CHAPTER IV

RESULT AND DISCUSSION

A. Data Description

This chapter outlines the research findings and provides a discussion based on the results of data analysis. The analysis focused on students' writing achievement scores, which were gathered through pre-test and post-test assessments administered to both the experimental and control groups. After the data collection, the results were processed and analyzed using SPSS version 22.

1. The Result of Narrative Writing Test

This section explains and analyzes the tests administered before and after the treatment. Both the experimental and control groups were given a pre-test prior to the implementation of the experiment and a post-test after the experiment concluded.

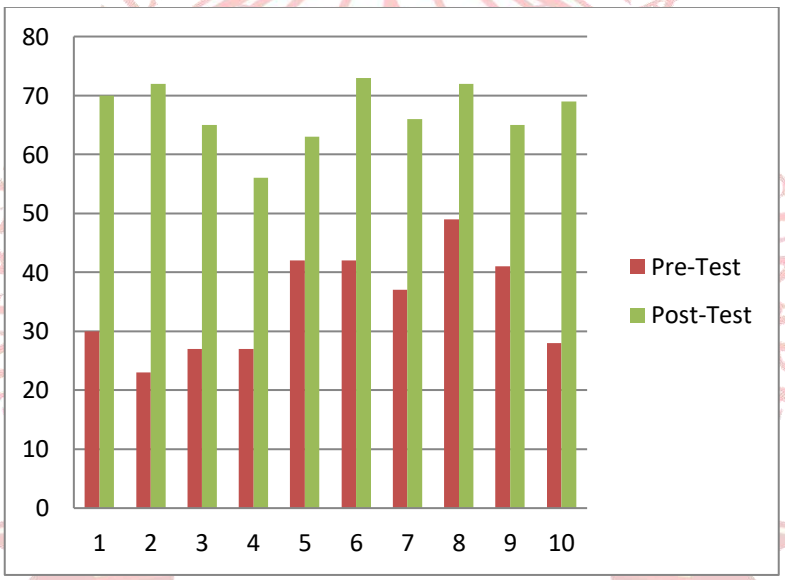
1.1. The Description of Pre-test and Post-test Scores in the Experimental Group

This part provides an explanation and analysis of the assessments conducted prior to and

following the treatment. The experimental and control groups each received a pre-test before the experiment began and a post-test upon its completion.

Figure 4.1

Graph for Pre-test and Post-test Scores in Experimental Group



Based on Figure 4, the post-test scores were higher than the pre-test scores, indicating that the use of the Inquiry-Based Learning (IBL) method in teaching narrative writing contributed to an improvement in students' performance.

The distribution of pre-test and post-test scores for the experimental group is presented in Table 2.

Table 4.1

The Scores Distribution in Experimental Group

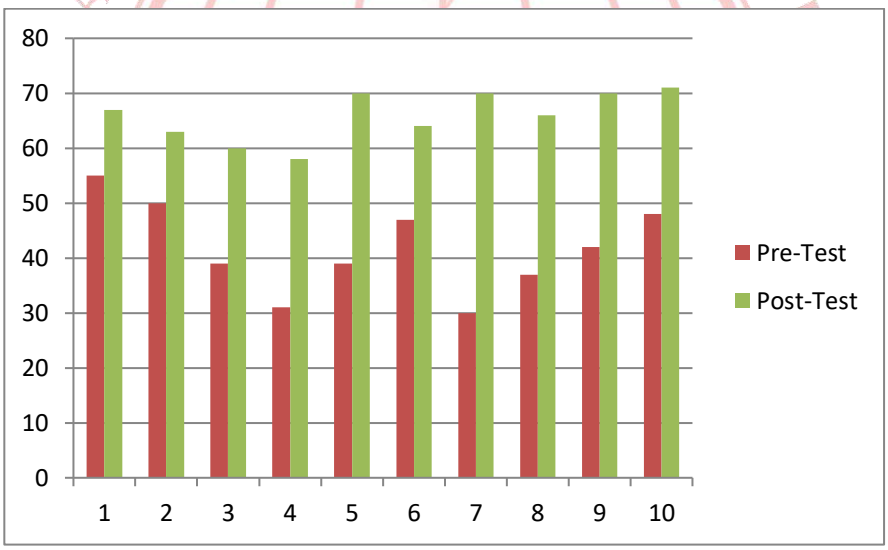
Score Interval	Category	Pretest		Posttest	
		Frequency (Students)	Percentage (%)	Frequency (Students)	Percentage
81-100	Excellent	0	0%	0	0%
70-80	Good	0	0%	4	40%
50-69	Average	0	0%	6	60%
<50	Poor	10	100%	0	0

Based on Table 2, the pre-test results for the experimental group showed that none of the students (0%) fell into the excellent, good, or average categories, while all ten students (100%) were categorized as poor. In contrast, the post-test results indicated that no students (0%) were in the excellent category, four students (40%) achieved the good category, six students (60%) were classified as average, and none (0%) remained in the poor category.

