## CHAPTER I

## INTRODUCTION

## A. Background of Study

A language is a tool used by humans to communicate. Language is one of the very important parts of human life. Learning a language is essentially learning to communicate. Language learning is directed to improve learners' ability to communicate. In this era globalization, English is a very important tool of international communication. English is a tool to communicate orally and writing. The sense of communicating is intended to understand and disclose communication, thought, feelings, and develop science, technology, and culture by using that language.

In learning English there are some skills that must be mastered by the students to master the English language. There are four skills in teaching and learning language: Listening, speaking, reading and writing. Writing is one of skill that have must to be mastered by students in English learning, that is include authentic and scientific writing. Writing is seen not just as a standardized system of communication but also as an essential tool for learning. Given the importance of English as an international language, most of people need to learn to write in English for academic purpose.

Writing is the basic competence that must be reached by the students in order to get other competencies like reading, listening, and speaking. It is difficult to mastering and understanding the writing. By writing, we can express our ideas. However, to get our meaning strong, interesting and clear for the reader, this skill must be improved by practice. Because writing has many contributions to our life, we can make a habit of writing to develop this skill.

Writing is not just for expressing and developing ideas, thoughts and feelings, but also writing is a process of an experience that is experienced by
the author to be conveyed to the reader and to deliver our opinion about problems around us.

Even though English has been familiar in Indonesia, but not every students can write the English languages well. The researcher sometime found that some students problem in English class. First, they are difficult to express their idea. If the student difficult to express their idea, so it can make the student is so hard to write not just write English language but also in other language. Then, they were afraid to making mistakes when the students write. Then, the students had lack ability in mastering grammar. This condition make the students write ungrammatically. These are some problems that English EFL faced in writing.

In which case the teacher needs to find an approach or method of instruction or that is appropriate and acceptable to student. Traditionally, conventional methods in the teaching of English as a foreign language, such as plain explaining and drilling, are unappealing and can be very monotonous to the students. When learning is too monotonous student will not be interested in the lesson. In the learning writing English process, the teacher should give the stimulus to the students. Because if the students accept the stimulus they are will be try to write English, and one of main ways to achieve this goal is by means use of Problem-Based Learning.

Problem-based learning is a primarily built around a problem scenario, or in problem-based language, a case. Students are presented with a case and are charged with the task of working together in collaborative groups to generate ideas or hypotheses to reach a resolution to the problem introduced to the case. A well written case, or the information the students will learn in order to solve the case, is germane to the curriculum content being taught. Students must be become self-directed as they work individually to gather ideas and information
to share with the group. ${ }^{1}$ From their statement the researcher can conclude that problem-based learning is one of method can make the student enjoy to learning, can thinking critically, and make the student writing English enjoy.

Based on the description above, researcher conduct quantitative research entitled "The Effectiveness of Problem-Based Learning in Teaching Writing on Argumentative Text (An Experimental Research at The Eleventh Grade of MAS Mathla'ul Anwar Pusat Menes)".

## B. Scopes and Limitations of The Research

In this research, the researcher focuses on the implementing of ProblemBased Learning approach to improve the students skill in their writing, caused many kind of writing the researcher choose argumentative text as a research.

Based on the statement above, the researcher formulated: Problem-Based Learning can be used in argumentative text. Based on the syllabus in the second grade student of MAS Mathla'ul Anwar Pusat Menes, there are many kinds of text that can learn by the student. Each kinds of these texts has their own purpose, based on the purpose, text are classified into some group, they are descriptive text, narrative text, exposition text, procedure text, spoof text, report text, review text, explanation text, anecdote text, news item text, and argumentative text.

This research focused in argumentative text. The researcher chose this kind of the text because argumentative text is suitable applied with this approach. The student can express their idea and their opinion freely, on topics provided by the teacher. Then the teachers can know about students' critical thinking skills in response to current events. This ability can give benefits to the students in the future by encouraging themselves in expressing public opinion.

[^0]The limitation of this research is writing argumentative text in MAS Mathla'ul Anwar Pusat Menes by using Problem-Based Learning approach that examined by the pre-test and post-test. The researcher interested to conduct research "The Effectiveness of Problem-Based Learning in Teaching Writing on Argumentative Text" in MAS Mathla'ul Anwar Pusat Menes.

## C. Statements of The Problem

The research is about the effectiveness of problem-based learning toward students' critical thinking on argumentative text at the eleventh grade of MAS Mathla;ul Anwar Pusat Menes. From the background of the study above, the researcher formulated the problems as follow:

1. How is the students' ability in writing English argumentative text at the eleventh grade of MAS Mathla'ul Anwar Pusat Menes?
2. How is the effectiveness of using problem-based learning in teaching writing on argumentative text at eleventh grade of MAS Mathla'ul Anwar Pusat Menes?

## D. The Objectives of the Study

According to the problem above the researcher formulated the aim as follows:

1. To know the students' ability in writing English argumentative text at the eleventh grade of MAS Mathla'ul Anwar Pusat Menes.
2. To know the effectiveness of using problem-based learning in teaching writing on argumentative text at the eleventh grade of MAS Mathla'ul Anwar Pusat Menes.

## E. Significance of the Study

The significance of the research expected to be useful for the perspective of the writing, and for giving the English teacher a different method in teaching English especially in teaching writing argumentative text.

## F. Writing Organization

This paper divided into five chapters, each chapter explains different maters in line with the topic that discussed.

Chapter I explain about introduction. This chapter describes background of the study, scope and limitation of the problem, statement of the problem, the objective of the study, significance of the study, and writing organization.

Chapter II explains about theoretical review, previous study, framework of study, and hypothesis.

Chapter III explains about place and time, research methodology, population and sample, research variable, instrument and data collecting, data analysis, and statistically hypothesis.

Chapter IV explains about the result of the research and discussion.
Chapter $\mathbf{V}$ is closing which contain of conclusion based on the result of the research and suggestion further research.

## CHAPTER II

## LITERATURE REVIEW

## A. Problem-Based Learning

1. Definition of Problem-Based Learning

Originally Problem-Based Learning was introduced at McMaster University, Canada. In 1966, a small but influential group of educational innovators put together a new curriculum. In fact, PBL originally was developed for adults, to train doctor in how to approach and solve medical problem. ${ }^{2}$ This approach make students' medical developed abilities to extend and improve their knowledge to keep up in the ever -expanding field of medicine and to learn how to provide care for new illnesses they encountered.

The definition of problem-based learning is an instructional approach where students learn by solving challenging problems. The problems are authentic from socially and contextually based teams of students. In other hand Barrows argue that the problems encountered in PBL require that students find more information than is given in order to define the issues and decide on solutions. ${ }^{3}$ In fact, as additional answers are learned, the problems may be redefined in very different ways. Student should be make decisions, even though they know that some data may be missing or in conflict with others. Finally, it is critical that the teacher serve as a resource person (rather than information giver) debrief with the students to make explicit their thinking processes and principles learned.

In other hand, Overton defines problem-based learning is a style of learning in which the problems act the context. All learning of new

[^1]knowledge is done within the all the context with problem. PBL differs from problem solving. In PBL the problems are encountered before all the relevant knowledge acquired, but solving problems results in the acquisition of knowledge. ${ }^{4}$

Problem-based learning provides an active strategy for language acquisition as well as cognitive engagement in the content area being taught. English as a second language (ESL) teachers are often challenged to bring stimulus opportunities for higher order thinking and learning experiences into the English language classroom. Problem-based learning give opportunities to the student to promote language learning in English language classroom. While promoting areas critical instruction: primarily increased communication skills, vocabulary, and culture construct. That is appropriate with John Dewey's say in a journal that paradigm of thinking and reflection, problem-based methods promise an in-depth, close-to-life learning experience that will help the students integrate the knowledge from various disciplines and make cultural connections. ${ }^{5}$

Problem-based learning can be used as a method when teaching writing. Because this method when the teacher apply, the student should be make a group. From the group, the student will be discussed with their friend, and try to solve the problem with build a new knowledge. Same with Barrows that Problem-based learning is the professional real-world problems provide the stimulus for student-driven learning in small groups; that is effectively facilitated, not directed, by tutors; and it is focuses on building content knowledge in tandem with developing problem-solving. ${ }^{6}$

[^2]So, problem-based learning is approach that will make the students thinking critically, and can solve the problem in around the students.

## 2. Characteristics of Problem-Based Learning

There are various developer of problem-based learning have described the instructional model as having the following features according to Krajcik:
a. Driving question or problem

Rather than organizing lesson around particular academic principles or skills, problem-based learning organizes instruction around questions and problems that are both socially important and personally meaningful to the students. They address real-life situations that evade simple answer and for which competing solution exist.
b. Interdisciplinary focus

Although a problem-based learning may be centered in a particular subject, but the actual problem under investigations is chosen because its solution requires students to delve into many subject (science, education, for the example: the pollution problem raised around of us and applied subjects-biology, economic and sociology).
c. Authentic investigation

Problem-based learning necessitates that students pursue authentic investigations that seek real solutions to real problems. They must analyze and define the problem, then develop should make hypothesis and predictions, collect and analyzes information, make inferences, and the last make conclusions.
d. Particular of artifacts exhibit

Problem-based learning requires students to construct products in the form of artifacts and exhibits that explain or represents their solutions. It could be a report, a physical model, a video, or a computer program, artifact and exhibits as will be described later, are planned,
by students to demonstrate to others what they have learned and provided a refreshing alternative to the traditional report or team paper.
e. Collaboration

Problem-based learning is characterized by students working with or another, or in form of a small group, working together provides motivation for sustained involvement in complex task and enhances opportunities for shared inquiry and dialogue, and for development and social skills.

## 3. The Steps of Problem-Based Learning

The PBL model proposed by the Academic of Sciences and Mathematics from Illinois, involves the following stages and sub-stages: ${ }^{7}$
a. Understanding of the problem

- Explore the issue. Gather necessary information; learn new concepts, principles, and skills about proposed topic.
- State what is known. Individual students and groups list what they already know about the scenario and list what areas they are lacking information.
- Define the issue

Frame the problem in a context of what is already known and information the students except to learn.
b. Curriculum exploring

- Research the knowledge. Find resources and information what will help create a compelling argument.

