**CHAPTER III**

**RESEARCH METHODOLOGY**

**A. Research Design**

 Experimental design is the general plan to carrying out a study with and active independent variable.[[1]](#footnote-2) In this research the reseacher applied experimental design because in order to know the influence of using semantic mapping technique towards student’s writing ability in narrative text. In this research, the reseacher used quasi experimental research design, quasi-experimentsinclude assignment, but not random assignment of participants to groups. According to Creswell, the experimenter can not artificially create groups for the experiment.[[2]](#footnote-3) In this research, the researcher used two classes of students that consisted of one class as the experimental class and another class as the control class.

 The variety of quasi experimental designs, which can be divided into two main categories, there are pretest, posttest, and posttest-only.[[3]](#footnote-4) The researcher used pre-test and post-test. The researcher design can be presented in Table 2:

**Table 2**

**Pre and Post test Design**

|  |  |  |  |
| --- | --- | --- | --- |
| Select Control Group | Pretest | No Treatment  | Post test |
| Select Experimental Group | Pretest | Experimental Treatment | Post test |

 In this research, the students gave pre-test to know their narrative text in writing ability before treatment and post test after the treatment by semantic mapping technique. The pretest and posttest conducted for control and experimental class. In addition, the experimental class received the treatment by using semantic mapping technique and the control class that taught by using lecturing technique used by English teacher there.

1. **Variables of the Research**

 A variable is a characteristic or attribute of an individual or an organization that a researcher can measure or observe and varies among individuals or organization study.[[4]](#footnote-5) With variable the researcher can measure the individual study. There are two variables in this research namely: independent variable and dependent variable.

 According to Creswell, independent variable is the major variable which investigated. It is the variable that is selected, manipulated, and measured in the research. While the dependent variable is a variable which is observed and measured to determine the effect of the independent variable. [[5]](#footnote-6) In this research the researcher used semantic mapping technique as independent variable and students writing ability in narrative text as a dependent variable.

1. **Operational Definition of Variable**

 The operational definition of variable used to decribe the variables which were used in this research to avoid misconception of variables presented in this research. It was also aim in other the research had clarity about the data needed, so the researcher investigated the data that had been related with the variables of this research. The operational definitions of the variables of this research were as follows:

* + - 1. **Independent Variable (X)**

 Semantic mapping is a visual technique involving brainstorming ideas by displaying categories of words related to one another based on one central topic which informs the teacher what the students already know about the topic.

* + - 1. **Dependent Variable (Y)**

 Students’ writing ability in narrative text is one of skill must be mastered. Students’ writing ability in narrative text is ability to communicate all the ideas or imagination into narrative text so the reader may understand what the writers mean in their writing.

1. **Population, Sample and Sampling Technique**

 Population, sample and sampling are component of the research to collect and measure the data of teh research.

* + - 1. **Population of the Research**

 The populationin social science research refers to all of your potential participants; think of it as the whole group of people in which you are interested.[[6]](#footnote-7) The population consisted of some people or participants in which interested. According to Ary *et.al.,* state that the larger group about which the generalization was made is called a population. A population is defined as all members of any well-defined class of people, events, or objects.[[7]](#footnote-8) Population of this research is all of the students at the first semester of the eleventh grade of SMK N 1 Abung Selatan in the academic year of 2017/2018. The number of population were 105 students consisted of four classes. The researcher is design can be presented in Table 3:

**Table 3**

**The Population of the Students at the First Semester of the Eleventh Grade of SMK N 1 Abung Selatan** **in the Academic Year of 2017/2018**

|  |  |  |
| --- | --- | --- |
| **No.** | **Class** | **The Number of Students** |
| **1.** | XI Akomodasi Perhotelan | 39 |
| **2.** | XI Teknik Komputer Jaringan | 38 |
| **3.** | XI Jasa Boga | 30 |
| **4.** | XI Akuntansi | 37 |
|  **Total** | 144 |

*Source: Document SMK N 1 Abung Selatan*

* + - 1. **Sample of the Research**

A sample is a subgroup of the target population that the researcher plans to study for generalizing about the target population.[[8]](#footnote-9) The sample of this research, the researcher used quasi experimental design. Based on the total of population 105 students from four classes at the first semester of the eleventh grade, the researhcer chosen one of class as experimental class and another as control class.