1.2 The Description of Pre-test and Post-test Scores in the Control Group

The total scores of students in the control group for both the pre-test and post-test are displayed in Figure 3.1.

Figure 4.2
Graph for Pretest and Posttest Scores in Control Group



Based on Figure 3.1, the post-test scores increased compared to the pre-test scores for almost all students, suggesting an improvement in learning outcomes even

though the control group did not receive any special intervention or treatment.

B. Classical Assumption Test

1. The Homogeneity and Normality of the Data

Prior to analyzing the data, tests for normality and homogeneity were conducted. The Shapiro-Wilk test was applied to assess whether the data met these assumptions.

1.1. The Result of Normality Data Test of Pre-test Scores

The one-sample Shapiro-Wilk test was employed to examine the normality of the pre-test score data, as each group contained fewer than 50 data points. The normality test results for the pre-test scores of the experimental group are presented in Table 2.1.

Table 4.2

The Normality Test of Pre-test Scores of the Experimental Group

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Score 1	.202	10	.200*	.917	10	.333

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

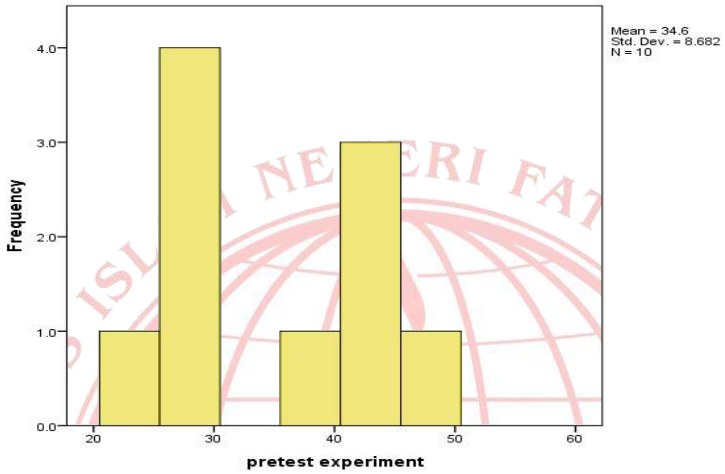
a. Lilliefors Significance Correction

Based on Table 2.1, the Shapiro-Wilk test for the experimental group's pre-test indicated a significance level of 0.333. Since the Asymp. Sig. (2-tailed) value of 0.333 exceeds 0.05, it can be concluded that the data are normally distributed.

The histogram illustrating the normal distribution of the pre-test scores for the experimental group is shown in Figure 3.2.

Figure 4.3

The Histogram of Normality Test of the Student's Pre-test Scores in the Experimental Group



The normality test of student's pretest scores of the control group can be seen at table 2.2.

Table 4. 3

The Normality Test of Pre-test Scores of the Control Group

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Score	1	.138	10	.200*	.962	10	.806

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

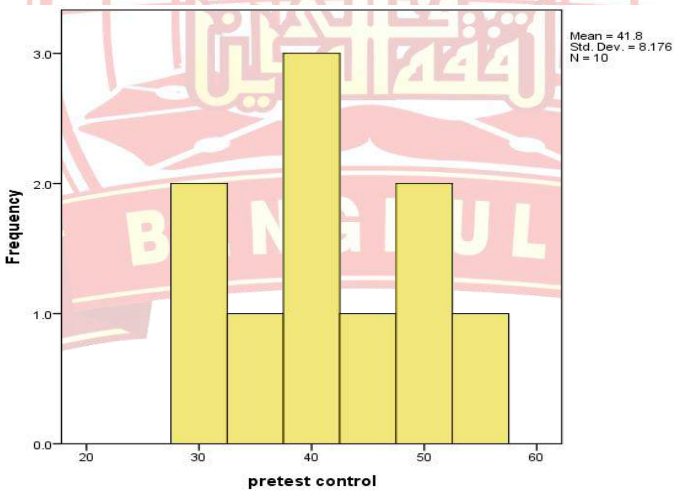
a. Lilliefors Significance Correction

Referring to Table 2.2, the Shapiro-Wilk test for the control group's pre-test yielded a significance value of 0.806. As the Asymp. Sig. (2-tailed) value 0.806 is greater than 0.05, it can be concluded that the data are normally distributed.

The histogram representing the normal distribution of the pre-test scores for the control group is shown in Figure 3.4.