[^3]- Investigate solution. List possible actions and solutions to the problem, formulate and test potential hypotheses.
c. Problem solving
- Present and support the chosen solutions. Clearly state and support your conclusion with relevant information and evidence.
- Review your performance. Often forgotten, this is a crucial step in improving your problem-skills. Student must evaluate their performance and plan improvements for the next problem.

From explanation above, the researcher conclude that any 3 important points to use problem-based learning in teaching there are, understanding of the problem, curriculum exploring and problem solving.

## 4. Advantages of Problem-Based Learning

Based on Taufiq Amir in his book, problem-based learning have many potential effect consists of these following ${ }^{8}$ :

1) Become more remember and increase understanding of teaching material
2) Increase focus on relevant knowledge
3) Encouraging thinking
4) Build team work, leadership, and social skills
5) Build learning skills (lifelong learning skills)
6) Motivate learners

The researcher find the advantages of this approach as follows:

1) Students more active, creative, and practice oriented education, use of different sources of information.
${ }^{8}$ M. Taufiq Amir, Inovasi Pendidikan Melalui Problem-Based Learning, (Jakarta: Pranamedia Group: 2009), 26.
2) Discussing ideas and notions results in more knowledge and better recall
3) Self-directed learning promotes the development of personal and individualized learning objectives.
4) Few contact hours, more students autonomy in lime allocation.

## B. Writing

## 1. Definition of Writing

Writing is the process of using symbols (letters of the alphabet, punctuation and spaces) to communicate thoughts and ideas in a readable form. To write clearly it is essential to understand the basic system of a language. In English this includes knowledge of grammar, punctuation and sentence structure. Vocabulary is also necessary, as is correct spelling and formatting.

According to Jeremy Harmer, "writing text has a number of conventions which separate it out from speaking. Apart from differences in grammar and vocabulary, there are issues of letter, word, and the text formation, manifested by handwriting, spelling, and layout and punctuation". ${ }^{9}$

A writer may write for personal pleasure or use, or for an audience of one or more persons. Viewers may be known (targeted) or unknown. Making notes for study purposes is an example of writing for yourself. Blogging openly is an example of writing for an unknown audience. A letter to a friend is an example of writing for a targeted audience. As with speaking, it is important to consider your audience while writing. There are many different writing styles, from informal to formal. Writing ability is an important part of communication. Good writing ability allow you to

[^4]communicate your message with clarity and ease to a much larger audience than through face-to-face or phone conversations.

According to Steinberg, "writing consists of three major process. They are planning, translating and reviewing". ${ }^{10}$ The planning process consists of generating, organizing, and goal setting sub process. The translating process acts under the guidance of the writing plan to produce language corresponding to information the writer's memory. And the function of reviewing process, which consists of reading and editing subprocess, is to improve the quality of the text produced by the translating process.

Writing ability is an important element in engineering success. In order to develop the writing ability that you need, you have to follow certain steps. Any time you decide to write a paragraph or an essay, you become involved in an ongoing process that involves thinking and making decisions, and rethinking.

In the world of teaching writing certainly becomes a very important thing. Because writing is not an easy thing for most people, who do have to pour ideas in writing are also certainly structured. So, required instructional media and learning strategies that are interesting and easy to understand by students.

From the explanation above writing is a process of giving ideas in writing and structured through defined stages with the correct grammatical.

## 2. Process of Writing

Writing is never one step action, it is an ongoing creativity act. When you first writing something, you have been already thinking about how to say and how to say it. Then, after you have finishing writing, you read over what you have written and make changes and correction. You

[^5]will write and revise and then write and revise again until you satisfied that your writing express exactly what you want to say.

There are writing stages in writing process as classroom activity ${ }^{11}$ :

1. Planning (pre-writing). In this stage we should to determine what would we write and what the point of view we will take the problem that we will write. In this stage we can make an outline of our writing to easy mapping problem that will be discussed.
2. Drafting (writing). After we are collecting the idea that will be write, we can start writing without editing the text.
3. Revising (redrafting). Revising is not merely checking for language errors it is done to improve global content and the organization of ideas, so the writer's intent is made clearer to the reader.
4. The last is editing. In this stage we are focus in tidying up and checking the text for grammar, spelling, punctuation, diction, sentence structure and accuracy of supportive textual material such as quotation, examples, and etc.

According to Richards and Renandya about the process of writing, the researcher conclude that writing is need long process because writing is not simple skill, we requires the preparation and writing material. So we write can be enjoyed by the reader.

## 3. Assessing writing

Assessing writing is one of the best known and most widely uses analytic scales in ESL was created by Jacobs. In Jacobs scale, scripts are related on five aspects of writing: content, organization, vocabulary, language use, and mechanics ${ }^{12}$.

[^6]Table 2.1
The Criteria of Assessing Writing

| No | Score | Level | Criteria |
| :---: | :---: | :---: | :---: |
| 1. | Content | 30-27 | Excellent to very good: knowledge, substantive, through development of thesis, relevant to assigned topic. |
|  |  | 26-22 | Good to average: some knowledge of subject, adequate range, limited development of thesis, mostly relevant to topic, but lack detail. |
|  |  | 21-17 | Fair to poor: limited knowledge of subject, little subject, inadequate development topic. |
|  |  | 16-13 | Very poor: does not show knowledge of subject non substantive, or not enough to evaluate. |
| 2. | Organization | 20-18 | Excellent to very good: Fluency expression, ideas clearly started/supported, succinct, well organize, logical sequencing, cohensive. |
|  |  | 17-14 | Good to average: somewhat choppy, loosely, organize but main ideas stand out, limited support, logical but incomplete sequencing. |
|  |  | 13-10 | Fair to poor: Non-fluent, ideas confused or disconnected, lacks logical sequencing and development. |
|  |  | 9-7 | Very poor: does not communicate, no organization, or not enough to evaluate. |
| 3. | Vocabulary | 20-18 | Excellent to very good: sophisticated range, effective word/idiom choice and usage, word form mastery, appropriate magister. |



|  |  |  | mastery of conventions, few errors of spelling, punctuation, capitalization, paragraphing |
| :---: | :---: | :---: | :---: |
|  |  | 4 | Good to average: occasional errors of spelling, punctuation, capitalization, paragraphing but meaning not obscured |
|  |  | 3 | Fair to poor: frequent errors of spelling, punctuation, capitalization, paragraphing, poor hand writing, meaning confused or obscured. |
|  |  | 2 | Very poor: no mastery of conventions, dominated by errors of spelling, punctuation, capitalization, paragraphing, handwriting illegible, or not enough to evaluate. |

## C. Argumentative Text

## 1. Definition of argumentative text

Argumentative is the act or process of arguing, discussing, or reasoning. ${ }^{13}$ Argumentative text is a text that purposed to argue or discussing about a topic and problem around.

Argumentation is proved by data and fact with purpose to agree, persuade, influence the readers, so that will be following or like which is hoped by the researcher. ${ }^{14}$ From statement above, so argumentative text is a text that prove some statement that provide by fact and data.

Argumentative is a discussion in which parties involved express disagreement with one other like a debate. Its mean argumentation text is a

[^7]text based on personality opinion to discuss and express an agreement and disagreement with someone opinion or to debate it.

Laurence Behrens and Leonard J Rosen categorize syntheses into two main types: explanatory and argument. The easiest way to recognize the difference between two types may be to consider the difference between a news article and an editorial on the some subject. For the most part, we'd say that the main purpose of the news article is to convey information, and the main purpose of the editorial is to convey opinion and interpretation. ${ }^{15}$ It's mean the argumentative text its used to make some argumentation that gives information from someone opinion that based on data.

Meanwhile, argumentative text is prove some statement that provided by data and fact that give information, it used to make reader agree and believing with what the writer write. It's at the heart of critical thinking.

## 2. Generic structure of argumentative text

The generic structure of argumentative text, there are:
a. Introduction. It's a short introduction, and presenting your thesis.
b. Main part. There are the main arguments in the body of the text. Here, the arguments supporting your thesis are presented and each argument must be stated at the beginning of the paragraph, introduced by the last sentence of the previous paragraph, never be more one thought every sentence, and set out in logical order and also must be illustrated with some examples.
c. Conclusion. It's should be short and confirm from the evidence in the main part.

Here the example of argumentative text divided of generic structure and text by the tittle Bullying.

[^8]| GENERIC |
| :--- | :--- |
| STRUCTURE |$\quad$| Introduction |
| :--- |
|  | | Bullying is a big problem for children and young |
| :--- |
| people that go through it. It knocks their self-esteem |
| and makes them lose their confidence, and can make |
| them dread going to school each day. In extreme |
| cases, young people can become suicidal as a result |
| of bullying, while in order very serious cases, it can |
| get out of hand and lead to the bully murdering their |
| victim. It's also a huge problem for parents and |
| teachers, because stopping bullying is a hard task and |
| they often don't know the best ways to go about it. |
| There are three key elements to stopping bullying: |
| educating the bullies, imposing greater sanctions for |
| the bullies, and protecting the victim. |


|  | when it begins to affect them. Bullying often isn't <br> taken seriously enough; for example, if you punched <br> a person in the middle of the street you would <br> probably be arrested, but if it happens in a case of <br> bullying, the perpetrator might get a detention. It is <br> important not to allow things to happen in school that <br> they would never get away with out in the real world, <br> and children and young people who don't have <br> boundaries and sanctions imposed as they grow up <br> may not obey the law as adults. <br> The final main way to deal with bullying involves <br> working with the victim. Victims of bullying need to <br> know their self-worth so that they don't just accept <br> what's happening to them, and need to be taught to be <br> assertive without just being aggressive. They should <br> also be taught that self-defence is allowed when <br> necessary, and should not be punished for it, while it <br> is very important that adults always listen to them and <br> take their concerns very seriously. |
| :--- | :--- |
| Conclusion | All in all, there is no one single solution for bullying, <br> but it's not good enough to ignore it just because it's <br> hard to deal with. By using a combination of these <br> three tactics, teachers should be able to stop bullying |
| at school long before it gets out of hand. |  |

## D. Theoretical Research

In quantitative research, the researcher is conducted with process, context, interpretation, meaning or understanding the phenomenon of interest through inductive reasoning. While in quantitative research, the
researcher is concerned with outcomes, generalization, prediction, and causal relationship using deductive reasoning.

