed that students' learning results will enhance. Researchers plan to utilize the discovery learning method in order for students to gain a deeper understanding of the structure and rules of negotiation texts.

Following up on this problem, to fulfill the expected learning objectives, researchers apply the discovery learning model when analyzing negotiation texts for grade X students at SMA Negeri 1 Suranenggala. The process of discovery learning involves students independently identifying and solving problems that are relevant to the content covered in previous lessons, as presented by the teacher.

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2. Methods

2.1. Research Design

This study adopted a quasi-experimental approach involving an experimental group and a control group. The Pre-test Post-test Control Group Design was used to evaluate the effect of the intervention on student learning outcomes by comparing the performance of both groups before and after the treatment. The primary objective was to determine the significance of the treatment's impact on learning outcomes.

Table 1. Research Design

Group	Pretest	Treatment	Posttest
Experiment Class (E)	O_1	X	O_3
Control Class (K)	O_2	X	O_4

Description:
O1 : Experiment class pretest
O2 : Control class pretest
O3 : Experiment class posttest
O4 : Control class posttest

2.2. Sample and Population

The population in this study consists of all Grade X students at SMAN 1 Suranenggala. In the sample selection process, researchers adopted the purposive sampling method because it was necessary to determine the sample to be analyzed based on certain criteria. Samples were taken from 30 students in one class for the experimental group, while 30 students in another class were chosen as the control group.

Table 2. Research Population

Class	Number of Students		Total
	Male	Female	
X MIPA 1	14	16	30
X MIPA 2	16	14	30
X MIPA 3	15	19	34
X MIPA 4	17	16	33
X MIPA 5	15	14	33
X IPS 1	18	14	32
X IPS 2	19	14	32

Table 3. Research Sample

Class	Number of Students		Total
	Male	Female	
X MIPA 1	14	16	30
X MIPA 2	16	14	30

2.3. Data Collection Methods

2.3.1. Test Method

A test is a structured method where individuals being tested are given a set of answers that can be represented in numerical form (Sugiyono, 2013). This test is designed to collect data from students and is conducted twice. The initial assessment is done to assess the students' skills before they receive any treatment, and the follow-up assessment is done to gauge the students' progress after they have

received treatment. This test is in the form of an essay test, where one of the tasks given to students is to analyze negotiation texts.

Table 4. Test Blueprint for Negotiation Text Competencies

No.	Basic Competency	Test Items
1.	3.11 Analyzing content, structure (orientation, submission, offer, agreement, closing) and language of negotiation texts	Create a negotiation text!
2.	4.11 Constructing negotiation texts by paying attention to content, structure (orientation, submission, offer, agreement, closing) and language	Find the structure of the negotiation text that has been created!

2.3.2. Observation Method

In this study, observations were made on teachers and students. Observations made on teachers aim to identify challenges faced during the learning process of negotiation text analysis in class. Meanwhile, observations directed at students aim to understand what problems they face during negotiation text analysis learning activities.

2.3.3. Research Instruments

1) Test Instruments

The test applied in this study is a test that focuses on negotiation text analysis. The assessment includes both a pretest and a posttest. The pretest is administered before the start of the learning process to gauge students' prior knowledge, while the posttest is completed after the learning to measure the students' comprehension of the taught material.

Table 5. Student Test Instrument

GRADE X STUDENT TEST INSTRUMENT
"Application of Discovery Learning Model in Learning to Analyze the Structure of Negotiation Text in Class X Students of SMAN 1 Suranenggala"
Student Identity
Name : Class : School :
Instructions
This text sheet is for research data Write your answers carefully.
Questions
Create a negotiation text! Find the structure in the negotiation text you have created!

Table 6. Assessment Rubric

No.	Assessed Aspect				Score
	Orientation	Submission	Offer	Approval	
	20	30	30	20	

Source: Ministry of Education and Culture (2013)

Description:
Success Indicators:
85-100 = Very Good
75-84 = Good
65-74 = Sufficient
0-64 = Poor

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2) Observation Instruments

Researchers have completed an observation using sheets to evaluate the activities of both teachers and students. The specific sheets used for this assessment are as listed below:

Table 7. Teacher Observation Sheet

No.	Learning Steps	Assessed Aspects				Score
		4	3	2	1	
1.	Stimulation					
2.	Problem statement (problem identification)					
3.	Data collection					
4.	Data processing					
5.	Verification					
6.	Generalization (drawing conclusions)					

Source: Sani (2014)