* + - 1. **Sampling Technique**

In getting the sample from population, the resercher used cluster random sampling. Cluster random samplingoccurs when the population was already divided into natural, preexisting groups. A cluster could be a state, district, school, classroom, metropolitan statistical area, city zone area, neighborhood block, street, and etc.[[9]](#footnote-10) The researcher conducted the research at the first semester of the eleventh grade. The first semester of the eleventh grade consisted of three classes, but it was quite hard to maintain all of the eleventh grade students as sample of this research, so the researcher selected two classes as the sample. Steps in determining the experimental class and control class as follows:

1. The first, the researcher wrote three names of classes in small pieces of paper and then the researcher rolled them up and put them into a glass.
2. The first, the resercher shaked and chosen an experimental class first by putting one of them out the glass randomly.
3. Then, pieces of the roll papers that the researcher shaked and choosen a control class by putting one of them out the glass randomly.
4. **Data Collecting Technique**

In collecting the data, the researcher used some techniques, they are:

1. Pre-test

 The pretest was given before the treatment. It was done by writing the narrative text based on the provided topics. The researcher gave pretest to the students in control class and the experimental class to measure their writing ability in narrative text before treatment. In pretest the students were asked to write narrative text based on the provide topics that consisted of approximately 150 – 250 words and 60 minutes for time allocation.

1. Post-test

 The posttest did after the students in experimental and control class were given the treatment. It was done to know the students’ narative text writing ability after they are taught by using semantic mapping technique. It was administered after treatment was given to measure the influence of using semantic mapping technique towads students’ narative text writing ability. In the post test the students also were asked to write narrative text based on the provide topics that consist of 150-250 words and 60 minutes for time allocation.

1. **Instrument of the Research**

 The instrument is a tool used to collect the data.[[10]](#footnote-11) The research instrument used in this research was writing test. The researher made two instruments, they were pre-test and post-test. The instrument of pre-test and post-test were tested to compose a narrative text. Based on the RPP (see appendix 7), the students made a composition in narrative text that consists of 150-250 words and 60 minutes for time allocation. The resercher gave some topics that might be chosen by students. Each student choosen one topic and wrote a narrative text in each test.

1. Pre-test instrument :
2. Malin Kundang
3. Timun Emas
4. Post-test instrument :
5. Pinochio
6. Cinderalla
7. **Scoring Procedure**

The score of test calculated based on the following scoring system proposed by Tribble:[[11]](#footnote-12)