The goal of quantitative research is the discovery of depth of knowledge and to generate the hypothesis. While in quantitative research it is the breadth of new knowledge which is a fundamental and the testing hypothesis.

Experimental research is the explanatory research, and the aim of explanatory research is to know the relationship between variable and the other variable.

## E. Conceptual Framework

Based on the theoretical above, the researcher makes the framework as follows:


## F. Previous Study

To prove the originality of this study, the researcher presents some previous study that deal with this title. The first research was conducted by Gabriel Gorghiu, Luminta Mihaela Draghicescu, Sorin Cristea, AnaMaria Patrescu and Laura Monica Gorghiu, the tittle "Problem-Based

Learning - An Efficient Learning Strategy In The Science Lessoon Context". This research conducted in recent years illustrates that traditional teaching generates a real passivity among students, who are placed in the position of ready-made knowledge consumers, their only effort being oriented to secure and, subsequently, reproduce the knowledge in the context of evaluation test. Traditional teaching practice may not have a learning effect than a superficial one, which result come as inconsistent and possible to be used only in immediate instructional context. In this sense, problem-based learning represents an effective way of working students who may thus be helped to build basic skills. The paper presents the results of the implementation in the classroom of 17 modules which involve problem-based learning paradigm. The modules were created by the teachers enrolled in the continuous professional development programme named "PROFILES - Education Through Sciences", organized in the frame of the Seventh Framework. Programme "PROFILES - Professional Reflection Oriented Focus on Inquiry-based Learning and Education Through Science". The feedback collected from teachers and students was positive, with important achievements in students' understanding of Science concepts, but also in taking ownership of their learning. ${ }^{16}$

Based on the research above, the researcher concluded, learning method were very important, then students easy to understand in the learning process. One of them is using problem-based learning method, an approach used by currently curriculum. Problem-based learning is defined as collaborative, student centered exploration of real world problems, for which the teacher acts as facilitator (or tutor) who offers decreasing guidance over time.

[^9]The second research was done by Normala Othman and Mohamed Ismail Ahmad Shah, the title "Problem-Based Learning in The English Language Classroom". The purpose of this research was to investigate the effects of problem-based learning approach (PBL) on students in language classes in two areas: course content and language development. The study was conducted on 128 students, grouped into the experimental and control groups, and employed an experimental research design. The syllabus, textbook, and instructor were controlled for both groups. The findings showed that in terms of course content. The PBL group showed improvements in the post-writing test, that is their essays were richer in in terms of support and arguments for each point and this group show more improvements, while the non-PBL did not show much difference in their post-writing test. ${ }^{17}$

Based on the research above the research above that the researcher got conclusion there was difference in students' ability to write an essay were richer in terms of support and arguments for each point.

## G. Hypothesis of the Study

According to David Nunan defined 'hypothesis is formal statement about an expected relationship between two or more variable which can be tested through an experiment. ${ }^{18}$ The hypothesis as follow:
a. The null hypothesis $\left(\mathrm{H}_{0}\right)$ : problem-based learning is not effective to use in teaching writing of argumentative text at the eleventh grade of MAS Mathla’ul Anwar Pusat Menes.

[^10]b. The experimental hypothesis $\left(\mathrm{H}_{a}\right)$ : problem-based learning is effective to use in teaching writing of argumentative text at the eleventh grade of MAS Mathla'ul Anwar Pusat Menes.

## CHAPTER III

## RESEARCH METHODOLOGY

## A. Research Method

Method of the research is a quantitative method. According to Creswell that quantitative research is testing objective theories by using research instruments that produce data with analyzed by statistics. ${ }^{19}$ It means that the variable of the research can be measured and analyzed to see the effect among variables. In this research there are two variables, variable X and variable Y . problem-based learning as $(\mathrm{X})$ and writing argumentative as variable $(\mathrm{Y})$.

Moreover, in this research the researcher will use experimental research. The researcher choose an experimental research because this research using treatment by the purpose to search the effect of certain treatment on the others with controlled conditions. ${ }^{20}$ Then the researcher wants to know the effect of problem-based learning in teaching writing on argumentative text. In addition, this research using Quasi Experimental by using the pre-test and post-test design by using the pre-test and post-test design by taking one of class as an experimental class which given pre-test, the treatment by Problem-based learning and given the post-test to measure the treatment is influence or not. Then the researcher take the second class as a control class, the class is given pre-test, treatment without problem-based learning and post-test.

## B. Place and Time of the Research

In research activity, place is needed as location of research to get appropriate. The researcher takes MAS Mathla'ul Anwar Pusat Menes on Jl. Parapatan Cimanying Menes, Kab. Pandeglang-Banten as place to research.

[^11]This school was chosen because this school is that easy to reach, then the condition of students in English ability especially writing ability aspect that needs to be increase, and have good and comfortable environment in learning process. So, the researcher interests in doing the research in MAS Mathla'ul Anwar Pusat Menes. This research was conducted on February 2019.

## C. Population and Sample

1. Population

According to Fraenkel and Wallen population is always all of the individuals who process a certain characteristics (or set of characteristics). ${ }^{21}$ Then he said in educational research the population of interest is usually a group of persons (students, teachers, or other individuals) who process certain characteristics. In this research the target population is the tenth years study at MAS Mathla'ul Anwar Pusat Menes.

Based on the observation there are 170 students of the eleventh year students. The research use class IPA 1 and IPA 2 for the research, and divided them two groups, 32 students of class IPA1 and 28 students of class IPA2 control class. In the experimental class the research using problem-based learning to know the effect of writing skill on argumentative text students and in control class the researcher not use problem-based learning.
2. Sample

Frenkel and Wallen say in their book that a simple in a research study is the group which in form obtained. ${ }^{22}$ Based on the theories previous, the researcher concludes that sample is part of population that will take to research.

[^12]According to explanation above the sample of this research is part of the eleventh year students of MAS Mathla'ul Anwar Pusat Menes, with some students who are divided into two classes; they are experiment class and control class. Total students the sample are 60 students.

## D. Research Instrument

The instrument that used in this research was test. The test divided into two tests, pre-test and post-test. The test is a subjective test which asked the students to write an argumentative text into several paragraph. This research used test as instrument to collect data as follow:

## 1. Pre-test

This test is to know how far the students writing ability. The researcher asked the students to write an argumentative text about "The negative impact of drug, smoking, or sex before marriage for the students".
2. Post-test

In post-test the researcher asked the students to write an argumentative text about "The negative impact of social media, game online, and online shop and how to solve these problem". Finally, the researcher would have seen the students' writing ability difference before and after using problembased learning.
3. Scoring sheet

Scoring sheet is used to make the researcher know about the students' ability in writing. The scoring sheet in this research adapted from Sara Cushing Weigle, as follows:

The scoring sheet of writing test
Name : $\qquad$
Class
The Criteria of Students' Score

| No | Proficiency <br> Description | Criteria |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Excellent to Very Good | Good to <br> Average | Fair to <br> Poor | Very <br> Poor |  |
| 1 | Content | 30-27 | 26-22 | 21-17 | 16-13 |  |
| 2 | Organization | 20-18 | 17-14 | 13-10 | 9-7 |  |
| 3 | Vocabulary | 20-18 | 17-14 | 13-10 | 9-7 |  |
| 4 | Language Use | 25-22 | 21-18 | 17-11 | 10-5 |  |
| 5 | Mechanic | 5 | 4 | 3 | 2 |  |
| Total |  |  |  |  |  |  |
|  | Letter | Score |  | Description |  |  |
|  | A | 83-99 |  | Very Good |  |  |
|  | B | 63-82 |  | Good |  |  |
|  | C | 43-62 |  | Enough |  |  |
|  | D | 26-42 |  | Less |  |  |
|  | E | 16-25 |  | Low |  |  |

## E. The Technique of Data Collecting

The data collection process is nothing other than a doubling of primary data for research purposes. The collection of data is a systematic procedure and standard to obtain the necessary data. In accordance with the necessary data in this study, the technique data collection in this study, include:

## 1. Observation

Observation is the first technique to know the situation and condition in the learning process of MAS Mathla'ul Anwar Pusat Menes. This observation conducted to observe students activity, teacher activity, and English learning process in the real classroom activities at the XI IPA 1 and XI IPA 2 of MAS Mathla'ul Anwar Pusat Menes.

The researcher used participant observation in this research. The researcher asked the participant observer to observe the teaching activity in the learning process of English subject. The participant observer is the eleventh grade English teacher of MAS Mathla'ul Anwar Pusat Menes.
2. Test

The test is a way to collect data to provide a test that object studied. The researcher tests for knowing result study of writing ability before and after using problem-based learning.
a. Pre-test

In the pre-test the researcher asked students to write an argumentative text about some problem. A pre-test conducted to know students' writing ability in argumentative text before using problem-based learning.
b. Post-test

In the post test the researcher asked students to write an argumentative text about a problem and how to solve these problem. After the post-test was conducted, the researcher gave the score of pre-test and post-test score. The results of pre-test and post-test was collected and compared to know the impact of problem-based learning in teaching writing on argumentative text.

## F. Technique of Analyzing Data

The technique of analysis data in this research uses t-test. According Anas Sudjiono t-test is used for testing the null hypothesis of the mean differences of two samples. Because the quasi experiment use pre-test and post-test then the researcher uses this test to measure the final test between experiment class and control class.