Average Score = X 100%

Success Indicators:

85-100: Very Good

80-84: Good

75-79: Sufficient

6-74: Poor

Table 8. Student Observation Sheet

Aspects Observed									Total Score
Activeness			Cooperation			Responsibility			
3	2	1	3	2	1	3	2	1	

Source: Thomas & Johnson (2014)

Criteria:

Maximum Score : 9

Grade : B = 7-9, C = 5-6, K = 0-4

2.4. Data Analysis Techniques

2.4.1. Statistical Data Processing

Test data in this study will be processed using statistical methods, including the following:

1) Normality Test

In this study, we conducted normality testing using the Shapiro-Wilk test on SPSS version 27 software to determine if the data conforms to a normal distribution. The hypothesis aimed to test is:

Ha = data comes from a normal distribution

Ho = data does not come from a normal distribution

Testing criteria:

a. If Shapiro-Wilk significance > 0.05, then accept Ha

b. If Shapiro-Wilk significance < 0.05, then reject Ho

2) Homogeneity Test

The test for homogeneity is utilized to ascertain whether there are differences in the variability of data between the experimental and control groups. In this study, Levene's Statistic was used to carry out the homogeneity test with SPSS version 27 software. The hypothesis that was examined:

Ho = identical population variance (control class and experimental class variance are the same)

H1 = non-identical population variance (control class and experimental class variance are not the same)

Testing criteria:

a. If Levene's Test significance > 0.05, then accept Ha
b. If Levene's Test significance < 0.05, then reject Ho

3) Independent Sample T-Test

The two-sample t-test aims to ascertain whether there are variations in average figures among two separate groups of individuals. This examination is performed through the utilization of the two-sample t-test feature within the SPSS version 27 program.

Testing criteria:

a. Ha is accepted if –t table < t value < t table
b. Ho is rejected if –t value < -t table or t value > t table

Based on probability:

a. Ha is accepted if P value > 0.05
b. Ho is rejected if P value < 0.05

2.4.2. Observational Data Analysis

Observations in this study were conducted on teachers and students, with the focus of observation on teachers aimed at identifying various challenges faced by teachers when teaching negotiation texts in class, while observations on students focused on revealing problems they face during negotiation text learning. The information collected through observing interactions between teachers and students during the analysis of negotiation texts using the discovery learning model will be reviewed to assess the effectiveness of this method in understanding the structure of negotiation texts.

3. Results and Discussion

3.1. Test Data Description

3.1.1. Initial Test (Pretest)

Table 9. Initial Test for Analyzing Negotiation Texts - Experimental Class

No	Name	Pretest Score
1	S-1	65
2	S-2	70
3	S-3	75
4	S-4	70
5	S-5	60
6	S-6	75
7	S-7	85
8	S-8	55
9	S-9	65
10	S-10	70
11	S-11	75
12	S-12	65
13	S-13	70
14	S-14	80
15	S-15	70
16	S-16	65
17	S-17	60
18	S-18	55
19	S-19	65
20	S-20	60

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No	Name	Pretest Score
21	S-21	75
22	S-22	55
23	S-23	70
24	S-24	75
25	S-25	70
26	S-26	60
27	S-27	65
28	S-28	60
29	S-29	55
30	S-30	65
Average		**66,50**

Table 9 data reveals that the experimental group started with an average test score of 66.50. Table 10 illustrates the range of initial test scores for the experimental group.

Table 10. Percentage of Pre-Test Scores - Experimental Class

Score	Number of Students	Percentage
55	4	13,33 %
60	5	16,66 %
65	7	23,33 %
70	5	16,66 %
75	7	23,33 %
80	1	3,33 %
85	1	3,33 %

The table below displays the initial outcomes of the control group's examination of negotiation text analysis.

Table 11. Initial Test for Analyzing Negotiation Texts - Control Class

No	Name	Pretest Score
1	S-1	65
2	S-2	65
3	S-3	75
4	S-4	70
5	S-5	65
6	S-6	75
7	S-7	60
8	S-8	65
9	S-9	80
10	S-10	70
11	S-11	65
12	S-12	70
13	S-13	70
14	S-14	80
15	S-15	70
16	S-16	75
17	S-17	65
18	S-18	55
19	S-19	65
20	S-20	60
21	S-21	75
22	S-22	55
23	S-23	70
24	S-24	75

No	Name	Pretest Score
25	S-25	70
26	S-26	65
27	S-27	70
28	S-28	60
29	S-29	65
30	S-30	70
Average		**68,00**

As in Table 11, the control class achieved an average initial test score of 68.00. The distribution of initial test scores for the control class is displayed in Table 12.

