CHAPTER IV

RESEARCH FINDINGS AND DISCUSSION

4.1 Research Findings

4.1.1 Data Description

The experimental class was XI A, and the control class was XI B; each received a different treatment. The experimental class employed a cube story, whereas the control class received conventional instruction. The Data can be viewed in Table 4.1 and Table 4.2:

4.1.1.1 The Data of Experimental Class

The experimental class of this research was XI A of Man 1 Deli Serdang which consisted of 26 students. This class was given the treatment of writing narrative text using a cube story as a teaching medium.

Table 4. 1 Students' Scores of Experimental Class

Students Initial	Experimental Class	
	Pre-test	Post-test
AA	67	75
AZ	56	70
AS	60	85
ASP	70	85
AR	63	80
AA	69	82
AS	80	90
DNP	70	80
DH	80	90
FH	60	80
FN	70	86
GI	50	70
KZN	70	84
MR	60	77
MRN	65	70

NAH	75	90
NAM	70	85
OR	58	80
PAP	50	73
RAP	55	75
RA	72	89
RH	55	71
RP	65	75
SA	69	79
WAT	60	88
ZF	70	87
Σ	**1689**	**2096**
Mean	**64.96**	**80.62**
Maximum Score	**80**	**90**
Minimum Score	**50**	**70**

Based on Table 4.1 of the pre-test and post-test from the experimental, in the pre-test, the lowest score is 50 and the highest is 80 with a mean of 64.96. In addition, the lowest score in the post-test is 70 and the highest score in the post-test is 90 with a mean of 80.62. The investigation examined the pre-test and post-test scores and discovered that the mean gained score was 29.35. This it can be seen from the mean different the pre-test and the post-test score in the experimental class, that the mean of the post-test is higher than the mean of the pre-test which means that there is a difference in scores from before receiving treatment to after receiving treatment using cubes story and experimental students showed improvement in writing skills.

4.1.1.2 The Data of Control Class

The control class of this research was XI B of Man 1 Deli Serdang which consisted of 24 students. This class was given the treatment of writing narrative text using conventional treatment.

Table 4. 2 Students' Scores of Control Class

Students Initial	Control Class	
	Pre-test	Post-test
AAR	60	70
AAS	55	59
ATN	56	66
AHN	45	50
EW	40	49
FN	62	62
IS	71	80
KA	54	60
MHA	67	76
MS	50	60
MA	68	70
NS	60	75
NAP	70	80
NKA	62	74
NZS	58	68
NDL	64	70
PAF	50	55
PFS	60	75
RRW	47	50
RGA	71	77
SSZ	67	76
SZT	65	69
TNK	61	63
ZH	63	74
$\sum$	1426	1608
Mean	59.42	67.00
Maximum Score	71	80
Minimum Score	40	49

Table 4.2 presents the results of the control class' pre and post-test. In the pre-test, the lowest score was 40 and the highest score was 71 with a mean of 59.42. In the post-test, the highest score was 80 and the lowest score was 49 with a mean of 67.00. After comparing the results of the pre-test and post-test in the control class, the researcher found that the mean of the gained score was 7.62, which means that there is a slight increase in writing ability.

The experimental class had a higher mean post-test score (80.96) than the control class (67.00), as seen in Table 4.1 and Table 4.2. The experimental class employed a cube story to create narrative text, but the control class used conventional instruction. Thus, the Cube story has an impact on students' writing skills.

4.1.2 Data Analysis

At this stage, the researcher analyzed the pre and post-test data in the experimental and control classes. The first is to test normality and homogeneity. this test aims to see whether the data from the two classes are normally distributed or not and homogeneous or not.

4.1.2.1 Normality Test

A normality test was conducted to assess whether the normal distributions of the data from the experimental and controlled classes are normally distributed or not. The normality test was used by the researcher using Kolmogorov Smirnov because the number of data samples in the study surpassed 50. The normality test has a significance level of $\alpha = 0.05$. The researcher processed the data using the SPSS 25 version. Table 4.3 presents the normality test results:

Table 4. 3 Tests of Normality of Pre-Test and Post-Test

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Class	Statistic	df	Sig.	Statistic	df	Sig.
Result Score	Pre-test experiment class	.151	26	**.131**	.956	26	.317
	Post-test experiment class	.127	26	**.200***	.929	26	.074
	Pre-test control class	.153	24	**.154**	.951	24	.290
	Post-test control class	.143	24	**.200***	.926	24	.079

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

a. Lilliefors Significance Correction

It can be seen from Table 4.3 that the pre-test significance results in the experimental class are 0.131 and in the control class 0.154. Both of these results are higher than the significance level of $\alpha = 0.05$. Thus, the pre-test data in the control class and experimental class is normally distributed.

Meanwhile, the post-test of the experimental class and the control class is 0.200. from these results, it can be seen that the post-test data is higher than the significance (0.05). it can be concluded that the post-test data from the experimental class and the control class are normally distributed.