The step for statistic analyze that are:

1. Determining mean of variable X with formula:

$$
\mathrm{M}_{1}=\frac{\sum \mathrm{x}_{1}}{\mathrm{~N}_{1}}
$$

2. Determining mean of variable X 2 with formula:

$$
\mathrm{M}_{2=\frac{\sum \mathrm{X}_{2}}{\mathrm{~N}_{2}}}
$$

3. Determining score deviation of variable x 1 with formula:

$$
\mathrm{X}_{1}=\mathrm{X}_{1-\mathrm{M}_{1}}
$$

4. Determining score deviation of variable x 2 with formula:

$$
\mathrm{X}_{2}=\mathrm{X}_{2-\mathrm{M}_{2}}
$$

5. Making quadrat $X_{1}$, then summed it and obtained $\sum X_{1^{2}}$
6. Making quadrat $X_{2}$, then summed it and obtained $\sum X_{2^{2}}$
7. Determining $t_{0}$ with formula:

$$
t=\frac{M_{1}-M_{2}}{\sqrt{\left(\frac{\sum x_{1}^{2}+\sum x_{2}^{2}}{N_{1}+N_{2}-2}\right)\left(\frac{N_{1}+N_{2}}{N_{1} \cdot N_{2}}\right)}}
$$

8. Giving interpretation towards $t_{0}$
9. Summing up

Notes:
$M_{X}=$ mean score of the experiment class
$M_{Y}=$ mean score of the control class
$\sum X^{2}=$ sum of square deviation score in experiment class
$\sum Y^{2}=$ sum of square deviation score in control class
$N_{X}=$ number of students of experiment class
$N_{Y}=$ number of students of control class
$2=$ constant number
$\mathrm{Df}=$ degree of freedom $\left(\mathrm{df}=N_{1}+N_{2}-2\right)$

## CHAPTER IV

## RESULT AND DISCUSSION

## A. Description of the Data

As researcher has revealed in chapter I about the objectives of this research, there are two objectives of this research, which are: to know the students' ability in writing argumentative text at the eleventh grade and to know the effectiveness of problem-based learning in teaching writing on argumentative text at the eleventh grade.

About research place and time, the research is held in MAS Mathla'ul Anwar Pusat Menes at February 2019 with involving 2 classes, 32 students as experimental class, it is from XI IPA 1, and 28 students as control class, it is from class XI IPA 2. Than the total of whole sample are 60 students. X ( $X_{1}$ and $X_{2}$ ) variable is represented as data or score derived from experimental class, while $\mathrm{Y}\left(Y_{1}\right.$ and $\left.Y_{2}\right)$ variable is rep[resented as data or score derived from control class.

For getting valid data, this research uses t-test (pre-test and post-test) as its instrument. Pre-test is given before treatment and one other is given after treatment. In this chapter also will be presented the results of pre-test and posttest score of the experimental class and control class. To make it easier for reader to understand about the obtained the data, some data are made in the form of tables and graphics. From here the researcher can conclude whether the PBL approach has an impact in improving students writing ability or not after all data are calculated using the t -test formula.

## B. Analyzing of the Obtained Data

## 1. Analyzing of Test

Here are the results of pre-test and post-test scores of students in experimental class. To find out its changes, the researcher compiled the results of the score into the table as below:

Table 4.1
The Result of Pre-Test and Post-Test scores in Experimental Class

|  | Nost |  |  |
| :---: | :--- | :---: | :---: |
|  |  | Pre-Test <br> $\left(\mathbf{X}_{\mathbf{1}}\right)$ | Post-Test <br> $\left(\mathbf{X}_{2}\right)$ |
| 1 | AAA | 44 | 70 |
| 2 | AH | 43 | 94 |
| 3 | AS | 41 | 70 |
| 4 | AM | 34 | 95 |
| 5 | AP | 42 | 72 |
| 6 | AA | 68 | 72 |
| 7 | AFZ | 40 | 84 |
| 8 | CN | 34 | 95 |
| 9 | EN | 40 | 65 |
| 10 | FI | 34 | 95 |
| 11 | FAM | 46 | 84 |
| 12 | FIM | 46 | 75 |
| 13 | IFZ | 36 | 83 |
| 14 | KI | 34 | 83 |
| 15 | KA | 45 | 95 |
| 16 | MF | 36 | 70 |
| 17 | MS | 44 | 70 |
| 18 | MSH | 61 | 83 |
|  |  |  |  |


| 19 | NF | 34 | 81 |
| :---: | :--- | :---: | :---: |
| 20 | NWN | 40 | 83 |
| 21 | NS | 37 | 70 |
| 22 | NF | 34 | 83 |
| 23 | NZY | 53 | 85 |
| 24 | RO | 86 | 95 |
| 25 | RMD | 36 | 70 |
| 26 | RKA | 34 | 75 |
| 27 | SA | 69 | 84 |
| 28 | SAH | 41 | 75 |
| 29 | SH | 46 | 95 |
| 30 | TZ | 54 | 84 |
| 31 | WSF | 76 | 83 |
| 32 | ZZ |  |  |

To make it easier for the reader to see the difference of scores of pre-test and post-test, the data from the table above is converted into the graphic form.

Graphic 4.1
The difference of pre-test and post-test score result in experimental class


The graphic above tells us scores from 32 students in experimental class which the highest score in pre-test is 86 and highest score in post-test 95 . While for the lowest score in pre-test is 34 and lowest score in post-test is 65 . It implies that there is an increase in students' writing ability after they are given a treatment using Problem-Based Learning approach.

Determining frequency distribution of pre-test score $\left(X_{1}\right)$

| 34 | 34 | 34 | 34 | 34 | 34 | 34 | 34 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 36 | 36 | 36 | 37 | 40 | 40 | 40 | 41 |
| 41 | 42 | 43 | 44 | 44 | 45 | 46 | 46 |
| 46 | 53 | 54 | 61 | 68 | 69 | 76 | 86 |

Table 4.2
Frequency Distribution of pre-test

| Score | $\mathbf{F}$ | $\mathbf{X}$ | $\boldsymbol{X}^{\mathbf{2}}$ | $\mathbf{F}\left(\boldsymbol{X}^{\mathbf{2}}\right)$ |
| :---: | :---: | :---: | :---: | :---: |
| 34 | 8 | 272 | 73984 | 591872 |
| 36 | 3 | 108 | 11664 | 34992 |
| 37 | 1 | 37 | 1369 | 1369 |
| 40 | 3 | 120 | 14400 | 43200 |
| 41 | 2 | 82 | 6724 | 13448 |
| 42 | 1 | 42 | 1764 | 1764 |
| 43 | 1 | 43 | 1849 | 1849 |
| 44 | 2 | 88 | 7744 | 15488 |
| 45 | 1 | 45 | 2025 | 2025 |
| 46 | 3 | 138 | 19044 | 57132 |
| 53 | 1 | 53 | 2809 | 2809 |
| 54 | 1 | 54 | 2916 | 2916 |
| 61 | 1 | 61 | 3721 | 3721 |
| 68 | 1 | 68 | 4624 | 4761 |
| 69 | 1 | 69 |  | 4761 |


| 76 | 1 | 76 | 5776 | 5776 |
| :---: | :---: | :---: | :---: | :---: |
| 86 | 1 | 86 | 7396 | 7396 |
|  | $\mathrm{~N}=32$ | $\sum \mathrm{X}=1442$ | $\sum \mathrm{X}^{2}=172570$ | $\sum \mathrm{~F}\left(\mathrm{X}^{2}\right)=795142$ |

Determining Mean of variable $\mathrm{X}_{1}$ (pre-test) using formula

$$
\begin{aligned}
\mathrm{MX}_{1} & =\frac{\sum \mathrm{x}_{1}}{\mathrm{~N}_{1}} \\
& =\frac{1442}{32} \\
& =45.06
\end{aligned}
$$

Then, the average score of pre-test in experimental class students is 45.06
Determining frequency distribution of post-test score $\left(\mathrm{X}_{2}\right)$

| 65 | 70 | 70 | 70 | 70 | 70 | 70 | 72 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 72 | 75 | 75 | 75 | 81 | 81 | 83 | 83 |
| 83 | 83 | 83 | 83 | 83 | 84 | 84 | 84 |
| 85 | 94 | 95 | 95 | 95 | 95 | 95 | 95 |

Table 4.3
Frequency distribution of post-test

| Score | $\mathbf{F}$ | $\mathbf{X}$ | $\boldsymbol{X}^{\mathbf{2}}$ | $\mathbf{F}\left(\boldsymbol{X}^{\mathbf{2}}\right)$ |
| :---: | :---: | :---: | :---: | :---: |
| 65 | 1 | 65 | 4225 | 4225 |
| 70 | 6 | 420 | 176400 | 1058400 |
| 72 | 2 | 144 | 20736 | 41472 |
| 75 | 3 | 225 | 50625 | 151875 |
| 81 | 1 | 81 | 6561 | 6561 |
| 83 | 7 | 581 | 337561 | 2362927 |
| 84 | 1 | 336 | 112896 | 451584 |
| 85 | 1 | 85 | 7225 | 7225 |
| 94 |  | 94 | 8836 | 8836 |


| 95 | 6 | 570 | 324900 | 1949400 |
| :---: | :---: | :---: | :---: | :---: |
|  | $\mathrm{~N}=32$ | $\sum \mathrm{X}=$ | $\sum \mathrm{X}^{2}=$ | $\sum \mathrm{F}\left(\mathrm{X}^{2}\right)=$ |
|  |  | 2601 | 1049965 | 6042505 |

Determining Mean of variable $\mathrm{X}_{2}$ (post-test) using formula:

$$
\begin{aligned}
\mathrm{MX}_{2} & =\frac{\sum \mathrm{X}_{2}}{\mathrm{~N}_{2}} \\
& =\frac{2601}{32} \\
& =81.28
\end{aligned}
$$

Then, the average score of post-test in experimental class student is 81.28
After obtaining the average score of pre-test and post-test, the next step is determining the different score from pre-test and post-test using formula:

$$
\begin{aligned}
\mathrm{MX} & =M X_{2}-M X_{1} \\
& =81.28-45.06 \\
& =36.22
\end{aligned}
$$

It can be concluded that there is an increase of average score of 36.22 points in the experimental class after being given treatment using ProblemBased Learning approach.