Table 12. Percentage of Pre-Test Scores - Control Class

Score	Number of Students	Percentage
55	1	3,33 %
60	3	10 %
65	9	30 %
70	9	30 %
75	5	16,66 %
80	2	6,66 %

Table 13 provides a detailed breakdown of the initial test scores for both the experimental and control classes.

Table 13. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Experimental Class	30	55,00	85,00	66,8333	7,71064
Control Class	30	55,00	80,00	68,0000	6,37884
Valid N (listwise)	30				

According to the details given, the experimental group had 30 students, scoring between 55 and 85, with an average of 66.83. Similarly, the control group also consisted of 30 students, scoring between 55 and 80, with an average of 68.00. The difference in average pretest results between the two classes is evident from the scores ranging from 55 to 85. From the explanation above, it can be concluded that the initial scores obtained by students have averages that are not significantly different. Therefore, the students in both the experimental and control classes display similar levels of proficiency prior to receiving any form of treatment. This aligns with the researcher's expectations, as the results to be obtained by students after treatment are expected to be more objective since both samples have similar abilities.

3.1.2. Final Test (Posttest)

Table 14. Final Test for Analyzing Negotiation Texts - Experimental Class

No	Name	Posttest Score
1	S-1	75
2	S-2	75
3	S-3	85
4	S-4	70
5	S-5	75
6	S-6	80
7	S-7	70
8	S-8	75
9	S-9	75

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No	Name	Posttest Score
10	S-10	80
11	S-11	70
12	S-12	80
13	S-13	75
14	S-14	90
15	S-15	70
16	S-16	85
17	S-17	75
18	S-18	65
19	S-19	75
20	S-20	70
21	S-21	80
22	S-22	65
23	S-23	80
24	S-24	85
25	S-25	80
26	S-26	70
27	S-27	80
28	S-28	75
29	S-29	75
30	S-30	80
Average		**76,16**

Table 14 indicates that the mean score on the last assessment for the test group was 76.16. Meanwhile, Table 15 showcases how the final test scores are spread out within the experimental group.

Table 15. Percentage of Posttest Scores - Experimental Class

Score	Number of Students	Percentage
65	2	6,66 %
70	6	7,06 %
75	10	33,33 %
80	8	26,66 %
85	3	10 %
90	1	3,33 %

The outcomes of the posttest for the control group's study on analyzing negotiation texts are displayed in Table 16.

Table 16. Final Test for Analyzing Negotiation Texts - Control Class

No	Name	Posttest Score
1	S-1	60
2	S-2	70
3	S-3	75
4	S-4	65
5	S-5	70
6	S-6	80
7	S-7	65
8	S-8	70
9	S-9	75
10	S-10	75
11	S-11	65
12	S-12	75
13	S-13	70

No	Name	Posttest Score
14	S-14	80
15	S-15	70
16	S-16	80
17	S-17	70
18	S-18	60
19	S-19	70
20	S-20	65
21	S-21	70
22	S-22	60
23	S-23	75
24	S-24	85
25	S-25	75
26	S-26	60
27	S-27	75
28	S-28	60
29	S-29	65
30	S-30	70
Average		**70,16**

According to Table 16, it is evident that 30 students participated in the test and achieved an average score of 70.16. The distribution of final test scores for the control group can be found in Table 17.

Table 17. Percentage of Posttest Scores - Control Class

Score	Number of Students	Percentage
55	1	3,33 %
60	3	10 %
65	3	10 %
70	9	30 %
75	8	26,66 %
80	5	16,66 %
85	1	3,33 %

The final test scores of both experimental and control classes can be described in detail in Table 18.

Table 18. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Experimental Class	30	65,00	90,00	76,1667	5,97168
Control Class	30	60,00	85,00	70,1667	6,75729
Valid N (listwise)	30				

Based on the information provided in the table, the control group consisted of 30 students who achieved test scores between 60 and 85, with an average score of 70.16. In contrast, the experimental group, which also had 30 students, obtained scores between 65 and 90, with an average score of 76.16. Consequently, the results show a discrepancy in the mean scores of the follow-up assessments between the control and experimental groups. The information provided earlier indicates a clear contrast in the average results of the last assessment. It is evident that the students in the control group and the experimental group showed distinct differences in their abilities following the intervention. After reviewing the recorded final scores, it appears that the average score for the experimental group is higher than that of the control group. Therefore, the findings of this research indicate that utilizing the discovery learning model to teach negotiation text analysis can enhance learning outcomes for students.

