**CHAPTER III**

**METHOD OF THE RESEARCH**

**3.1 Research Design**

This research used qualitative approach. According to Creswell (2008) qualitative research is primarily exploratory research. It is used to gain an understanding of underlying reasons, opinions, and motivations of the respondents. The purpose of this research was to improve students’ writing ability on the use of mind mapping technique.

**3.2 Population and Sample**

**3.2.1 Population**

Population is the overall subjects that is researched. All the 11th grade students of TKJ of SMK NEGERI 1 Lubuk Pakam were as the population in this research. Furthermore, the researcher chooses the school as the population due to the school is the vocational school which is there are some majors of study and the near distance from the place where the researcher stays. The distribution of population can be seen below:

**Table 3.1**

**Population of the school**

|  |  |  |
| --- | --- | --- |
| No. | Grade/Majors of Study | Number of Students |
| 1. | X TKJ-1 | 25 |
| 2. | X TKJ-2 | 22 |
| 3. | XI TKJ-1 | 14 |
| 4. | XI TKJ-2 | 16 |

|  |  |  |
| --- | --- | --- |
| 5. | XII TKJ-1 | 22 |
| 6. | XII TKJ-2 | 26 |
| Total | | 125 |

**3.2.2 Sample**

The sample is a small proportion of the population selected for observation and analysis (Best, 1981:8). To get a sample in this research, the researcher will select the students from the class XI-TKJ 1 that contains 14 students.

**3.3 Source of Data**

The primary data were corrected directly from the sample. A data sources is a person, something, or place that provides information for a piece of research. For this research, the researcher got the data from observation. So, the researcher can got the data from these sources. The data sources were derived from the students of XI TKJ-1 SMKN 1 Lubuk Pakam.

**3.4 Technique of Collecting Data**

The data were qualitative. The qualitative data were description of the process during the action. To get this data, the following qualitative data collection techniques were employed:

**1. Interview Guideline**

Interview guideline were used to interview the Researcher and the students during the research. The interview did in the reconnaissance and action steps. After all steps were done, the researcher gave some questionnaires for the students to saw their responses and answers.

**2. Observation Checklist**

Observation checklist used to check the application of mind mapping in the teaching and learning process. The researcher and collaborators put mark to the statements of writing processes which had been done.

**3. Writing Tests**

Students’ writing tasks were used as the media to got the information about the students’ writing ability after mind mapping was applied. By seeing at the tasks, it could be seen whether there was an improvement after implementing mind mapping on the students’ writing ability or not.

**4. Questionnaires**

The questionnaire was most frequently a way concise, preplanned set of questions designed to yield specific information to meet a particular need for research information about a pertinent topic.

It was list of questions that would be answered by a group of people to get information for an investigation or a research. In this study the questionnaire was used to collect data from students’ interest, relevance, advantage, students’ achievement, and sustainability during the teaching learning process. It was supported by Mills (2000:58) questionnaires allow the teacher researcher to collect large amounts of data in relatively short amount of time.

In giving questionnaires, I needed an instrument that would help ensure useful responses. Mills (2000:58) gave guidelines for developing and presenting questionnaires, they were:

* 1. Carefully proofread questionnaires.
  2. Avoid a sloppy presentation.
  3. Avoid lengthy presentation.
  4. Do not ask unnecessary questions.
  5. Use structured items with a variety of possible responses.
  6. Whenever possible, allow for an “Other Comments” section.
  7. Decide whether to use respondents’ names or use a number to keep track of respondents.

The result of the questionnaire was used to describe the data about students’ opinion, problem, difficulties, understanding, and responses aboutmaterial and method. The guidelines of the questionnaire are as follows:

**Table 3.2**

**Guidelines of the Questionnaire**

|  |  |
| --- | --- |
| **Number of Question** | **Students’ Opinion** |
| 1, 2, 3, 4, 5, 6, 7 | About students’ interest |
| 8, 9, 10 | About the relevance |
| 11, 12, 13 | About the advantage |
| 14 | About students’ achievement |
| 15 | About sustainability |

**3.5 Technique of Analyzing the Data**

The data of interview were analyzed by using descriptive qualitative analysis. According to Nazir (1998),”Descriptive method is a research which concern a group of human status, an object, a condition, the system of thinking, or phenomenon which occurs at present time”. The purpose of this descriptive research was to create a description, or systematic illustration, factual and accurate deals with facts, characteristics and phenomenon in that research. According to Whitney (1960), “Descriptive method is seeking fact with appropriate interpretation”. The indicator of the score will be mentioned as below:

