

CHAPTER IV

FINDINGS AND DISCUSSION

A. Findings

1. Implementation of Teaching and Learning in Control Class and Experiment Class

In this research, researcher is acted as a teacher in applying Mindscape technique in teaching writing. The material of the teaching and learning is analytical exposition at eleventh grade students with KTSP curriculum that consists of one standard competency and basic competence and indicators. For detail, it can be seen in appendix 9.

All of the material of analytical exposition is explained to the subjects of research, they are the eleventh grade students of XI IPA 1 and XI IPA 2 in SMAN 2 Tanjung. Each class is acted as what have decided in research method. The detail of the act that applied to each class will explain as follows:

a) Implementation of Teaching and Learning in Control Class (XI IPA 2)

Before the researcher teach in the class. She makes planning of all needed in teaching later in control class such as the lesson plan, the material, the aids, the evaluation and so on (Look at appendix 10, 12, 14).

Teaching and learning implementation is done for three times and once for the last test. Schedule of the teaching and learning implementation can be seen in this table below.

Table 4.1 Implementation of Teaching and Learning in Control Class

Meeting	Day/Date	Time	Topic
1	Saturday/ 26 October 2013	1-2	Analytical Exposition (The purpose and generic structure of the text)
2	Thursday/ 31 October 2013	1-2	Analytical Exposition (Language features of the text and complex sentence)
3	Saturday/ 2 November 2013	1-2	Analytical Exposition (Parts of good paragraph)
4	Thursday/ 21 November 2013	1-2	Last Test

b) Implementation of Teaching and Learning in Experiment Class (XI IPA 1)

The planning of teaching and learning implementation in experiment class is more complex than in control class. Besides, the researcher plans the lesson plan, the material, the aid, the evaluation and so on (looks at appendix 11, 13, and 15), she also must plan the Mindscapes on the paper and all things that need in making a Mindscape.

Same with control class, the implementation of teaching and learning is done for three times and once for the last test. Schedule of the teaching and learning implementation can be seen in this table below.

Table 4.2 Implementation of Teaching and Learning in Experiment Class

Meeting	Day/Date	Time	Topic
1	Friday/ 25 October 2013	2-3	Analytical Exposition (The purpose and generic structure of the text)
2	Thursday/ 31 October 2013	7-8	Analytical Exposition (Language features of the text and complex sentence)

Meeting	Day/Date	Time	Topic
3	Friday/ 1 November 2013	2-3	Analytical Exposition (Parts of good paragraph)
4	Thursday/ 21 November 2013	7-8	Last Test

2. Description of Teaching and Learning Activity in Experiment Class

Generally, the teaching and learning activities in experiment class using Mindscape as follows.

Teacher gave the students a Mindscape about analytical exposition and asked them to write whatever that they can get from the Mindscape. After that, the teacher what they have done, what the Mindscape is and explained about analytical exposition by create its Mindscape on the whiteboard. At the first time, the students seem confuse but then they seem interesting and enjoying the lesson.

Then, the teacher introduced Mindscape and explained how to translate a Mindscape into written language which all aspects in Mindscape like pictures, symbols and words could be transformed to a sentence even a paragraph.

After that, the teacher explained how to use Mindscape to help them in writing. Then she gave them a new Mindscape and asked them to transform the Mindscape into written language as an evaluation to check their understanding about analytical exposition.

Furthermore, the teacher trained the students how to make a Mindscape with using symbols, picture, templates and key words. To develop their writing especially of analytical exposition, the teacher gave those templates, pictures and the sentences which they were ordered to choose the appropriate picture and its

sentences. Finally, they asked to make their own Mindscape and its text of analytical exposition.

3. Description of the Students' First Ability in Writing

Data of the students' first ability in writing of XI IPA 1 and XI IPA 2 is the score of the writing test. The researcher did the test in the first meeting of each class (look at appendix 16 and 17). Here is the description of the students' first ability in writing.

Table 4.3 Description of the Students' First Ability in Writing

	Experiment Class	Control Class
Highest Score	70	72.2
Lowest Score	20	33.3
Mean	50.33	51.67
Standard Derivation	11.56	11.51

The table above shows that the mean value of experiment class and control class is not too different. For more specific, the data will be measured by t test.

4. The Test Difference of the Students' First Ability in Writing

a) Normality Test

Normality test is used to know the normalcy of data distribution by using Liliefors test.