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3.1.3. Teacher Activities

Learning activities were conducted on students in class X MIPA 1 at SMA Negeri 1 Suranenggala as the experimental class with basic competency in analyzing negotiation texts. The researcher received support from an Indonesian language teacher, Mr. H. Asmadi, S.Pd., who acted as an observer at SMA Negeri 1 Suranenggala during the teaching and learning activities.

Table 19. Teacher Observation Results in Learning to Analyze Negotiation Texts

No.	Observed Aspect	Checklist				Score
		4	3	2	1	
1	Stimulation: The teacher may begin by posing inquiries, recommending reading material, and offering various learning tactics to aid in readiness for tackling challenges.		√			3
2	Problem statement (problem identification): The teacher offers chances for students to recognize problems connected to the topic, then they choose one of these problems and present it as a hypothesis.	√				4
3	Data collection: Students have the chance to explore different sources of information, including conducting interviews and performing personal experiments, in order to find answers to questions and validate hypotheses.		√			3
4	Data processing: Students gain new knowledge through analyzing data and information collected using methods such as interviews and observation. This aids in developing concepts and forming generalizations, leading to the testing of various alternative solutions through logical means.		√			3
5	Verification (proof): Students meticulously analyze data to verify the accuracy of the existing hypothesis by comparing it with other research and linking it to the outcomes of data evaluation.		√			3
6	Generalization (drawing conclusions): The process of generalization or deduction involves reaching a conclusion that can be applied universally to similar situations or issues based on the results of verification.	√				4
Total						**20**

Average Score = X 100% = 83,33

Success Indicators:

85 – 100 : Excellent

80 – 84 : Good

75 – 79 : Fair

0 – 74 : Poor

Based on Table 19, the teacher implementing the discovery learning model in analyzing negotiation texts achieved a score of 83.33 out of 100, indicating a good performance.

3.1.4. Student Activities

The student observation data evaluates the actions of students as they engage with negotiation texts in the experimental class. The following findings are based on the student observation data.

Table 20. Student Activity Observation Results - Experimental Class

No.	Subject	Assessed Aspects									Score	Grade		
		Activeness			Cooperation			Responsibility				B	C	K
		3	2	1	3	2	1	3	2	1				
1	S-1	√				√			√		7	√		
2	S-2	√			√				√		8	√		
3	S-3	√				√			√		7	√		
4	S-4	√				√			√		7	√		
5	S-5	√				√			√		7	√		
6	S-6	√				√			√		7	√		

No.	Subject	Assessed Aspects									Score	Grade		
		Activeness			Cooperation			Responsibility				B	C	K
		3	2	1	3	2	1	3	2	1				
7	S-7	√			√				√		8	√		
8	S-8		√		√				√		7	√		
9	S-9	√				√		√			8	√		
10	S-10	√				√			√		7	√		
11	S-11	√				√		√			8	√		
12	S-12		√			√			√		7	√		
13	S-13		√			√			√		7	√		
14	S-14	√			√				√		8	√		
15	S-15	√				√		√			8	√		
16	S-16		√		√				√		7	√		
17	S-17		√		√				√		7	√		
18	S-18	√			√				√		8	√		
19	S-19	√				√			√		7	√		
20	S-20	√				√			√		7	√		
21	S-21	√				√			√		7	√		
22	S-22	√				√		√			8	√		
23	S-23		√		√				√		7	√		
24	S-24		√		√				√		7	√		
25	S-25		√			√		√			7	√		
26	S-26		√			√		√			7	√		
27	S-27	√				√			√		7	√		
28	S-28	√				√			√		7	√		
29	S-29		√			√			√		6		√	
30	S-30		√		√				√		7	√		

Criteria:
Maximum Score : 9
Grade : B = 7-9, C = 5-6, K = 0-4
Success Indicators:
85 – 100 : Excellent
80 – 84 : Good
75 – 79 : Fair
0 – 74 : Poor

Based on Table 20, students using the discovery learning model in analyzing negotiation texts scored 217 out of 270, equivalent to 80.37%, which is categorized as good.