Table 4.4
The result of pre-test and post-test scores in control class

| No | Respondents | Test |  |
| :---: | :---: | :---: | :---: |
|  |  | Post-Test <br> $\left(\mathbf{Y}_{\mathbf{2}}\right)$ |  |
| 1 | AAR | 37 | 36 |
| 2 | AH | 36 | 50 |
| 3 | AFZ | 34 | 34 |
| 4 | AN | 40 | 38 |
| 5 | AS | 40 | 45 |


| 6 | DMR | 35 | 39 |
| :---: | :---: | :---: | :---: |
| 7 | FA | 35 | 44 |
| 8 | IL | 38 | 39 |
| 9 | MAF | 34 | 35 |
| 10 | MM | 38 | 34 |
| 11 | MSM | 34 | 53 |
| 12 | NY | 47 | 54 |
| 13 | NNS | 34 | 37 |
| 14 | NN | 34 | 34 |
| 15 | RA | 34 | 37 |
| 16 | RAL | 34 | 34 |
| 17 | RE | 34 | 42 |
| 18 | RF | 37 | 39 |
| 19 | RY | 37 | 53 |
| 20 | SM | 37 | 39 |
| 21 | SS | 36 | 37 |
| 22 | SR | 34 | 35 |
| 23 | SWP | 34 | 39 |
| 24 | TA | 42 | 52 |
| 25 | TH | 34 | 35 |
| 26 | UN | 34 | 39 |
| 27 | VA | 35 | 38 |
| 28 | WA | 34 | 43 |

To make it easier for the reader to see the difference of scores of pre-test and post-test, the data from the table above is converted into the graphics form.

Graphic 4.2
The difference of pre-test and post-test score result in control class


The graphic above tells us score from 28 students in control class which the highest score in pre-test is 47 and the highest score in post-test is 54 . While for the lowest score in pre-test is 34 and the lowest score in post-test is 34 . It implies that there is a little bit increase in students' writing ability after they are given treatment without using Problem-Based Learning approach.

Determining frequency distribution of pre-test score $\left(\mathrm{Y}_{1}\right)$

| 34 | 34 | 34 | 34 | 34 | 34 | 34 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 34 | 34 | 34 | 34 | 34 | 34 | 35 |
| 35 | 35 | 36 | 36 | 37 | 37 | 37 |
| 37 | 38 | 38 | 40 | 40 | 42 | 47 |

Table 4.5
Frequency distribution of pre-test

| Score | $\mathbf{F}$ | $\mathbf{Y}$ | $\mathbf{Y}^{\mathbf{2}}$ | $\mathbf{F}\left(\mathbf{Y}^{\mathbf{2}}\right)$ |
| :---: | :---: | :---: | :---: | :---: |
| 34 | 13 | 442 | 195364 | 2539732 |
| 35 | 3 | 105 | 11025 | 33075 |
| 36 | 2 | 72 | 5184 | 10368 |


| 37 | 4 | 148 | 21904 | 87616 |
| :---: | :---: | :---: | :---: | :---: |
| 38 | 2 | 76 | 5776 | 11552 |
| 40 | 2 | 80 | 6400 | 12800 |
| 42 | 1 | 42 | 1764 | 1764 |
| 47 | 1 | 47 | 2209 | 2209 |
|  | $\mathrm{~N}=28$ | $\sum \mathrm{X}=1012$ | $\sum \mathrm{X}^{2}=249626$ | $\sum \mathrm{~F}\left(\mathrm{X}^{2}\right)=2699116$ |

Determining Mean of variable $Y_{1}$ (pre-test) using formula:

$$
\begin{aligned}
M Y_{1} \quad & =\frac{\sum X_{1}}{N_{1}} \\
& =\frac{1012}{28} \\
& =36.14
\end{aligned}
$$

Then, the average score of pre-test in control class students is 36.14
Determining frequency distribution of post-test score $\left(\mathrm{Y}_{2}\right)$

| 34 | 34 | 34 | 34 | 35 | 35 | 35 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 36 | 37 | 37 | 37 | 38 | 38 | 39 |
| 39 | 39 | 39 | 39 | 39 | 42 | 43 |
| 44 | 45 | 50 | 52 | 53 | 53 | 54 |

Table 4.6
Frequency distribution of post-test

| Score | $\mathbf{F}$ | $\mathbf{X}$ | $\mathbf{X}^{\mathbf{2}}$ | $\mathbf{F}\left(\mathbf{X}^{\mathbf{2}}\right)$ |
| :---: | :---: | :---: | :---: | :---: |
| 34 | 4 | 136 | 18496 | 73984 |
| 35 | 3 | 105 | 11025 | 33075 |
| 36 | 1 | 36 | 1296 | 1296 |
| 37 | 3 | 111 | 12321 | 36963 |
| 38 | 2 | 76 | 5776 | 11552 |
| 39 | 6 | 234 | 54756 | 328536 |
| 42 | 1 | 42 | 1764 | 1764 |


| 43 | 1 | 43 | 1849 | 1849 |
| :---: | :---: | :---: | :---: | :---: |
| 44 | 1 | 44 | 1936 | 1936 |
| 45 | 1 | 45 | 2025 | 2025 |
| 50 | 1 | 50 | 2500 | 2500 |
| 52 | 1 | 52 | 2704 | 2704 |
| 53 | 1 | 106 | 11236 | 22472 |
| 54 | $\mathrm{~N}=28$ | $\sum \mathrm{X}=$ | $\sum \mathrm{X}^{2}=$ | $\sum \mathrm{F}\left(\mathrm{X}^{2}\right)=$ |
|  |  | 1134 | 130600 | 523572 |

Determining Mean of variable $\mathrm{Y}_{2}$ (post-test) using formula:
$M Y_{2}=\frac{\sum X_{2}}{N_{2}}$

$$
\begin{aligned}
& =\frac{1134}{28} \\
& =40.5
\end{aligned}
$$

Then, the average score of post-test in control class students is 40.29
After obtaining the average score of pre-test and post-test, the next step is determining the different score from pre-test and post-test using formula:

MY $\quad=M Y_{2}-M Y_{1}$
$=40.5-36.14$
$=4.34$
It can be concluded that there is a little increase of average score of 4.34 points in the control class without being given treatment using problem-based learning approach.

To simplify the calculation using t-test formula, then all the obtained data are entered into the table to find out the total number of results from the pretest and post-test scores. If the result has been acquired it will be easy for
researcher to determine the mean, standard deviation, and standard error that will be summed afterward using t-test formula.

Table 4.7
The calculation result of pre-test and post-test at the experimental class $\left(X_{1}\right)$ and the control class $\left(X_{2}\right)$

| No | Post-test score |  | $\mathrm{x}_{1}$ | $\mathbf{x}_{2}$ | $\mathrm{x}_{1}^{2}$ | $\mathrm{x}_{2}^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathrm{X}_{1}$ | $\mathbf{X}_{2}$ |  |  |  |  |
| 1 | 70 | 36 | -11.281 | -4.5 | 127.267 | 20.25 |
| 2 | 94 | 50 | 12.7188 | 9.5 | 161.767 | 90.25 |
| 3 | 70 | 34 | -11.281 | -6.5 | 127.267 | 42.25 |
| 4 | 95 | 38 | 13.7188 | -2.5 | 188.204 | 6.25 |
| 5 | 72 | 45 | -9.2813 | 4.5 | 86.1416 | 20.25 |
| 6 | 72 | 39 | -9.2813 | -1.5 | 86.1416 | 2.25 |
| 7 | 84 | 44 | 2.71875 | 3.5 | 7.3916 | 12.25 |
| 8 | 95 | 39 | 13.7188 | -1.5 | 188.204 | 2.25 |
| 9 | 65 | 35 | -16.281 | -5.5 | 265.079 | 30.25 |
| 10 | 95 | 34 | 13.7188 | -6.5 | 188.204 | 42.25 |
| 11 | 84 | 53 | 2.71875 | 12.5 | 7.3916 | 156.25 |
| 12 | 75 | 54 | -6.2813 | 13.5 | 39.4541 | 182.25 |
| 13 | 83 | 37 | 1.71875 | -3.5 | 2.9541 | 12.25 |
| 14 | 83 | 34 | 1.71875 | -6.5 | 2.9541 | 42.25 |
| 15 | 95 | 37 | 13.7188 | -3.5 | 188.204 | 12.25 |
| 16 | 70 | 34 | -11.281 | -6.5 | 127.267 | 42.25 |
| 17 | 70 | 42 | -11.281 | 1.5 | 127.267 | 2.25 |
| 18 | 83 | 39 | 1.71875 | -1.5 | 2.9541 | 2.25 |
| 19 | 81 | 53 | -0.2813 | 12.5 | 0.0791 | 156.25 |
| 20 | 83 | 39 | 1.71875 | -1.5 | 2.9541 | 2.25 |
| 21 | 70 | 37 | -11.281 | -3.5 | 127.267 | 12.25 |


| 22 | 83 | 35 | 1.71875 | -5.5 | 2.9541 | 30.25 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 23 | 85 | 39 | 3.71875 | -1.5 | 13.8291 | 2.25 |
| 24 | 95 | 52 | 13.7188 | 11.5 | 188.204 | 132.25 |
| 25 | 70 | 35 | -11.281 | -5.5 | 127.267 | 30.25 |
| 26 | 75 | 39 | -6.2813 | -1.5 | 39.4541 | 2.25 |
| 27 | 84 | 38 | 2.71875 | -2.5 | 7.3916 | 6.25 |
| 28 | 83 | 43 | 1.71875 | 2.5 | 2.9541 | 6.25 |
| 29 | 75 |  | -6.2813 |  | 39.4541 |  |
| 30 | 95 |  | 13.7188 |  | 188.204 |  |
| 31 | 84 |  | 2.71875 |  | 7.3916 |  |
| 32 | 83 |  | 1.71875 |  | 2671.51 |  |
|  | $\sum 2601$ | $\sum 1134$ |  |  | $\sum 5343.18$ | $\sum 1101$ |