Table 4.4 Normality Test of the Students' First Ability in Writing

Class	L _{count}	L _{table}	Summary
Experiment	0.0974	0.1617	Normal
Control	0.1310	0.1617	Normal

$\alpha = 0.05$

Based on the table above is known that in experiment class L_{count} is smaller than L_{table} in $\alpha = 0.05$. This shows that the data is distributed normally. Also in control class L_{count} is smaller than L_{table} in $\alpha = 0.05$ so the data is distributed normally. The detail calculation can be seen in appendix 18, 19, 20 and 21.

b) Homogeneity Test

After using Normality test, it's gotten that the data normalcy distributed then do Homogeneity test to know whether the data is homogenous or not.

Table 4.5 Homogeneity Test of the Students' First Ability in Writing

Class	Variance	F_{count}	F_{table}	Summary
Experiment	133.63	1.009	1.85	Homogenous
Control	132.48			

$\alpha = 0.05$

Based on the table above is known that in the significance level $\alpha = 0.05$ is gotten F_{count} is smaller than F_{table} . It means that the students' ability in writing is homogenous. The detail calculation can be seen in appendix 22.

c) T test

The data distribution is normal and homogenous, and then does t test to know whether any significant different of the students' first ability in writing. Based on the calculation that can be seen in appendix 23, it is known that $t_{count} = 0.44$ and $t_{table} = 2.005$ in the significant level $\alpha = 0.05$ with $df = 58$. Because of $-t_{table} \leq t_{count} \leq t_{table}$ so H_0 is accepted and H_a is rejected. It can be concluded that there is no significant different between the students' first ability in writing

5. Description of the Students' Achievement in Writing Analytical Exposition

A. The Students' Achievement in Writing Analytical Exposition in Every Meeting

The students' achievement in writing analytical exposition in every meeting can be seen from the *post test* score which is given in the end of the lesson. Data of the *post test* score can be seen in appendix 24 and 25. Shortly, the mean value of the *post test* in every meeting at control class and experiment class can be seen in this following table.

Table 4.6 Mean Value of Class in Every Meeting

Meeting	Mean	
	Control Class	Experiment Class
1	58.06	62.66
2	70.02	70.72
3	66.86	70.54

B. The Students' Achievement in Writing Analytical Exposition in Last Test

The last test is given to know the students' achievement in writing analytical exposition both of control class and experiment class. The test is implemented in the fourth meeting. Distribution of the total number of students who following this test can be seen in this table below.

Table 4.7 Distribution of the Total Number of Student Who Following Last Test

	EC	CC
Last test of teaching	30	31
Total number of students	31	31

According to the table, in experiment class all students followed the last test while in control class just one student didn't follow the last test.

1) The Students' Achievement in Writing Analytical Exposition in Control Class

The students' achievement in writing analytical exposition in control class is showed in the following table.

Table 4.8 Frequency Distribution of the Students' Achievement in Control Class

No	Score	Frequency	Percentage (%)	Category
1.	95 – 100	-	-	Excellent
2.	80 - < 95	-	-	Very Good
3.	65 - < 80	19	61.29 %	Good
4.	55 - < 65	8	25.81 %	Enough
5.	40 - < 55	4	12.90 %	Low
6.	0 - < 40	-	-	Very Low

Based on the table above, it can be known that in control class there are 19 students or 61.29 % in good category and there are 12 students or 38.71 % in enough and low category. The detail calculation can be seen in appendix 26.

2) The Students' Achievement in Writing Analytical Exposition in Experiment Class

The students' achievement in writing analytical exposition in control class is showed in the following table.

Table 4.9 Frequency Distribution of the Students' Achievement in Control Class

No	Score	Frequency	Percentage (%)	Category
1.	95 – 100	-	-	Excellent
2.	80 - < 95	2	6.67 %	Very Good
3.	65 - < 80	23	76.67 %	Good
4.	55 - < 65	4	13.33 %	Enough
5.	40 - < 55	1	3.33 %	Low
6.	0 - < 40	-	-	Very Low

Based on the table above, it can be known that in control class there are 25 students or 83.33 % in good and very good category and there are 5 students or 16.67% in enough and low category. The detail calculation can be seen in appendix 27.

6. T test of the Students' Achievement in Writing Analytical Exposition

The summary of the students' achievement in writing analytical exposition of the last test can be seen in this following table.

Table 4.10 Description of the students' achievement

	Experiment Class	Control Class
Highest Score	90	77
Lowest Score	50	45
Mean	69.57	63.39
Standard Derivation	8.25	7.91

a) Normality Test

Normality test is used to know the normalcy of data distribution by using Liliefors test.