Table 21. Student Activity Observation Results - Control Class

No.	Subject	Assessed Aspects									Score	Grade		
		Activeness			Cooperation			Responsibility				B	C	K
		3	2	1	3	2	1	3	2	1				
1	S-1		√			√			√		6		√	
2	S-2		√			√			√		6		√	
3	S-3	√				√			√		7	√		
4	S-4		√			√			√		6		√	
5	S-5	√				√			√		7	√		
6	S-6	√				√			√		7	√		
7	S-7		√			√			√		6		√	
8	S-8	√				√			√		7	√		
9	S-9	√				√			√		7	√		
10	S-10	√				√			√		7	√		

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No.	Subject	Assessed Aspects									Score	Grade		
		Activeness			Cooperation			Responsibility				B	C	K
		3	2	1	3	2	1	3	2	1				
11	S-11		√				√	√			6		√	
12	S-12	√				√			√		7	√		
13	S-13	√				√			√		7	√		
14	S-14	√			√				√		8	√		
15	S-15		√		√				√		7	√		
16	S-16	√				√			√		7	√		
17	S-17	√				√			√		7	√		
18	S-18		√			√				√	5		√	
19	S-19	√				√			√		7	√		
20	S-20	√				√			√		7	√		
21	S-21	√				√			√		7	√		
22	S-22		√			√			√		6		√	
23	S-23	√				√			√		7	√		
24	S-24	√				√			√		7	√		
25	S-25	√				√			√		7	√		
26	S-26	√				√			√		7	√		
27	S-27	√				√			√		7	√		
28	S-28	√				√			√		7	√		
29	S-29	√				√			√		7	√		
30	S-30	√				√			√		7	√		

Criteria:
Maximum Score : 9
Grade : B = 7-9, C = 5-6, K = 0-4
Success Indicators:
85 – 100 : Excellent
80 – 84 : Good
75 – 79 : Fair
0 – 74 : Poor

According to the findings in Table 21, students in the control group who utilized the discussion method achieved a score of 203 out of 270, representing 75.81%, falling into the fair category. This indicates that the experimental group students had superior learning experiences compared to their counterparts in the control group. As a result, the study demonstrates that student engagement using the discovery learning approach is more effective, enhancing their logical reasoning and creativity while honing their problem-solving abilities through cognitive skill development.

3.2. Test Data Analysis

3.2.1. Initial Test Data

1) Normality Test

Table 22. Pretest Normality Test

	Shapiro-Wilk		
	Statistic	df	Sig.
Experiment Class	,946	30	,131
Control Class	,942	30	,100

Results showed that the experimental group had a significance level of 0.131, higher than 0.05. The significance level for the control group was found to be 0.100, which is considered higher than the

commonly accepted threshold of 0.05. This suggests that the data collected in the study follows a normal distribution, possibly as a result of the smaller sample size of 30 compared to the usual 50.

2) Homogeneity Test

Table 23. Pretest Homogeneity Test

		Levene Statistic	df1	df2	Sig.
Experiment Class	Based on Mean	,738	1	58	,394
	Based on Median	,482	1	58	,490
	Based on Median and with adjusted df	,482	1	57,137	,490
	Based on trimmed mean	,668	1	58	,417

The homogeneity significance of 0.394 > 0.05 indicates that the pretest variables in the treatment and control groups are homogeneous, with a Levene Statistic of 27.

3) Independent Sample T Test

Table 24. Independent Samples Test Table for Pretest

Experiment Class	Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Equal variances assumed	1.253	.268	-.639	58	.526	-1.16667	1.82705	-4.82391	2.49058
Equal variances not assumed			-.639	56.033	.526	-1.16667	1.82705	-4.82665	2.49331

Based on the "Independent Sample Test" results in the "Equal variances assumed" section, the significance value of 0.525 exceeds the 0.05 threshold. Following the independent sample test criteria, the null hypothesis is accepted and the alternative hypothesis is rejected, indicating no statistically significant difference in mean learning outcomes between the experimental and control groups.

3.2.2. Posttest Data

1) Normality Test

Table 25. Posttest Normality Test

	Shapiro-Wilk		
	Statistic	df	Sig.
Experiment Class	,940	30	,093
Control Class	,934	30	,062

The experimental group yielded a significance value of 0.093, surpassing the threshold of 0.05. Similarly, the control group produced a significance value of 0.062, also exceeding 0.05. Therefore, it can be deduced that the information analyzed in this study aligns with a standard bell curve.