**Table 3.3**

**Scoring Rubric**

**Analytic Scale For Rating Composition Tasks**

|  |  |  |
| --- | --- | --- |
| **1. Organization: Introduction, body and conclusion** | | |
| Excellent to good | 22 – 25 | Appropriate title, effective introductoryparagraph, topic is stated, leads to body: transitional expression used Arrangement of material shows plan (could be outlined by reader); supporting evidence given for generalization; conclusion logical and complete. |
| Good to adequate | 18-20 | Adequate title, Introduction or conclusion  Body of essay is acceptable, but some evidence may be lacking, some ideas aren’t fully developed Sequence is logical but transitional expression may be absent or misused. |
| Adequate to fair | 15-18 | Mediocre or scant introduction or conclusion  Problems with the order of ideas in body  The generalizations may not be fully supported by the evidence given Problems of organization interfere. |
| Unacceptable-not  college-level  work | 11-15 | Shaky or minimally recognizable introduction Organization can barely be seen  Several problems with ordering of ideas Lack of supporting evidence Conclusion weak or illogical Inadequate effort at organization |
| Unacceptable-not  college-level  work | 9-11 | Absence of introduction or conclusion No apparent organization of body Severe lack of supporting evidence Writer has not made any effort to organize the composition (could not be outlined by the researcher). |
| **2. Logical development of ideas; Content** | | |
| Excellent to good | 22 – 25 | Essay addresses the assigned topic The ideas are concrete and thoroughly Developed No extraneous material |
| Good to adequate | 18-20 | Essay addresses the issues but misses some  points  Ideas could be more fully developed Some extraneous material is present |
| Adequate to fair | 15-18 | Development of ideas not complete or essay is somewhat off the topic. Paragraphs are not divided exactly right. |
| Unacceptable-not  college-level  work | 11-15 | Ideas incomplete inadequate and does not  reflect careful thinking or was hurriedly  written  Inadequate effort in area of content |
| Unacceptable-not  college-level  work | 9-11 | Essay is completely inadequate and does not reflect college – level work  No apparent effort to consider the topic carefully. |
| **3. Grammar** | | |
| Excellent to good | 22 – 25 | Native-like fluency in English grammar  Correct use of relative clauses, prepositions, modals, articles, verb forms, and tense sequencing  No fragments or run on sentences. |
| Good to adequate | 18-20 | Advanced proficiency in English grammar  some grammar problems don’t influence  communication, although reader is aware of them no fragments or run-on sentences. |
| Adequate to fair | 15-18 | Ideas are getting through to the reader, but  grammar problems are apparent and have a negative effect on communication run-on sentences or fragments present. |
| Unacceptable-not  college-level  work | 11-15 | Numerous serious grammar problems interfere with communication of the researcher’s ideas  Grammar review of some areas clearly needed; difficult to read sentences. |
| Unacceptable-not  college-level  work | 9-11 | Severe grammar problems interfere greatly  with the message Reader can’t understand what the researcher was trying to say  Unintelligible sentence structure. |
| **4. Punctuation, spelling and mechanic** | | |
| Excellent to good | 22 – 25 | Correct use of English writing conventions Left and right margins  All needed capitals, paragraph intended, punctuation and spelling  Very neat |
| Good to adequate | 18-20 | Some problems with writing conversations or punctuation  Occasional spelling errors  Left margin correct  Paper is neat and legible. |
| Adequate to fair | 15-18 | Uses general writing conventions but has errors  Spelling problems distract reader  Punctuation errors interfere with ideas.. |
| Unacceptable-not  college-level  work | 11-15 | Serious problems with format of paper  Parts of essay not legible  Errors in sentence punctuation and final punctuation  Unacceptable to educated readers. |
| Unacceptable-not  college-level  work | 9-11 | Complete disregard for English writing conventions  Paper illegible  Obvious capital missing  No margins  Severe spelling problems |

Taken from: (Brown, 2004:244-245)

The next method was marking the students’ achievement. The scores would be more meaningful if they were changed into numerical data, which were arranged from the highest to the lowest group. The measurements of the students’ achievement can be described as follows:

**Table 3.4**

**The measurement of the Students’ Achievement**

|  |  |
| --- | --- |
| **Criteria of mastery** | **Level of achievement** |
| 91 – 100 | Excellent |
| 81 – 90 | Very Good |
| 71 – 80 | Good |
| 61 – 70 | Fair |
| 51 – 60 | Poor |
| Less than 50 | Very poor |

Taken from: (Brown, 2004:244-245)