Table 4.11 Normality Test of the Students' Last Ability in Writing

Class	L _{count}	L _{table}	Summary
Experiment	0.1421	0.1617	Normal
Control	0.1360	0.1591	Normal

$\alpha = 0.05$

Based on the table above is known that in experiment class L_{count} is smaller than L_{table} in $\alpha = 0.05$. This shows that the data is distributed normally. Also in control class L_{count} is smaller than L_{table} in $\alpha = 0.05$ so the data is distributed normally. The detail calculation can be seen in appendix 28, 29, 30 and 31.

b) Homogeneity Test

After using Normality test, it's gotten that the data normalcy distributed then do Homogeneity test to know whether the data is homogenous or not.

Table 4.12 Homogeneity Test of the Students' Last Ability in Writing

Class	Variance	F _{count}	F _{table}	Summary
Experiment	68.05	1.087	1.84	Homogenous
Control	62.58			

Based on the table above is known that in the significance level $\alpha = 0.05$ is gotten F_{count} is smaller than F_{table}. It means that the students' ability in writing is homogenous. The detail calculation can be seen in appendix 32.

c) T test

The data distribution is normal and homogenous, and then does t test to know whether any significant different of the students' last ability in writing. Based on the calculation that can be seen in appendix 33, it is known that $t_{count} = 2.89$ and $t_{table} = 2.005$ in the significant level $\alpha = 0.05$ with $df = 59$. Because of $-t_{table} \leq t_{count} \leq t_{table}$ then H_a is accepted and H_o is rejected. It can be concluded that there is a significant different between the students' last ability in writing analytical exposition using Mindscapes and not using Mindscape

7. The Students' Respond to Mindscape as a Technique in Teaching Writing

In teaching and learning using Mindscapes, the students' seem interest in the lesson and enjoy it because this technique gives a new atmosphere of learning to them. They also seem understand the lesson easily. Because of that, they were given some questionnaires about this Mindscape.

The questionnaire consists of two form; questionnaire using multiple choice answer and questionnaire using 'yes' or 'no' answer. The questionnaires consist of questions about their respond to English lesson using Mindscapes. Questionnaires are answered by students after the teaching and learning in the last meeting that is on Friday, 01 November 2013.

The percentage of the students respond to Mindscape can be seen in these following tables.

Table 4.13 Table of the students' respond to Mindscape with questionnaire using multiple choice answer

No.	Question	Answer	Frequency	Percentage	Summary
1	How is you feeling after participate in English lesson?	A	26	96.30 %	Fun
		B	1	4 %	
		C	-		
2	What is your opinion about the Mindscapes?	A	25	92.59 %	Interesting
		B	2	7 %	
		C	-		
3	Does the picture help you in understand the lesson?	A	27	100 %	Very Helpful
		B	-		
		C	-		
4	Do you find any difficulties in answer the given task?	A	2	7 %	Difficult
		B	9	3.3 %	
		C	16	59.2 %	
5	Does the Mindscape add your English vocabulary?	A	18	66.7 %	Very Add
		B	9	33.3 %	
		C	-		
6	Do the medium help you in making an essay?	A	27	100 %	Very Helpful
		B	-		
		C	-		
7	What is your opinion about the teacher's expert using the medium?	A	20	74.1 %	Very Good
		B	7	25.9 %	
		C	-		
8	Do you agree if the teacher use the medium in teaching and learning again?	A	25	92.6 %	Agree
		B	1	4 %	
		C	1	4 %	
9	Does the Mindscape motivate you in learning?	A	19	70.4 %	Very Motivated
		B	8	29.6 %	
		C	-		
10	Is it needed a creative teacher in using many kinds of techniques in teaching and learning?	A	27	100 %	Very Need
		B	-		
		C	-		

According to the first questionnaire, it can be seen from percentage and summary that in teaching and learning activity using Mindscape the student felt fun, interesting, helped by the technique, add their vocabulary and so on.

One thing that interesting that although their respond to Mindscape is good which the techniques gave a good distribution to their learning English especially in writing analytical exposition but they stated that they felt difficult to do the task that had given by teacher. However, the whole of the answer shows that the students very accept this technique.

Table 4.14 Table of the students' respond to Mindscape with questionnaire using 'yes' or 'no' answer.