2) Homogeneity Test

Table 26. Posttest Homogeneity Test

		Levene Statistic	df1	df2	Sig.
Experiment Class	Based on Mean	,119	1	58	,732
	Based on Median	,224	1	58	,638
	Based on Median and with adjusted df	,224	1	57,633	,638
	Based on trimmed mean	,097	1	58	,756

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The significance of homogeneity, with a value of 0.732 higher than 0.05, indicates that the posttest variables in the treatment and control groups are alike, as seen in a Levene Statistic of 27.

3) Independent Sample T Test Posttest

Table 27. Independent Samples Test Table for Posttest

Experiment Class	Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Equal variances assumed	.119	.732	3.516	58	.001	5.83333	1.65889	2.51270	9.15396
Equal variances not assumed			3.516	57.354	.001	5.83333	1.65889	2.51191	9.15476

The "Independent Sample Test" results show a significance value of 0.001, which is less than 0.05. According to independent sample test criteria, this leads to rejecting H_0 and accepting H_a, indicating a significant difference in mean learning outcomes between the experimental and control groups.

Titik Persentase Distribusi t (df = 41 – 80)

df \ Pr	0.25	0.10	0.05	0.025	0.01	0.005	0.001
	0.50	0.20	0.10	0.050	0.02	0.010	0.002
41	0.68052	1.30254	1.68288	2.01954	2.42080	2.70118	3.30127
42	0.68038	1.30204	1.68195	2.01808	2.41847	2.69807	3.29595
43	0.68024	1.30155	1.68107	2.01669	2.41625	2.69510	3.29089
44	0.68011	1.30109	1.68023	2.01537	2.41413	2.69228	3.28607
45	0.67998	1.30065	1.67943	2.01410	2.41212	2.68959	3.28148
46	0.67986	1.30023	1.67866	2.01290	2.41019	2.68701	3.27710
47	0.67975	1.29982	1.67793	2.01174	2.40835	2.68456	3.27291
48	0.67964	1.29944	1.67722	2.01063	2.40658	2.68220	3.26891
49	0.67953	1.29907	1.67655	2.00958	2.40489	2.67995	3.26508
50	0.67943	1.29871	1.67591	2.00856	2.40327	2.67779	3.26141
51	0.67933	1.29837	1.67528	2.00758	2.40172	2.67572	3.25789
52	0.67924	1.29805	1.67469	2.00665	2.40022	2.67373	3.25451
53	0.67915	1.29773	1.67412	2.00575	2.39879	2.67182	3.25127
54	0.67906	1.29743	1.67356	2.00488	2.39741	2.66998	3.24815
55	0.67898	1.29713	1.67303	2.00404	2.39608	2.66822	3.24515
56	0.67890	1.29685	1.67252	2.00324	2.39480	2.66651	3.24226
57	[illegible]	[illegible]	[illegible]	[illegible]	2.39357	2.66487	3.23948
58	0.67874	1.29632	1.67155	2.00172	2.39238	2.66329	3.23680
59	0.67867	1.29607	1.67109	2.00100	2.39123	2.66176	3.23421
60	0.67860	1.29582	1.67065	2.00030	2.39012	2.66028	3.23171

Figure 1. T-Table

The t-value of 3.516 surpasses the critical value of 2.001 stated in the t-table, resulting in the dismissal of the null hypothesis in support of the alternative hypothesis. This implies a significant difference in mean scores between the experimental and control groups. Essentially, employing the discovery learning method proves more effective than traditional techniques in teaching negotiation text analysis to the control group.

3.2.3. Teacher Activities

The observation sheet was filled out by Mr. Asmadi, S.Pd., the Indonesian language teacher for Grade X at SMAN 1 Suranenggala, during the implementation of the discovery learning model in teaching negotiation text analysis. The observation focused on six key aspects of the discovery learning process. In the stimulation stage, the teacher initiated learning by presenting questions and encouraging students to explore through books and other preparatory activities, which received a score of 3, indicating that the teacher effectively introduced problems to students.

During the initial phase of the assignment, the teacher allowed students to pinpoint pertinent issues within the study materials, assisting them in developing a theory. This aspect earned the highest score of 4, showing that the teacher successfully facilitated student-led problem identification. For the data collection stage, students were allowed to gather relevant information through reading, observation, interviews, and simple experiments. The students' participation in the inquiry process was demonstrated by the high score of 4 given to this activity.

In the data processing stage, students engaged in organizing and analyzing the data they had collected, aiming to form concepts and generalizations. This stage received a score of 3, indicating adequate support from the teacher in guiding students through the process of drawing logical inferences. The verification stage involved students examining their hypotheses by comparing them with their data analysis. This component also received a score of 3, reflecting a satisfactory level of analytical rigor during the learning process.