**Table 4**

**Scoring System**

|  |  |  |
| --- | --- | --- |
| **Area** | **Score** | **Descriptor** |
| **Task Fulfillment/ Content** | 20-17 | **Excellent to very good:** Excellent to very good treatment of the subject, considerable variety of ideas or argument; independent and through interpretation of the topic; content relevant to the topic; accurate detail.  |
| 16-12 | **Good to average:** Adequate treatment of topic, some variety of ideas or argument; some independence of interpretation of the topic; most content relevant to the topic; reasonably accurate detail. |
| 11-8 | **Fair to poor:** Treatment of topic is hardly adequate, little variety of ideas or argument; some irrelevant content to the topic; lacking detail. |
| 7-5 | **Very poor:** inadequate treatment of topic, no variety of ideas or argument; content irrelevant, or very restricted; almost no useful detail. |
| 4-0 | **Inadequate:** fails to adress the task with any effectiveness. |
| **Organization** | 20-17 | **Excellent to very good:** Fluent expression, ideas clearly stated and supported; appropriately organized paragraphs or sections; logically sequenced (coherence); connectives approptiately used (cohesion). |
| 16-12 | **Good to average:** Uneven expression, but main ideas stand out; paragraphs or sections evident; logically sequenced (coherence);some connectives used (cohesion). |
| 11-8 | **Fair to poor:** Very uneven expression, ideas difficult follow; paragraphing/organization does not help the reader; logical sequenced difficult to follow (coherence); connectives largely absent (cohesion). |
| 7-5 | **Very poor:** Lacks fluent expressions, ideas very difficult to follow. Little sense of paragraphing/organization; no sense of logical sequence. |
| **Vocabulary**  | 20-17 | **Excellent to very good:** Wide range of vocabulary; accurate word/idiom choice and usage; appropriate selection to match register. |
| 16-12 | **Good to average:** Adequate range of vocabulary; occasional mistakes in word/idiom choice and usage; register not always appropriate. |
| 11-8 | **Fair to poor:** Limited range of vocabulary; a noticeable number of mistakes in word/idiom choice and usage; register not always appropriate. |
| 7-5 | **Very poor:** No range of vocabulary; uncomfortably frequent mistakes in word/idiom choice and usage; no apparent sense of appropriate |
| 4-0 | **Inadequate:** Fails to address his aspect of the task with any effectiveness. |
| **Language**  | 30-24 | **Excellent to very good:** Confident handling of appropriate structures, hardly any errors of agreement, tense, number, word order, articles, pronouns, prepositions; meaning never obscured. |
| 23-18 | **Good to average:** Acceptable grammar-but problem with more complexes structures; mostly appropriate structures; some errors of agreement, tense, number, word order, articles, pronouns, prepositions; meaning sometimes obscured. |
| 17-10 | **Fair to poor:** Insufficient range of structures with control only shown in simple constructions; frequent errors of agreement, tense, number, word order, articles, pronouns, prepositions, meaning sometimes obscured. |
| 9-6 | **Very poor:** Major problems with structures – even simple ones; frequent errrors of negation, agreement, tense, number, word order/function, articles, pronouns, prepositions; meaning often obscured.  |
| 5-0 | **Inadequate:** Fails to address his aspect of the task with any effectiveness. |
| **Mechanics**  | 10-8 | **Excellent to very good:** Demonstrates full command of spelling, punctuation, capitalization, and layout. |
| 7-5 | **Good to average:** Occasional errors in spelling, punctuation, capitalization, layout. |
| 4-2 | **Fair to poor:** Frequent errors in spelling, punctuation, capitalization, and layout. |
| 1-0 | **Very poor:** Fails to address his aspect of the task with any effectiveness. |

 Besides, the researcher used inter-rater to score the result of the test. The scoring had done by researcher and the English teacher in the school. The scores of two raters were summed up and then divide into two.

The final score = Content + Vocabulary + Organization + Language + Mechanics

Example:

Content : 20

Vocabulary : 20

Organization : 20

Language : 30

Mechanics : 10

**Total : 100**

 In this research, the researcher used Tribble is theory for the scoring system. In Tribble theory had completed aspect of scoring system of writing, so that was why the researcher used Tribble’s theory.

1. **Research Procedure**

The procedures of this research were as follows:

1. Determining the subject

 The researcher determined the subject. In this case, the researcher chosen the first semester of eleventh grade of SMK N 1 Abung Selatan as the subjects of the research, one class as the experimental class and one class as control class.

1. Determining the population and sample signing the test

 The researcher determined the instruments that had been taught by students, the instruments was narrative text writing ability. The students got the same instrument for both classes in several topics.

1. Selecting the material that will given

 The researcher selected the materials that had been suitable for the students.

1. Giving the treatment, the researcher taught the class

 The researcher gave the treatment in three meetings. In the treatment, the researcher as a teacher taught by using semantic mapping technique. The researcher gave the explanation about narrative text. For instance, the general structure of narrative text, the example of narrative text and the researcher also gave explanation about the semantic mapping technique. After that, the students wrote narrative text based on the semantic mapping technique by a small group.

1. Giving the pre-test, post test and score the result.

 The researcher conducted the pre-test before the treatment. The researher prepared a kind of test (called pre-test) that had been given to the students. Then, The researcher conducted the post-test after the treatment. By giving post-test, the researcher knew the students’ improvement in their writing ability in narrative text or not. This test is aimed to knows the students’ narrative text writing ability after giving the treatment. In this test, the students had been given some of the topics. Then, the students made the narrative text related to the topics.