## Note :

$\mathrm{X}_{1} \quad=$ Score of Post-test (Experimental Class)
$\mathrm{X}_{2} \quad=$ Score of Post-test (Control Class)
$\mathrm{x}_{1} \quad=\mathrm{X}_{1}-\mathrm{M}\left(\operatorname{Mean} \mathrm{X}_{2}\right)$
$\mathrm{x}_{2} \quad=\mathrm{X}_{2}-\mathrm{M}\left(\right.$ Mean $\left.\mathrm{Y}_{2}\right)$
$\mathrm{x}_{1}{ }^{2} \quad=$ The squared mark from $\mathrm{x}_{1}$
$\mathrm{x}_{2}{ }^{2}=$ The squared mark from $x_{2}$
$N_{1}=32, N_{2}=28, \sum X_{1}=2601, \sum X_{2}=1134, \sum x_{1}{ }^{2}=5343.18, \sum x_{2}{ }^{2}=1101$
After all needed data are collected, all data re calculated using t-test formula which its steps as follow:

1. Determining mean of variable $X_{1}$

$$
\begin{aligned}
M_{1} & =\frac{\sum X_{1}}{N_{1}} \\
& =\frac{2601}{32} \\
& =81.28
\end{aligned}
$$

2. Determining mean of variable $X_{2}$

$$
\begin{aligned}
M_{2} & =\frac{\sum X_{2}}{N_{2}} \\
& =\frac{1134}{28} \\
& =40.5
\end{aligned}
$$

3. Determining Deviation Standard of variable $X_{1}$

$$
\begin{aligned}
D S_{1} & =\frac{\sqrt{\sum \boldsymbol{x}_{\mathbf{1}}{ }^{2}}}{N} \\
& =\frac{\sqrt{5343.18}}{32} \\
& =\sqrt{166.97} \\
& =12.92
\end{aligned}
$$

4. Determining Deviation Standard of variable $X_{2}$ :

$$
\begin{aligned}
D S_{2} & =\frac{\sqrt{\sum x_{2}^{2}}}{N} \\
& =\frac{\sqrt{1101}}{28} \\
& =\sqrt{39.32} \\
& =6.27
\end{aligned}
$$

5. After getting deviation standard, next the researcher determine Error Standard (ES) derived from deviation standard of variable $X_{1}$ and $X_{2}$

$$
\begin{aligned}
& E S_{M_{1}}=\frac{D S_{1}}{\sqrt{N_{1-1}}}=\frac{12.92}{\sqrt{32-1}}=\frac{12.92}{\sqrt{31}}=\frac{12.92}{5.57}=2.32 \\
& E S_{M_{2}}=\frac{D S_{2}}{\sqrt{N_{2-1}}}=\frac{6.27}{\sqrt{28-1}}=\frac{6.27}{\sqrt{27}}=\frac{6.27}{5.196}=1.21
\end{aligned}
$$

6. Determining the different of Error Standard of variable $X_{1}$ and $X_{2}$

$$
\begin{aligned}
E S_{M_{1}}-E S_{M_{2}} & =\sqrt{E S_{M_{1^{2}}}}+E S_{M_{2^{2}}} \\
& =\sqrt{2.32^{2}}+1.21^{2} \\
& =\sqrt{5.38}+1.46
\end{aligned}
$$

$$
\begin{aligned}
& =\sqrt{6.84} \\
& =2.615
\end{aligned}
$$

7. Determining $t_{0}$ (t observation)

$$
t_{0}=\frac{M_{1}-M_{2}}{\sqrt{\left(\frac{\sum x_{1}^{2}+\sum x_{2}^{2}}{N_{1}+N_{2}-2}\right)\left(\frac{N_{1}+N_{2}}{N_{1} \cdot N_{2}}\right)}}=\begin{aligned}
&=\frac{81.28-40.5}{\sqrt{\left(\frac{5343.18+1101}{32+28-2}\right)\left(\frac{32+28}{32.28}\right)}} \\
&=\frac{40.78}{\sqrt{\left(\frac{644.18}{58}\right)\left(\frac{60}{896}\right)}} \\
&=\frac{40.78}{\sqrt{(11.11)(0.07)}} \\
&=\frac{40.78}{\sqrt{0.78}} \\
&=\frac{40.78}{0.88} \\
&=46.34
\end{aligned}
$$

After all data is calculated using t-test formula, then it is obtained the result that $t_{0}$ ( t observation) is 46.34
8. Determining $t_{t}$ ( t table) at a significance level $0 \mathrm{f} 5 \%$ and $1 \%$

Df $=\left(N_{1}+N_{2}\right)-2$
$=(32+28)-2$
$=58$
By df (degree of freedom) of 58 , the researcher consult with the mark $t$ table, both at the $5 \%$ significance level and at the $1 \%$ significance level. So the obtained result are:
a. At significance $5 \% t_{t}(\mathrm{t}$ table $)=1.67$
b. At significance $1 \% t_{t}(\mathrm{t}$ table $)=2.39$

## 2. Analyzing of Observation

a. Teaching-learning argumentative text using Problem-Based

## Learning

Teaching argumentative text using problem-based learning described: introduction, main activity, and closing.

## 1) Introduction

Teaching-learning introduction using problem-based learning included: orientation, apperception, motivation, giving reference.

## a) Orientation

Teaching-learning introduction activity of argumentative text using problem-based learning at table 4.8 below:

Table 4.8
Orientation of Introduction Activity Teaching-Learning
(Students' Observation)

| No | Statements | Criteria, Score, Percentage and Percent |  |  |  |  | Mean of Score and Percent | Interpre tation |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Worse | Bad | Quite | Good | Very Good |  |  |
|  |  | 1 | 2 | 3 | 4 | 5 |  |  |
| 1 | Teacher starts the learning Process with greeting and praying | 0 | 2 | 4 | 17 | 9 | 4.03 | Good |
|  |  | 0.0 | 6.25 | 12.5 | 53.1 | 28.1 | 80.6 | High |
| 2 | Teacher checking students' attendance as a discipline | 0 | 2 | 8 | 16 | 6 | 3.81 | Good |
|  |  | 0.0 | 6.25 | 25 | 50 | 18.75 | 76.25 | High |
| 3 | Teacher preparing the students' physical and psychological to start teaching in the learning process | 0 | 2 | 14 | 10 | 6 | 3.625 | Good |
|  |  | 0.0 | 6.25 | 43.7 | 31.25 | 18.75 | 72.5 | High |
|  |  |  |  |  |  |  | 3.82 | Good |
|  |  |  |  |  |  |  | 76.45 | High |

Table 4.8 showed orientation of introduction activity teachinglearning (students' observation). Teacher starts the learning process with greeting and praying at score 2 frequencies 2 , percentage $6.25 \%$. At score 3, frequencies 4 , percentage $12.5 \%$. at score 4 frequencies 17 , percentage $53.1 \%$. At score 5, frequencies 9, percentage $28.1 \%$. The whole score mean was $4.03 \%$, good categories. Percentage all $80.6 \%$, high categories.

Teacher checking students' attendance as a discipline at score 2 frequencies 2, percentage $6.25 \%$. At score 3 , frequencies 8 , percentage $25 \%$. At score 4 , frequencies 16 , percentage $50 \%$. At score 5 , frequencies 6 , percentage $18.75 \%$. The mean was 3.81 , good categories. Percentage all $76.25 \%$, high categories.

Teacher preparing the students' physical and psychological to start teaching in the learning process at score 2 frequencies 2, percentage $6.25 \%$.at score 3 frequencies 14 , percentage $43.75 \%$. At score 4 frequencies 10 , percentage $31.25 \%$. at score 5 frequencies 6 , percentage $18.75 \%$. the mean was 3.625 , good categories. Percentage all $72.5 \%$, high categories.

All orientation teaching and learning activities, mean 3.82, good categories. Average percentage $76.45 \%$ high categories. Summary activity teaching-learning argumentative text using problem-based learning approach.

Table 4.9
Orientation of Introduction Activity Teaching-Learning
(Teachers' Observation)

| No | Statements | Score <br> and <br> Percent | Interpretation |
| :---: | :--- | :---: | :---: |
| 1 | Teacher starts the learning Process with greeting <br> and praying | 4 | Good |
|  | Teacher checking students' attendance as a <br> discipline | 80 | High |
|  | Teacher preparing the students' physical and <br> psychological to start teaching in the learning <br> process | 80 | Good |
|  |  | High |  |
|  |  | 80 | Good |

Table 4.9 showed orientation of introduction activity teachinglearning (teachers' observation). Teacher starts the learning process with greeting and praying; score 4 good categories, percentage $80 \%$
high categories. Teacher checking students' attendance as a discipline; score 4 good categories, percentage $80 \%$ high categories. Teacher preparing the students' physical and psychological to start teaching in the learning process; score 4 good categories, percentage $80 \%$ high categories. All orientation of introduction activity teachinglearning (teachers' observation) mean 4 good categories, percentage $80 \%$ high categories.

## b) Apperception

Teaching-learning introduction activity of argumentation part apperception showed at table 4.10 below:

Table 4.10
Apperception Activity Teaching-Learning Introduction
(Students' Observation)

| No | Statements | Criteria, Score, Percentage, andPercent |  |  |  |  | $\begin{aligned} & \text { Mean } \\ & \text { of } \\ & \text { Score } \\ & \text { and } \\ & \text { Percent } \end{aligned}$ | Interpretation |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Worse | Bad | Quite | Good | Very Good |  |  |
|  |  | 1 | 2 | 3 | 4 | 5 |  |  |
| 4 | Teacher associates material / theme/ learning activities that will be carried out with the experience of students with previous material/themes/activities before. | 0 | 1 | 7 | 18 | 6 | 3.91 | good |
|  |  | 0.0 | 3.13 | 21.9 | 56.25 | 18.75 | 78.1 | high |
| 5 | Teacher remember the students essential material with asking | 0 | 0 | 4 | 23 | 5 | 4.03 | good |
|  |  | 0.0 | 0,0 | 12.5 | 71.9 | 15.6 | 80.6 | high |
| 6 | Teacher asks questions that are related to the lessons | 0 |  | 4 | 22 | 6 | 4.06 | good |
|  |  | 0,0 | 0,0 | 12.5 | 68.75 | 18.75 | 81.2 | high |
|  |  |  |  |  |  |  | 4 | good |
|  |  |  |  |  |  |  | 79.97 | high |

Table 4.10 showed the apperception of teaching and learning activity. Teacher associates material/theme/learning activities before score 2 frequencies 1, percentage $31.25 \%$. score 3 frequencies 7, percentage $21.9 \%$. score 4 frequencies 18 , percentage 56.25 . Score 5 frequencies 6 , percentage $18.75 \%$. The mean was 3.91 good categories. Percentage all $80.6 \%$, high categories.