No.	Question	Frequency	Percentage	Category
1.	In participate to the English lesson using Mindscapes; Do you feel that you have accurateness in finishing the given task?	26	96.30 %	Very Good
2.	Does the teaching and learning using Mindscapes motivate you in learning English?	25	92.59 %	Very Good
3.	Does the teaching and learning using Mindscapes help you in writing analytical exposition?	26	96.30 %	Very Good
4.	Do the given teaching and learning activities add your spirit and self-confidence in writing?	27	100 %	Very Good
5.	Does the teaching and learning using Mindscapes create a pleasure in learning to do the given writing tasks in order to get maximal score?	27	100 %	Very Good
6.	Is the teaching and learning using Mindscapes good to apply to the other teaching writing?	26	96.30 %	Very Good

No.	Question	Frequency	Percentage	Category
7.	In the teaching and learning using Mindscapes; Does the teacher guide in learning?	27	100 %	Very Good
8.	Does the teaching and learning using Mindscapes is a new thing for you?	26	96.30 %	Very Good

In the first question, there are 26 students who answering 'yes' or 96.30 % in very good category which they had accurateness in finishing the given task using Mindscapes.

In the second question, there are 25 students who answering 'yes' or 92.59 % in very good category which they was motivated in teaching and learning activity using Mindscapes.

In the third question, there are 26 students who answering 'yes' or 96.30 % in very good category which they felt that Mindscape helped them in writing analytical exposition.

In the fourth question, there are 27 students who answering 'yes' or 100 % in very good category which teaching and learning activities using Mindscape has been added their spirit and self-confidence in writing analytical exposition.

In the fifth question, there are 27 students who answering 'yes' or 100 % in very good category which they felt that Mindscapes gave them a pleasure atmosphere to get maximal score in writing analytical exposition.

In the sixth question, there are 26 students who answering 'yes' or 96.30 % in very good category which Mindscapes also can be applied to the other teaching writing in a different theme.

In the seventh question, there are 27 students who answering 'yes' or 100 % in very good category which the teacher guided the students in using Mindscape in writing analytical exposition.

In the last question, there are 26 students who answering 'yes' or 100 % in very good category which they taught that Mindscapes is a new thing for them.

B. Discussion

The result of the last test showed that the mean value of experiment class is 69.57 in good category while the mean value of control class is 63.39 in enough category. The different value between them is 6.18 that showed significant different. Based on the calculation of t test, the value of $t_{count} = 2.89$ and $t_{table} = 2.005$ in the significance level $\alpha = 0.05$ with $df = 59$. Because of $-t_{table} \leq t_{count} \leq t_{table}$ then H_a is accepted and H_o is rejected. This shows that there is a significant different between the students' achievement in writing analytical exposition using Mindscapes and the students' achievement not using Mindscape at eleventh grade in SMAN 2 Tanjung. That case also can be seen in the mean value of each class in every meeting.

In the field, the students of experiment class seem more active in participate to English writing lesson and the condition and situation for every meeting is better and better.

In the first meeting, the students in experiment class felt surprised with the given Mindscape and a little confuse to do the first task because they still not yet learn about analytical exposition before. However, after the teacher explains it to them and introduce them to Mindscape and they understand the role, they could write some sentences from the Mindscape and got the mean score 62.66. Meanwhile, in control class, the students seem not interesting to English lesson and they didn't give their full attention and participate although the teacher had tried to make activity to make them enjoy so that the students in control class just got the mean score 58.06.

The second meeting, both of class gave their full attention and participate actively in the English writing lesson which in control class at the first meeting felt didn't comfortable with the English writing lesson. Also, in experiment class, the situation of teaching and learning was so interesting, so fun and fantastic that they accustomed with the Mindscape. In this meeting, both of class got the mean score that not to different that is 70.02 for control class and 70.72 for experiment class.

In the third meeting, the students in control class felt difficult in finishing the task that connecting with making an essay so that they got the mean score 66.86. This is different with experiment class, here the students made their own Mindscape to make an essay and this way was work which they can stand their mean score in writing that is 70.54.

Generally, the students in experiment class accepted the Mindscapes technique well in English writing lesson because they felt happy, fun, and

interesting to the new teaching and learning activity. The students also motivated in create their own Mindscapes using many kinds of picture, symbol, word and color.

From the explanation above, it can be understood that English writing lesson using Mindscapes can improve the students' achievement in writing. The application of Mindscapes technique is one way to that can be chose by teacher to increase the students' English achievement especially in writing.

Then, the students' respond to the Mindscape using questionnaires that consist of question list. This is done in the last meeting of teaching using Mindscape in experiment class on 2 November 2013. According to the questionnaires, it can be said that all students gave positive respond to Mindscape as a technique in teaching writing although most of them felt difficult in finishing the given task of writing and just few students gave negative respond. However, the students' respond to Mindscape can be categorized in very good respond.