1. Analyzing the result of the test

The data obtained from the research was analyzed to find out whether the technique used affective or not.

1. **Validity and Reliability of the Test**

 To know whether the test was good or not, there were some criteria must be considered. The test should have validity and reliability.

1. **Validity of the Test**

Validity is the most important consideration in developing and evaluating measuring instruments.[[12]](#footnote-13) It means that a good test must have validity, so the test can be measured based on the aspects in writing that will be measured. To measure whether the test has good validity or not, the writer used the content and construct validity.

* 1. **Content Validity**

 According to Best and Kahn, content validity refers to the degree to which the test actually measures, or is specifically related to the traits for which it was design, content validity is based upon the careful examination of course textbooks, syllabus, objectives, and the judgments of subject matter specialists.[[13]](#footnote-14) It means that to get content validity the test adapted with an English teacher and the student book that is the test suited with subject that is taught to the students.

 Content validity concerns whether the tests were good reflection of the materials that needed to be tested. Content validity refers to instruments that were parallel with the matter that had measured because in this research the test was intended to measure students’ narrative text writing ability at the eleventh grade of High School. Based on the syllabus, narrative text was taught at the first semester of the eleventh grade of High School.

* 1. **Construct Validity**

 According to Best and Kahn that construct validityis the degree to which scores on a test can be accounted for by the explanatory constructs of a sound theory.[[14]](#footnote-15) It means that construct validity focus on the aspects of the test which can measure the ability especially for students’ narrative text writing ability. In this research, the researcher asked students to make a narrative text test that could measure the students’ narrative text writing ability based on the scoring covers five aspects of writing that are adapted from Tribble. They are content, organization, vocabulary, language and mechanics. To make sure, the researcher consulted to the English teacher of SMK N 1 Abung Selatan, Mrs. Neneng Hartati, S.Pd for determining wether test had obtained construct validity or not.

1. **Reliability of the Test**

 Schreiber say that Reliabilityis the consistency or stability of the values, test scores, or weight measurement.[[15]](#footnote-16) Reliability is a measure of accuracy, consistency, dependability or fairness of scores resulting from administration of particular examination. To ensure the reliability of the scores and to avoid the subjectivity of the researcher, the researcher will use inter-rater reliability. According to Ary *et.al.,* a simple way to determine the reliability of ratings is to have two or more observers independently rate the same behaviors and then correlate the observers’ ratings. The resulting correlation was called the inter-rater or inter-observer reliability.[[16]](#footnote-17) It means that, inter-rater reliability is used when scores on the tests are independently estimated by two or more judges or raters. They were the teacher and the researcher. The estimate the reliability of the test, the researcher used rank order correlation formula as follows:[[17]](#footnote-18)

 6∑D²

 rhoXY = 1 -

 N (N²-1)

**Notes :**

Rho XY : Coefficient correlation ordinal.

 D : Difference of rank correlation (D = R 1- R 2)

N : Number of subjects.

 6 & 1 : Constant number

 Furthermore, to know the degree or the level of the reliability of writing test the researcher consult the criteria of reliability as follows.[[18]](#footnote-19)

0. 80 – 1. 00 = very high

0. 60 – 0. 80 = high,

0. 40 – 0. 60 = medium

0. 20 – 0. 40 = low

0. 00 – 0. 20 = very low

1. **Data Analysis**

After collecting the data, the researcher analyzed the data by using independent sample t-test. There were two assumptions that were done, before the researcher analyzed the data by using t-test.

1. **Fulfillment of the Assumptions**

Parametric statistical significance tests, such as analysis of variance and least squares regression were widely used by researchers in many disciplines, including, statistics parametric tests to produce accurate results, the assumptions underlying them such as normality and homogeneity test must be satisfied.