4.1.2.2 Homogeneity Test

After testing normality, the next test is the homogeneity test, the homogeneity test was conducted aiming to test the similarity of the sample from both experimental and control class. In this test the researcher used the Levene statistic of the SPSS 25 version. The homogeneity test is considered homogeneous if the sig > 0.05, whereas sig < 0.05 shows that the data is not homogenous.

Table 4. 4 Test of Homogeneity of Pre- Test

		Levene Statistic	df1	df2	Sig.
Pre-test score	Based on Mean	.005	1	48	**.946**
	Based on Median	.027	1	48	.869
	Based on Median and with adjusted df	.027	1	46.955	.869
	Based on trimmed mean	.020	1	48	.889

Table 4.4 shows that the pre-test for homogeneity has a significance level of 0.946. The pre-test distribution data in the experimental and control classes were homogeneous, as shown by a significant value of 0.946 (> 0.05).

Table 4. 5 Test of Homogeneity of Post Test

		Levene Statistic	df1	df2	Sig.
Post-test score	Based on Mean	3.768	1	48	**.058**
	Based on Median	2.401	1	48	.128
	Based on Median and with adjusted df	2.401	1	39.050	.129
	Based on trimmed mean	3.538	1	48	.066

Table 4.5 shows that the post-test of the experimental and control classes for homogeneity has a significance level of 0.058. Therefore, the experimental and control classes' post-test data are homogeneously distributed. It can be indicated from the significance value of 0.058 > 0.05.

4.1.2.3 Hypothesis Test

In this research, after conducting the normality and homogeneity tests, the next step was to use a t-test to examine the hypothesis of this research whether cubes story as teaching media have a significant effect on students' writing skills. This test was

conducted by SPSS 25 Version. The significance value (α) of the t-test is 5% or 0.05. The results are presented further below:

Table 4. 6 Group Statistics of Post-Test Score

Group Statistics

	Class	N	Mean	Std. Deviation	Std. Error Mean
Post-test score	post-test Experiment	26	80.62	6.724	1.319
	post-test Control	24	67.00	9.574	1.954

Table 4.6 shows the results of the statistical analysis post-test for both the experimental and control classes. The average score of the experimental group was 80.62, and the average score of the control group was 67.00.

Table 4. 7 Independent Sample Test

Independent Samples Test

		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
Post-test score	Equal variances assumed	3.768	.058	**5.856**	**48**	**.000**	13.615	2.325	8.941	18.290
	Equal variances not assumed			5.775	40.909	.000	13.615	2.357	8.854	18.377

Based on Table 4.7, the results of the T-test show that the t_{value} is 5.856 with the significance (2-tailed) 0.000. The $t\text{-}table$ shows 1.677 with 48 as the degree of freedom (df) in the significance level 0.05. The comparison shows that t_{value} (5.856) > t_{table} (1.677) And the Sig. (2-tailed) value of the score was lower than α, 0.000 < 0.05. the results implied that the alternative hypothesis (Ha) is accepted and the null hypothesis

(Ho) is rejected. This means that is a positive effect of applying cubes story as a teaching media on students' writing skills in narrative text.

4.1.2.4 Effect Size

The effect size is the final calculation after all data analysis (such as normality test, homogeneity test, and hypothesis test) was calculated. The purpose of the effect size was to find out the significance level of the effect in the research. The following formula was employed:

$$d = \frac{(mean\ for\ group\ A - mean\ for\ group\ B\ )}{pooled\ standard\ deviation}$$

$$Pooled\ standard\ deviation$$

$$= \frac{Standar\ deviation\ 1 + Standar\ deviation\ 2}{2}$$

$$= \frac{6.724 + 9.574}{2} = 8.14$$

$$d = \frac{(mean\ for\ group\ A - mean\ for\ group\ B\ )}{pooled\ standard\ deviation}$$

$$d = \frac{(80.62 - 67.00\ )}{8.14} = \frac{13.62}{8.14} = 1.67$$

Based on the above calculation, the effect size of this study is 1.67, so it can be concluded that the size effect level in this study is a strong effect.

4.2 Discussion

This research aims to evaluate the effectiveness of using cubes story media in improving students' narrative English writing skills. Data was collected through Pre-Test and Post-Test to 11th-grade students of Man 1 Deli Serdang.