Lastly, in the generalization stage, students were guided to draw conclusions based on their findings, formulating general principles applicable to similar problems. The teacher was able to assist students in combining their knowledge, earning a 4 on this level. In general, the observation findings suggest that the teacher successfully integrated the discovery learning method in every aspect that was assessed. The learning process proceeded effectively and aligned with the intended instructional goals.

3.2.4.Student Learning Activities

The observation sheet was completed by Mr. H. Asmadi, S.Pd., the Indonesian language teacher for Grade X at SMAN 1 Suranenggala, during the implementation of negotiation text analysis learning using the discovery learning model in the experimental class. The observation covered three key aspects: activity, cooperation, and responsibility. Regarding participation (both physical and mental engagement), 19 students achieved a score of 3, while 11 students scored 2, and no students received a score of 1. For collaboration, 10 students earned a score of 3, 20 students scored 2, and none scored 1. In the area of accountability, 6 students received a score of 3, 24 students scored 2, and no students scored 1. Based on this analysis, the level of student engagement in the experimental group that implemented the discovery learning method was considered satisfactory.

In contrast, the control class applied the discussion method. In the activity aspect, 18 students scored 3, 11 students scored 2, and 1 student scored 1. For the cooperation aspect, only 3 students scored 3, while 27 students scored 2, and 1 student scored 1. In the responsibility aspect, 2 students scored 3, and 28 students scored 2, with no students scoring 1. Overall, student observation results in the control class were categorized as adequate. The outcomes show that implementing the discovery learning approach in the experimental group led to higher levels of student engagement, teamwork, and accountability when compared to the discussion method used in the control class.

3.3. Discussion

3.3.1. Test Results

According to the analysis of negotiation text data from students in the experimental class, the pretest scores average 66.83, compared to 68.00 for the control class. Based on the pretest findings, it appears that there is not a noteworthy disparity in the mean scores of the students. This suggests that both classes have similar abilities prior to any intervention. This aligns with the researcher's expectations because the results obtained by students after treatment will be more objective since the samples have similar abilities.

Following the posttest, the experimental class displayed a noteworthy enhancement with an average of 76.16, while the control class demonstrated an average of 70.16. The posttest information

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revealed that the experimental class saw a substantial increase of 9.33, which was greater than the control class's increase of 2.16.

The independent sample t-test showed significant differences in means between groups. With 58 degrees of freedom, the t-value of 3.516 exceeded the t-table of 2.001, resulting in accepting the alternative hypothesis and rejecting the null hypothesis. This confirms that the discovery learning model significantly improves negotiation text analysis skills among grade X students at SMAN 1 Suranenggala.

3.3.2. Learning Activities

The data collected on the teacher's learning activities indicates that all areas were rated at 83.33 or in the satisfactory range. This can be seen in the way the teacher presents learning materials to students and demonstrates a strong understanding of the material during lessons on text analysis and negotiation. The educator may begin with inquiry, suggesting reading material, and additional educational tasks that promote readiness for addressing challenges, achieving a score of 3. This is evident from how the teacher adequately presents or gives problems to students. The teacher gives students chances to pinpoint issues related to what they are learning, from which one is chosen and turned into a hypothesis; this earns the teacher a score of 4 or falls in the excellent category. Students are encouraged to gather different information, study literature, examine objects, interview people, and carry out their experiments to address queries or validate the hypothesis; this results in the teacher receiving a score of 4 or being categorized as excellent.

Students gather data and information through interviews and observations, followed by a stage where they generate concepts and conclusions. Through this process, students have the opportunity to learn from diverse perspectives and logical reasoning. Teachers are evaluated based on their effectiveness in facilitating this stage, with a score of 3 indicating satisfactory performance. Students carefully analyze to determine if the hypothesis is correct or incorrect by exploring different data processing outcomes; in this scenario, the teacher is given a rating of 3 for satisfactory performance. The final stage involves making a conclusion that can be applied as a universal rule to similar situations or issues based on the results of the validation process; in this case, the teacher is awarded a score of 4 for outstanding achievement.

From these calculations, the final result of teacher observation using the discovery learning model in negotiation text analysis learning is 83.33 or rated as good. According to the data collected on student engagement, both the experimental and control groups are rated highly in terms of student involvement. Learning heavily relies on the active participation of students as it can make the learning process more engaging. Active involvement of students is deemed crucial for learning success as it can significantly impact the outcome of the educational process.