1. **Normality test**

To analyze the data, the reseracher used normality test to know whether the data are normally distributed or not so that the researcher decided what type of test to be used to test the hypothesis of the research later. The normality test is use to measure weather the data in the experimental class and control classes are normally distributed or not.[[19]](#footnote-20) In this case, the researcher used *Lilliefors* test as followed:

1. Arranging the sample of data from the lowest until the highest.
2. Determining the score Z from each data by using following formula:

$$Ζi=\frac{xi-x}{s}$$

1. Counting the cumulative frequency of each Z score S (z)

$$Sz=\frac{Z1, Z2………Zn<Zi}{n}$$

1. Counting the differential of L = Max **{***F (Zi) – S (Zi)*}
2. Determining the Lobserved score with the highest score, compare to the Lcritical, and score from the table of *Lilliefors.*
3. The hypotheses formulas are :

H0: The data have normal distribution.

Ha: The data do not have normal distribution.

1. The test criteria:

H0 is accepted if L *observed* < L *critical*, it means that the distribution or the data are normally distributed.

H0 is refused if L *observed* > L *critical,* it means that the distribution or the data are not normally distributed.[[20]](#footnote-21)

**b. Homogeneity Test**

 Another requirement test of deciding the types of research hypothesis test is homogeneity test. Homogeneity is used to determine whether the data is homogeneous or not. In this research, the reseracher used F-test measure the homogeneity of the data.

The formula of F-test used as follows:[[21]](#footnote-22)

 **F = The Biggest variance**

**The smallest variance**

The hypothesis for the homogeneity tests were formulated as follows:

H0 = Data have the homogenous variances

Ha = Data have not the homogenous variances

In this case the criteria for the homogeneity test were:

Ha is accepted if $F\_{observed }< F\_{critical }$

Ho is accepted if$F\_{observed }\geq F\_{critical }$. [[22]](#footnote-23)

**2. Hypothetical Test**

 After the researcher know that the data is normal and homogeneous, the data was analyzed by using t-test in order to know the significance of the treatment effect. According to Ary *et.al.,* the *t* test for independent samples is a straight forward ratio that divides the observed difference between the means by the difference expected through chance alone.[[23]](#footnote-24) A physical education teacher conduct an experimental to determine if archery students perform better if they get frequent feedback concerning their performance or do better with infrequent feedback. The formula used in this research is independent sample t- test as follows:[[24]](#footnote-25)

$$t=\frac{\overbar{x}\_{1}-\overbar{x}\_{2}}{\sqrt{\frac{∑x\_{1}^{2}- \frac{(∑x\_{1})^{2}}{n\_{1}}+ ∑x\_{2}^{2}- \frac{(∑x\_{2})^{2}}{n\_{2}}\_{}^{}}{n\_{1}+n\_{2}-2}(\frac{1}{n\_{1}}+\frac{1}{n\_{2}})}}$$

Notes:

 = Mean of experimental class

 = Meanof control class

$∑x\_{1}^{2} =Average deviation in experimental class$

$∑x\_{2}^{2} =Average deviation in control class$

 = Number of sample in experimental class

 = Number of sample in control class

The hypothesis formulas were:

Ha : There is a significant influence of using semantic mapping technique toward students’ writing ability in narrative text at the first semester of eleveth grade of SMA Muhammadiyah Bandar Lampung in the academic year of 2016/2017

Ho : There is no significant influence of using semantic mapping technique toward students’ writing ability in narrative text at the first semester of eleventh grade of SMK N 1 Abung Selatan in the academic year of 2016/2017.

The criteria were:

Ha is accepted if t-observed > t-critical

Ho is accepted if t-observed < t- critical. [[25]](#footnote-26)

**REFERENCES**

Allen, Janet. 2007.*Inside Words.* *Tools for Teaching Academic Vocabulary Grades 4-12.* New York: Heinemann

Anderson, Mark and Kathy Anderson.1997. *Text Types in English.* Sidney: Macmillan.

Antonnaci P.A. 2011. *Students Search For Meaning In The Text Through Semantic Mapping. Social Education*. Lomdon: SAGE Publication Ltd.

Ary, Donald *et.al.,* 2010*. Introduction in Research Education (8th Education)*. Montreal: Wardsword Cengange Learning.