Teacher remember the students essential material with asking score 3 frequencies 4 , percentage $12.5 \%$. Score 4 frequencies 23 ,
percentage $71.9 \%$. Score 5 frequencies 5 , percentage $15.6 \%$. the mean was $4.06 \%$ good categories. Percentage all $80.6 \%$, high categories.

Teacher asks questions that are related to the lessons score 3 frequencies 4 , percentage $12.5 \%$. score 4 frequencies 22 , percentage $68.75 \%$. score 5 frequencies 6 , percentage $18.75 \%$. the mean was 4.06 good categories. Percentage all $81.2 \%$, high categories.

All apperception activity teaching and learning, mean 4, categories good. Average percentage $79.97 \%$, high categories. Summary activity teaching learning argumentative text using problem-based learning was good.

Table 4.11
Apperception Activity Teaching-Learning Introduction
(Teachers' Observation)

| No | Statements | Score <br> and <br> Percent | Interpretation |
| :---: | :--- | :---: | :---: |
| 4 | Teacher associates material / theme/ learning <br> activities that will be carried out with the <br> experience of students with previous <br> material/themes/activities before. | 4 | Good |
|  | Teacher remember the students essential material <br> with asking | 80 | High |
| 5 |  | 80 | Good |
|  |  | 4 | High |
|  |  |  | 80 |
| High |  |  |  |

Table 4.11 showed apperception activity teaching-learning introduction (Teachers' Observation). Teacher associates material/themes/learning activities that will be carried out with the experience of students with previous material/theme/activities before, score 4 good categories, percentage $80 \%$ high categories. Teacher remember the students essential material with asking, score 4 good categories, percentage $80 \%$ high categories. Teacher asks questions that are related to the lessons, score 4 good categories, percentage

80\% high categories. The mean all apperception activity teachinglearning was 4 good categories. The mean percentage $80 \%$ high categories.

## c) Motivation

Teaching-learning introduction activity of argumentative text using problem-based learning part motivation showed at table 4.12 below:

Table 4.12
Motivation Activity Teaching-Learning Introduction
(Students' Observation)

| No | Statements | Criteria, Score, Percentage, and Percent |  |  |  |  | Mean of Score and Percent | Interpreta tion |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Worse | Bad | Quite | Good | Very Good |  |  |
|  |  | 1 | 2 | 3 | 4 | 5 |  |  |
| 7 | Teacher provides an overview of the benefits earning the lessons to be learned in daily activity | 0 | 2 | 5 | 20 | 5 | 3.9 | good |
|  |  | 0.0 | 6.25 | 15.7 | 62.5 | 15.7 | 78 | high |
| 8 | Teacher delivers the learning objectivities at the meeting | 0 | 3 | 4 | 18 | 7 | 3.9 | good |
|  |  | 0.0 | 9.38 | 12.5 | 56.25 | 21.9 | 78 | high |
| 9 | Teachers asks questions | 0 | 2 | 5 | 19 | 6 | 3.9 | good |
|  |  | 0.0 | 6.25 | 15.6 | 59.4 | 18.75 | 78 | high |
|  |  |  |  |  |  |  | 3.9 | good |
|  |  |  |  |  |  |  | 78 | high |

Table 4.12 showed the motivation of teaching and learning activity. Teacher provides an overview of the benefits of learning the lessons to be learned in daily life score 2 frequencies 2 , percentage $6.25 \%$. Score 3 frequencies 5, percentage $15.7 \%$. Score 4 frequencies 20 , percentage $62.5 \%$. Score 5 frequencies 5 , percentage $15.7 \%$. The mean was 3.9 , good categories. Percentage all $78 \%$ high categories.

Teacher delivers the learning objectives at the meeting score 2 frequencies 3, percentage all $9.38 \%$. Score 3 frequencies 4, percentage $12.5 \%$. Score 4 frequencies 18 , percentage $56.25 \%$. Score 5 frequencies 7 , percentage $21.9 \%$. The mean was $3.9 \%$ good categories. Percentage all $78 \%$, high categories.

Teacher asks questions score 2 frequencies 2 , percentage $6.25 \%$. Score 3 frequencies 5, percentage $15.6 \%$. Score 4 frequencies 19 , percentage $59.4 \%$. Score 5 frequencies 6, percentage $18.75 \%$. The mean was 3.9 good categories. Percentage all $78 \%$, high categories.

All motivation activity teaching and learning, mean 3.9, categories good. Average percentage 78\%; high categories. Summary activity teaching learning argumentative text using Problem-based learning was good.

Table 4.13
Motivation Activity Teaching-Learning Introduction
(Teachers' Observation)

| No | Statements | Score and Percent | Interpretation |
| :---: | :---: | :---: | :---: |
| 7 | Teacher provides anoverview of the benefits leaming the lessons to be leamed in daily activity | 3 | Medium |
|  |  | 60 | Medium |
| 8 | Teacher delivers the leaming objectivities at the meeting | 4 | Good |
|  |  | 80 | High |
| 9 | Teachers asks questions | 4 | Good |
|  |  | 80 | High |
|  |  | 3.67 | Good |
|  |  | 73.33 | High |

Table 4.13 showed apperception activity teaching-learning introduction (teachers' observation). Teacher provides an overview of the benefits of learning the lessons to be learned in daily life score 3 medium categories, percentage $60 \%$ medium categories. Teacher delivers the learning objectives at the meeting score 4 good categories, percentage $80 \%$ high categories. Teacher asks questions score 4 good categories, percentage $80 \%$ high categories. The mean of all motivation activity teaching-learning was 3.67 good categories. The mean percentage $73.33 \%$ high categories.

## d) Giving Reference

Teaching-learning introduction activity of argumentative text using problem-based learning part giving reference showed at table 4.14 below:

## Table 4.14

Giving Reference Activity Teaching-Learning Introduction
(Students Observation)

| No | Statements | Criteria, Score, Percentage, and Percent |  |  |  |  | Mean of Score and Percent | Interpret ation |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Worse | Bad | Quite | Good | Very Good |  |  |
|  |  | 1 | 2 | 3 | 4 | 5 |  |  |
| 10 | Teacher delivers the material subject that will be discussed at the meeting. | 0 | 0 | 6 | 17 | 9 | 4.1 | good |
|  |  | 0.0 | 0.0 | 18.75 | 53.1 | 28.1 | 82 | high |
| 11 | Teacher shows KI, KD, Introduction and KKM in the meeting | 0 | 2 | 8 | 17 | 5 | 3.78 | good |
|  |  | 0.0 | 6.25 | 25 | 53.1 | 15.6 | 75.6 | high |
| 12 | Teacher distributes group of study | 0 | 1 | 4 | 18 | 10 | 4.25 | good |
|  |  | 0.0 | 3.25 | 12.5 | 56.25 | 31.25 | 85 | high |
| 13 | Teacher explains the mecharics for applying the leaming experience according to the leaming steps | 0 | 1 | 6 | 18 | 7 | 3.97 | good |
|  |  | 0.0 | 3.1 | 18.75 | 56.25 | 21.9 | 79.4 | high |
|  |  |  |  |  |  |  | 4.025 | good |
|  |  |  |  |  |  |  | 80.5 | high |

Table 4.14 showed the giving reference of teaching and learning activity. Teacher delivers the material subject that will be discussed at the meeting score 3 frequencies 6 , percentage $18.75 \%$. Score 4 frequencies 17 , percentage $53.1 \%$. Score 5 frequencies 9 , percentage $28.1 \%$. The mean was 4.1 good categories. Percentage all $82 \%$, high categories.

Teacher shows KI, KD, Indicator and KKM in the meeting score 2 frequencies 2, percentage $6.25 \%$. Score 3 frequencies 8 , percentage $25 \%$. Score 4 frequencies 17 , percentage $52.1 \%$. Score 5 frequencies 5 , percentage $15.6 \%$. The mean was 3.8 good categories. Percentage all $76.0 \%$, high categories.

Teacher distributes group of study score 2 frequencies 1 , percentage $3.25 \%$. Score 3 frequencies 4 , percentage $12.5 \%$. Score 4
frequencies 18 , percentage $56.25 \%$. Score 5 frequencies 10 , percentage $31.25 \%$. The mean was $4.25 \%$ good categories. Percentage all $79.4 \%$, high categories.

Teacher explains the mechanism for applying the learning experience according to the learning steps score 2 frequencies 1 , percentage $3.25 \%$. Score 3 frequencies 6, percentage $18.75 \%$. Score 4 frequencies 18, percentage $56.25 \%$. Score 5 frequencies 7, percentage $21.9 \%$. the mean was 3.97 good categories. Percentage all $79.4 \%$; high categories.

All giving reference teaching and learning activities, mean 4.025, good categories. Summary teaching learning activity of argumentative text using problem-based learning was good. Average percentage 80.5\%; high categories.

Table 4.15
Giving Reference Activity Teaching-Learning Introduction
(Teachers' Observation)

| No | Statements | Score and Percen | Interpretation |
| :---: | :---: | :---: | :---: |
| 10 | Teacher delivers the material subject that will be discussed at the meeting. | 3 | Medium |
|  |  | 60 | Medium |
| 11 | Teacher shows KI, KD, Introduction and KKM in the meeting | 3 | Medium |
|  |  | 60 | Medium |
| 12 | Teacher distributes group of study | 4 | Good |
|  |  | 80 | High |
| 13 | Teacher explains the mecharics for applying the leaming experience according to the leaming steps | 4 | Good |
|  |  | 80 | High |
|  |  | 3.5 | Medium |
|  |  | 70 | High |

Table 4.15 showed Giving Reference Activity Teaching-Learning Introduction (Teachers' Observation). Teacher delivers the material subject that will be discussed at the meeting score 3, medium categories, percentage $60 \%$ medium categories. Teacher shows KI,

KD, Indicator and KKM in the meeting score 3 medium categories, percentage $60 \%$ medium categories. Teacher distributes group of study score 4 good categories, percentage $80 \%$ high categories. Teacher explains the mechanism for applying the learning experience according to the learning steps score 4 good categories, percentage $80 \%$ high categories. The mean of all giving reference activity teaching-learning was 3.5 medium categories. The mean percentage $70 \%$, high categories.