The cooperation aspect of experimental class students is categorized as good, while the control class cooperation aspect is categorized as adequate. This is reflected in each child's willingness to join and interact with their group members and the existence of good relationships among students. The responsibility aspect of both experimental and control class students is categorized as good. Responsibility ability requires students to carry out learning obligations and complete assignments. The experimental class using the discovery learning model for analyzing negotiation texts showed more effective results in student observations than the control class.

4. Conclusion

The discovery learning model used to teach negotiation text analysis to Grade X students at SMAN 1 Suranenggala was effective. The experimental class had better learning outcomes, with an average score increase from 66.83 to 76.16, compared to the control class which improved from 68.00 to 70.16. The independent sample t-test indicated a noticeable gap (t-value = 3.516 > t-table = 2.001; Sig. = 0.00 < 0.05) in statistical analysis, suggesting that the discovery learning approach greatly boosts students' ability in critical thinking. Observations also support these findings, with student learning activity rated at 80.37% and teacher performance at 83.33%, both categorized as good. Students were actively engaged, cooperative, and responsive throughout the learning process. The discovery learning method is suggested as a different strategy to enhance students' ability to analyze negotiation texts. Teachers are encouraged to consider curriculum alignment, student readiness, and classroom conditions before implementation. Strengthening student cooperation is also important to support effective problem-solving and collaborative learning. Future scholars are encouraged to delve deeper into the research in order to investigate the wider range of possibilities for implementing the discovery learning model in the field of Indonesian language education.

5. References

Elvadola, C., Lestari, Y. D., & Kurniasih, T. I. (2022). Penggunaan Model Pembelajaran Discovery Learning dalam Meningkatan Hasil Belajar Siswa Sekolah Dasar. *Pedagogia: Jurnal Ilmiah Pendidikan Dasar Indonesia*, *4*(1). https://doi.org/10.52217/pedagogia.v4i1.732

Hermawan, H., & Saefurahman, A. (2024). Increasing the Activity and Outcomes of Science Learning through the Implementation of the Discovery Learning Model in Student X at SMK Al Khairiyah Ciomas. *Transformational Language, Literature, and Technology Overview in Learning (TRANSTOOL)*, *3*(4), 19–28. https://doi.org/10.55047/transtool.v3i4.1319

Kosasih, & Kurniawan, E. (2019). *22 Jenis Teks dan Strategi Pembelajarannya di SMA-MA/SMK*. Yrama Widya.

Mubarok, C., & Sulistyo, E. (2014). Penerapan Model Pembelajaran Discovery learning Terhadap Pembelajaran siswa Kelas X Tav Pada Standar Kompetensi Melakukan Intalasi Sound System di SMK Negeri 2 Surabaya. *Jurnal Pendidikan Teknik Elektro*, *3*(2). https://doi.org/10.26740/jpte.v3n2.p%25p

Rusman. (2011). *Model-Model Pembelajaran: Mengembangkan Profesionalisme Guru*. Raja Grafindo Persada.

Sani, R. A. (2014). *Pembelajaran saintifik untuk implementasi kurikulum 2013*. Bumi Aksara.

Sholikhan, S., Amul, T. N., & Ain, N. (2023). Memberdayakan Motivasi Belajar dan Keterampilan Berpikir Kritis Siswa Melalui Penerapan Model Pembelajaran Discovery pada Materi Getara dan Gelombang. *Jurnal Riset Pendidikan Dan Pengajaran*, *2*(2), 259–274. https://doi.org/10.55047/jrpp.v2i2.521

Sugiyono. (2013). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Alfabeta.

Sunarto, M. F., & Amalia, N. (2022). Penggunaan Model Discovery Learning Guna Menciptakan Kemandirian dan Kreativitas Peserta Didik. *BAHTERA : Jurnal Pendidikan Bahasa Dan Sastra*, *21*(1). https://doi.org/10.21009/bahtera.211.07

Thomas, L., & Johnson, E. B. (2014). *Contextual teaching learning*. Kaifa.

Winarti, W. T., Yuliani, H., Rohmadi, M., & Septiana, N. (2021). Pembelajaran Fisika Menggunakan Model Discovery Learning Berbasis Edutainment. *Jurnal Ilmiah Pendidikan Fisika*, *5*(1). https://doi.org/10.20527/jipf.v5i1.2789

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