Arikunto, Suharsimi. 2002. *Prosedur Penelitian Suatu Pendekatan Praktek*. Jakarta: Rineka Cipta

Best, John B and and James V. Kahn. 1995. (7th edition), *Research in Education.* New Delhi: Prentice-Hall.

Brown, H. Douglas. 1994. *Teaching Principle of Language and Teaching.* New Jersey: Prentice Hall Regents.

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Budiyono. 2004. *Statistika untuk Penelitian*. Surakarta: Sebelas Maret University Press.

Buis, Kellie. 2004. *Making Words Stick*. Markham: Pembroke Publisher.

Creswell, John W. 2008. *Educational Research*. Boston: Pearson Education.

Djamarah, Saiful Bahri. 2010. *Strategi Belajar Mengajar*. Jakarta: Rhineka Cipta.

Djauharie, Otong Setiawan. 2009. *Essay Writing*. Bandung: Yrama Widya.

Emilia, Emi. 2011. *Pendekatan Genre-based dalam Pembelajaran Bahasa Inggris*. Bandung: Rizki Press.

Gerald G, Duffy. 2009. *Explaiing Reading a Sourse for Teaching Concepts, Skills and Strategies*. New York : The Guildford Press.

Ginting, Siti Aisyah & Ridho Sari C. Sitanggang. 2009. *Improving Students Achivementin Writing Descriptive Paragraph Through Semantic Mapping Technique.* Medan : Unpublished.

Grenville, Kate. 2001. *Writing From Start to Finish A Six-step Guide*. Sidney: Allen & Unwin.

Hanifah, Nurul. 2011. The Influence of Using Semantic Mapping towards Students’ Descriptive Text Writing Ability. Bandar Lampung: Unpublished.

Haris, R Karen and Steve Graham. 2007. *Teaching Reading Comprehension to Students with Learning Difficulties.* New York: The Guilford Press.

Harmer, Jeremy. 2007. *The Practice of English Language Teaching*. London: Pearson Longman.

 . 2004. *How to Teach Writing*. New York: Longman.

Hartati, Neneng. 2016. *An interview*. An English Teacher of SMK N 1 Abung Selatan. Unpublished

Hyland, Ken. 2009. *Teaching and Researching Writing*. London: Longman.

January F. Baloto.1996. *How Important English. In English Teaching Forum.* Available in <http://iteslj.org/article/BALOTO-EIL.html>.

Johnson, D Pearson,P.D, *Teaching Reading Vocabulary,* (New York: Holt Rinehart and Wiston, 1978),p.133.

Kane, S Thomas. 1988. *The Oxford Essential Guide to Writing.* New York: Oxford University Press.

Knapp, Peter and Megan Watkins. 2005. *Genre, Text, Grammar: Technologies for Teaching and Assessing Writing.* Sydney: University of New South Wales Press Ltd.

Muna, Alief Syhril. 2015. *The Effect of Semantic Mapping Technique on Students Writing Ability in Descriptive Text.* Kediri : Universitas Nusantara PGRI.

Paul, David. 2003. *Teaching English to Children in Asia*. New York: Longman.

Praveen, M. Jain. and Patel. 2008. *English Language Teaching (Methods, Tool and Technique).* Rajpur : Sunrise Publishers and Distributors.

Raimes Ann.1983. *Technique in Teaching Writing.* Oxford: Oxford University Press.

S, Margono. 2004. *Metodologi Penelitian Pendidikan.* Jakarta: Rineka Cipta.

Schreiber, B James and Kimberley Asner-Self. 2011. *Educational Reasearch, The Interrelationship of Question, Sampling, Design and Analysis*. India: John Willey and Sons Inc.

Siahaan, Sanggam. 2008. *The English Paragraph*.Yogyakarta: Graha Ilmu.

Stafford, Ken and Mavis Kelly,1993,*An Introduction to Lecturing*, Available on https:www.google.com/search?q=an+introduction+lecturing+pdf accessed (Accessed on September 2016)

Sudijono, Anas. 2008. *Pengantar Statistik Pendidikan.* Jakarta: PT. Raja Grafindo Persada.