Table 4 8 Pre-Test and Post-Test Results

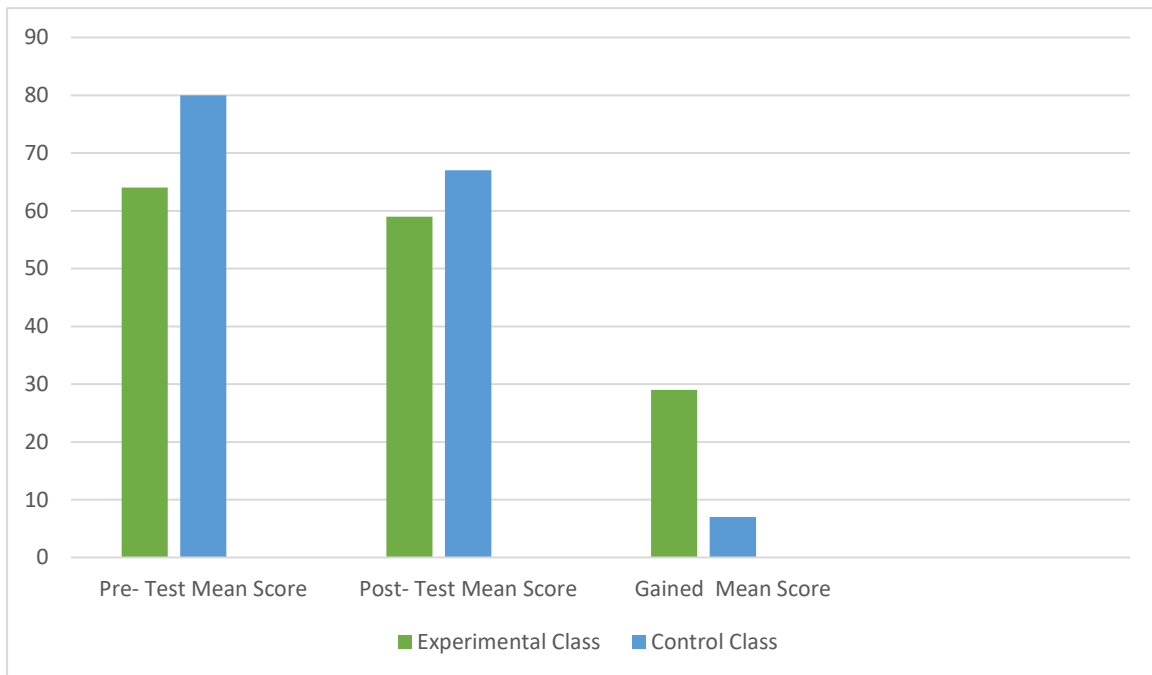| Group	Total of Students	Pre-Test Mean Score	Post- Test Mean Score	Gained Mean Score
Experimental Class	26	64	80	29
Control Class	24	59	67.00	7.62

Figure 4 1 Narrative Test Score Improvement

Table 4.8 and Figure 4. 1 Show that Students in the experimental group who used cubes story as learning media improved significantly than the control class who did not use cubes story as teaching media. The gained mean score in the experimental class score was 29 points while the control class only improved by 7 points. These results show that the use of story cubes as a teaching medium is effective in improving the effectiveness of narrative English writing of grade 11 students. This is due to several factors. First, story cubes provide an interesting and interactive way of teaching story development. Secondly, the use of cubes story media increases students' learning motivation because they are actively involved in the learning process (Brown, 2007).

The experimental class experienced an improvement due to the use of cubes story as a learning media in writing narrative text. Cubes story is a media to help students develop ideas in writing narrative text. On the other hand, cubes story can also improve students' vocabulary and grammar. Cube Story is a picture media that will help students determine the content of the generic structure of the narrative text. First, for the orientation section, story cubes help to determine the characters and the place and time setting that students will use to create characters, place, and time in their narrative text. Second, for the complication section, story cubes assist in deciding the problem that students will use in making their narrative texts. Third, in the resolution section, story

cubes help to set the resolution of the problem or the ending of the story. It can be concluded that students were very helpful in completing a narrative text when using cubes story (Richards & Renandya, 2002)

Meanwhile, the control class that used conventional techniques or did not use cubes story as learning media in writing narrative text did not experience the same improvement as the experimental class. In the control class, students wrote narrative text without media assistance such as cubes story. The disadvantage that occurred in the control class was in creativity, such as students' difficulty in visualizing the scene. Students also have difficulty in creating characters in the orientation stage and in solving the problem they also face difficulties in the resolution stage. Another disadvantage is the grammatical errors that occur when translating. Several errors occur First is an omission error, the second grammatical error is an addition error and Misinformation is the third error(F. R. W. B. Kembaren et al., 2023)

Compared to a previous study by (Sultan et al., 2020) in their article entitled "Story Cube in Increasing Narrative Writing Skills". Using the Story Cube significantly affects the learning outcomes of the VI-grade students of SDN 161 Pinrang on writing narrative essay skills. The average score (mean) in the Experiment class was 26. Meanwhile, the average score (mean) in the control class was 13. The average result between the n-gain of the experimental class and the control class shows that the average in the experimental class was higher than the average result of the control class.

Compared to another previous study by (Fatiani et al., 2021) in their article "Practicing Cooperative Learning Model Using Picture Cube and Story Marker to Improve Writing Skills". Using Picture Cube and Story Marker significantly affects the student's narrative writing abilities. The results of the analysis also indicated a considerable improvement. Furthermore, the number of pupils who met the minimum accomplishment requirement (KKM) increased by 70. In the pre-test, only 12 students (60%) fulfilled the minimal requirements for achievement; in the post-test, 20 students (100%) met the required criteria.

Based on the research findings, it is possible to conclude that using Cubes Story as a learning media can increase students' narrative writing skills compared to students who do not use Cubes Story.