Figure 4.4

The Histogram of Normality Test of the Student's Pre-test Scores in the Control Group



1.2. The Result of Normality Data Test of Post-test Scores

The one-sample Shapiro-Wilk test was applied to examine the normality of the post-test score data, as each group contained fewer than 50 observations. The normality test results for the post-test scores of the experimental group are displayed in Table 2.3.

Table 4. 4

The Normality Test of Post-test Scores of the Experimental Group

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Score	1	.144	10	.200*	.912	10	.298

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

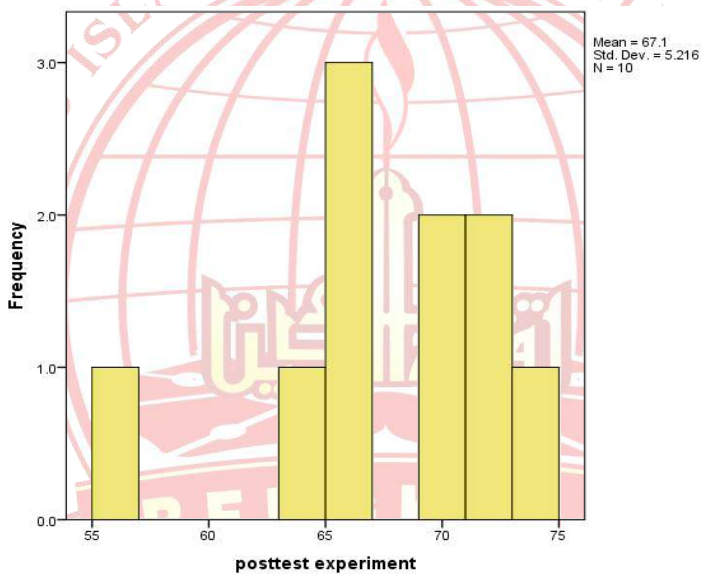
a. Lilliefors Significance Correction

Based on Table 2.3, the Shapiro-Wilk test for the experimental group's post-test resulted in a significance value of 0.298. As the Asymp. Sig. (2-tailed) value (.298) exceeds 0.05, it can be concluded that the data are normally distributed.

The histogram illustrating the normal distribution of the post-test scores for the experimental group is shown in Figure 3.5.

Figure 4.5

The Histogram of Normality Test of the Student's Post-test Scores in the Experimental Group



The normality test of student's post-test scores of the control group can be seen at table 2.4.

Table 4.5

The Normality Test of Post-test Scores of the Control Group

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Score	1	.216	10	.200*	.908	10	.266

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

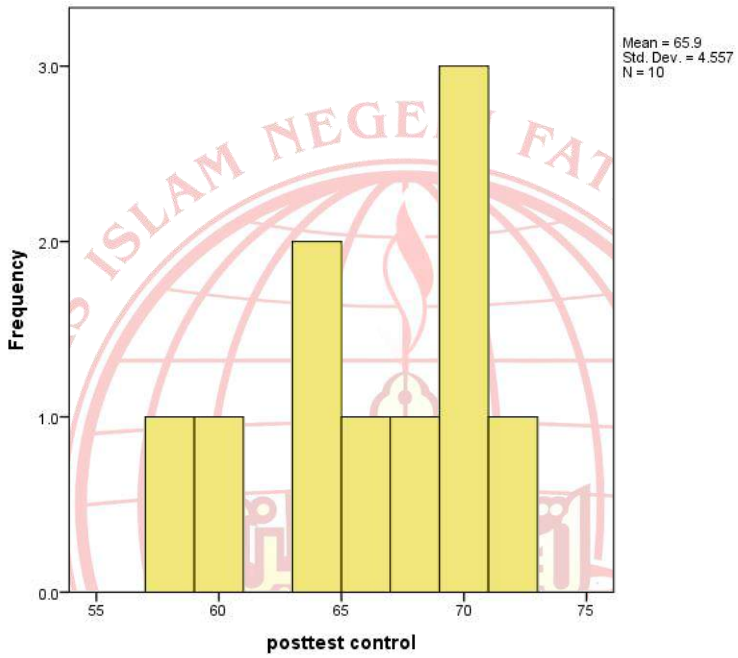
a. Lilliefors Significance Correction

Based on Table 2.4, the Shapiro-Wilk test for the post-test scores of the control group indicated a significance value of 0.266. Since the Asymp. Sig. (2-tailed) value of .266 is greater than 0.05, it can be concluded that the data are normally distributed.

The histogram illustrating the normal distribution of the control group's post-test scores is presented in Figure 3.6.

Figure 4.6

The Histogram of Normality Test of the Student's Post-test Scores in the Control Group



1.3 The Result of Homogeneity of Variances Test

To assess the homogeneity of the data, Levene's test was performed using the SPSS 22 program. The analysis involved comparing the pre-test scores of both the experimental and control groups. The results of the homogeneity test are presented in Table 2.5.