Sudjana. 2003. *Metode Statistika*. Bandung: Tarsito.

Sugiyono. 2013. *Metode Penelitian Kuantitatif Kualitatif dan R & D.* Bandung: Alfabeta.

Suryana.et.al. 2007. *Be Global with English 3.* Bogor : PT Ghalia Indonesia Printing.

Swales, M. John and Christine B. freak. 1994. *Academic Writing for Graduate Students*. Michigan: University of Michigan Press.

Tribble, Chrispoher. 1996. *Language Teaching Writing.* New York:Oxford University Press.

Urutina, Lorena Jaramillo. 2011. *Adolescent’ Awarness of Envirovmental Care: Experiences when Writing Short Descrptive Text In English*, Distric of Colombia: Unpublished.

Vandermey, Randall and Verne Mayer. 2006. *The College Writer: A Guide to Thinking, Writing and Researching.* New York: Wadsword Cengage Learning.

1. Donald Ary *et.al.*, *Introduction to Research in Education,* (8th Ed) (Montreal: Wadsworth Cengange Learning, 2010), p.301. [↑](#footnote-ref-2)
2. John W. Creswell, *Educational Research*, (4th Ed) (Boston: Pearson Education, 2008.) p.309. [↑](#footnote-ref-3)
3. Donald Ary *et.al.*, *Op. Cit*, p.307. [↑](#footnote-ref-4)
4. John W. Creswell. *Op. Cit,* p.112. [↑](#footnote-ref-5)
5. *Ibid*, p.115-116. [↑](#footnote-ref-6)
6. 6 James B. Schreiber and Kimberly Asner-Self, *Educational Reasearch, the Interrelationship of Question, Sampling, Design and Analysis* (Indiana: John Willey and Sons Inc, 2011), p.83. [↑](#footnote-ref-7)
7. Donal Ary *et.al.,* *Op. Cit*, p.148. [↑](#footnote-ref-8)
8. John W. Creswell, *Op.Cit.,* p.142 [↑](#footnote-ref-9)
9. James B. Schreiber, *Op. Cit*, p.89. [↑](#footnote-ref-10)
10. Sugiyono, *Metode Penelitian Kuantitatif Kualitatif dan R & D* (Bandung : Alfabeta, 2013), ,p.133. [↑](#footnote-ref-11)
11. Christopher Tribble*, Language Teaching Writing* (New York:Oxford University Press, 1996), p.130. [↑](#footnote-ref-12)
12. Donal Ary *et.al.,* *Op. Cit*, p.225. [↑](#footnote-ref-13)
13. John W. Best and James V. Kahn, *Research in Education,* (7th Ed) *(*New Delhi : Prentice-Hall, 1995), p. 295. [↑](#footnote-ref-14)
14. *Ibid,* p.296. [↑](#footnote-ref-15)
15. James B. Schreiber, *Op. Cit*, p.110. [↑](#footnote-ref-16)
16. Donal Ary, *et.al*., *Op. Cit*, p.256. [↑](#footnote-ref-17)
17. Suharsimi Arikunto, *Prosedur Penelitian Suatuu Pendekatan Praktek (*Jakarta*:* Rineka Cipta, 2010), p.321. [↑](#footnote-ref-18)
18. *Ibid*, p.319. [↑](#footnote-ref-19)
19. Budiyono, *Statistika Untuk Penelitian* (Surakarta: Sebelas Maret University Press, 2004), p.170. [↑](#footnote-ref-20)
20. Sudjana, *Metode Statistika* (Bandung: Tarsito, 2005), p.467. [↑](#footnote-ref-21)
21. Sugiyono., *Op. Cit,* p.275. [↑](#footnote-ref-22)
22. Anas Sudijono, *Pengantar Statistik Pendidikan* (Jakarta: Raja Grafindo Persada, 2008), p.313. [↑](#footnote-ref-23)
23. Donal Ary *et.al., Op.Cit,* p.171. [↑](#footnote-ref-24)
24. *Ibid,* 172. [↑](#footnote-ref-25)
25. *Op.Cit,* p.313. [↑](#footnote-ref-26)