## 2) Teaching-Learning Main Activity of Argumentative Text using Problem-Based Learning

Teaching learning main activity of argumentative text using problem-based learning included: simulation through literacy activities, problem statement through critical thinking, data collection, data processing, verification, generalization through communication, generalization through creativity.
a) Teaching Learning Main Activity of Argumentative Text Using Problem-Based Learning Included: Simulation Through Literacy Activities

Teaching-learning main activity of argumentative text using problem-based learning part simulation through literacy showed at Table 4.16 below:

Table 4.16
Simulation Through Literacy of Main Activity Teaching-Learning
(Students' Observation)


Table 4.16 showed the main activity of teaching and learning. Teacher shows the picture with relevant text score 2 frequencies 2 , percentage $6.25 \%$. Score 3 frequencies 3, percentage $9.38 \%$. Score 4 frequencies 22 , percentage $68.75 \%$. Score 5 frequencies 5 , percentage $15.6 \%$. The man was 3.9 high categories. All of the Percentage was $78 \%$ good categories.

Teacher gives students opportunity to observe worksheet on this picture and asking for information related to opinion. Score 2 frequencies 1 , percentage $3.125 \%$. Score 3 frequencies 5 , percentage $15.6 \%$. Score 4 frequencies 19 , percentage $59.4 \%$. Score 5 frequencies 7 , percentage $21.9 \%$. The mean was 4 high categories. All of the Percentage was $80 \%$ high categories.

Teacher gives students the opportunity to observe the disclosure of examples of ways of discover from each context of the use of transactional and interaction text score 2 frequencies 3, percentage $9.4 \%$. Score 3 frequencies 5, percentage $15.6 \%$. Score 4 frequencies

19, percentage $59.4 \%$. Score 5 frequencies 5, percentage $15.6 \%$. The mean was 3.81 high categories. All of the Percentage was $76.2 \%$.

The teacher gives students the opportunity to read material from textbooks or other books, examples of how disclose from each context of the use of transactional and interaction text score 3 frequencies 6 , percentage $18.75 \%$. Score 4 frequencies 19, percentage $59.4 \%$. Score 5 frequencies 7, percentage $21.9 \%$. The mean was 4.03 high categories. All of the Percentage was $80.6 \%$ high categories.

Teacher trains sincerity, thoroughness, and searches for information through listening to material on how to disclose from each context the use of transactional text score 2 frequencies 1 , percentage $3.25 \%$. Score 3 frequencies 4 , percentage $12.5 \%$. Score 4 frequencies 21 , percentage $65.6 \%$. Score 5 frequencies 6 , percentage $18.75 \%$. The mean was 4 high categories. All of the Percentage $80 \%$, high categories.

All main activities teaching and learning mean 3.948, high categories. Average percentage $78.8 \%$ high categories. Summary activity teaching learning argumentative text using problem-based learning was high.

Table 4.17
Simulation Through Literacy of Main Activity Teaching-Learning
(Teachers' Observation)

| No | Statements | $\begin{array}{c\|} \hline \text { Score } \\ \text { and } \\ \text { Percent } \end{array}$ | Interpretation |
| :---: | :---: | :---: | :---: |
| 14 | Teacher shows the picture with the relevant text | 4 | Good |
|  |  | 80 | High |
| 15 | Teacher gives students opporturity to observe the worksheet on this picture and a sking for informationrelatedto opirion | 4 | Good |
|  |  | 80 | High |
| 6 | Teacher gives students the opporturity to observe the disclosure of examples of ways of discover from each context of the use of transactional and interaction texts | 4 | Good |
|  |  | 80 | High |
| 17 | The teacher gives students the opporturity to read material fromtextbooks or other books, examples of how to disclose fromeach context of the use of transactional andinteraction texts | 4 | good |
|  |  | 80 | high |
| 18 | Teacher trains sincerity, thoroughness, and searches for informationthroughlistening to material on how to disclose fromeach context the use of transactional text | 4 | good |
|  |  | 80 | high |
|  |  | 4 | good |
|  |  | 80 | high |

Table 4.17 showed simulation through literacy of main activity teaching-learning (teachers' observation). Teacher shows the picture with the relevant text score 4 good categories, percentage $80 \%$ high categories. Teacher gives students opportunity to observe worksheet on this picture and asking for information related to opinion score 4 good categories, percentage $80 \%$ high categories. Teacher gives students the opportunity to observe the disclosure of examples of ways of discover from each context of the use of transactional and interaction text score 4 good categories, percentage $80 \%$ high categories. Teacher trains sincerity, thoroughness, and searches for information through listening to material on how to disclose from each context the use of transactional text score 4 good categories, percentage $80 \%$ high categories. The mean of all simulation through
literacy activity teaching-learning was 4 , high categories. The mean percentage $80 \%$ high categories.

## b) Teaching-Learning Activity of Argumentative text using problembased learning through problem statement

Teaching-learning main activity of argumentative text using problem-based learning through problem statement showed at Table 4.18 below:

Table 4.18
Problem Main Activity Teaching-Learning
(Students' Observation)

| No | Statements | Criteria, Score, Percentage, and Percent |  |  |  |  | Mean of Score and Percent | Interpret ation |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Worse | Bad | Quite | Good | Very <br> Good |  |  |
|  |  | 1 | 2 | 3 | 4 | 5 |  |  |
|  | Teacher gives chance to student for identify as much as possible | 0 | 0 | 4 | 20 | 8 | 4.125 | good |
| 19 | question about expression give and ask information opinion about opinion in argumentative text | 0.0 | 0.0 | 12.5 | 62.5 | 25 | 82.5 | high |

Table 4.18 showed the problem statement main activity of teaching and learning. Teacher gives students the opportunity to identify as many questions as possible about give and asks information about opinion in argumentative text score 3 frequencies 4 , percentage $12.5 \%$. Score 4 frequencies 20 , percentage $62.5 \%$. Score 5 frequencies 8 , percentage $25 \%$. The mean was 4.125 high categories. All of the percentage was 82.5 very high categories.

Table 4.19
Problem Statement Main Activity Teaching-Learning
(Teachers' Observation)

| No | Statements | Score <br> and <br> Percent | Interpretation |
| :---: | :---: | :---: | :---: |
| 19 | Teacher gives chance to student for identify as <br> much as possible question about expression give <br> and ask information opinion about opinion in <br> argumentative text | 4 | Good |
|  | 80 | High |  |

Table 4.19 showed problem statement main activity teachinglearning (teachers' observation). Teacher gives chance to students for identify as much as possible question about expression give and ask information related opinion on argumentative text score 4 good categories, percentage $80 \%$ high categories.

## c) Teaching-Learning Main Activity of Argumentative Text Using

## Problem-Based Learning

Teaching-learning activity of argumentative text using problembased learning data collection showed at Table 4.20 below:

Table 4.20
Data Collection Main Activity Teaching-Learning
(Students' Observation)

| No | Statements | Criteria, Score, Percentage, and Percent |  |  |  |  | Mean of Score and Percent | Interpret ation |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Worse | Bad | Quite | Good | Very Good |  |  |
|  |  | 1 | 2 | 3 | 4 | 5 |  |  |
| 20 | Carefully observe the material expres sions of giving and asking information related argument on the problem. | 1 | 2 | 4 | 20 | 5 | 3.69 | good |
|  |  | 3.125 | 6.25 | 12.5 | 62.5 | 15.6 | 73.8 | high |
| 21 | Read the other source of expressions of giving and asking information related argument on the problem. | 0 | 0 | 4 | 23 | 5 | 4.03 | good |
|  |  | 0.0 | 0.0 | 12.5 | 71.9 | 15.6 | 80.6 | high |
| 22 | Question and answer to the teacher about how to express of giving and asking information related argument on the social problem. | 0 | 1 | 4 | 21 | 6 | 4 | good |
|  |  | 0.0 | 3.13 | 12.5 | 65.6 | 18.75 | 80 | high |
| 23 | The teacher makes a group to discuss how to express giving and asking information related argument on the social problem. | 0 | 1 | 3 | 23 | 5 | 4 | high |
|  |  | 0.0 | 3.13 | 9.4 | 71.9 | 15.6 | 80 | good |
| 24 | The teacher facilitates students to record and collect information on how to express of giving and asking information related argument on the social problem. | 0 | 0 | 3 | 24 | 5 | 4.06 | high |
|  |  | 0.0 | 0.0 | 9.4 | 75 | 5 | 81.2 | $\begin{aligned} & \text { very } \\ & \text { good } \end{aligned}$ |
| 25 | The teacher facilitates students to represent the results of the discussion related argument on the social problem. | 0 | 0 | 3 | 22 | 7 | 4.125 | high |
|  |  | 0.0 | 0.0 | 9.4 | 68.75 | 21.9 | 82.5 | very good |
| 26 | Teacher facilitates students to exchange information on how to express of giving and asking information related argument on the social problem. | 0 | 3 | 5 | 16 | 4 | 3.9 | high |
|  |  | 0.0 | 9.4 | 15.6 | 50 | 25 | 78 | good |
|  |  |  |  |  |  |  | 3.97 | good |
|  |  |  |  |  |  |  | 79.44 | good |

Table 4.20 showed the data collection main activity of learning and teaching. Carefully observe the material expressions of giving and asking score 1 frequency 1 , percentage $3.125 \%$. Score 2 frequencies 2 , percentage $6.25 \%$. Score 3 frequencies 4 , percentage $12.5 \%$. Score 4 frequencies 20 , percentage $62.5 \%$. Score 5 frequencies 5 ,
percentage $15.6 \%$. The mean was 3.69 high categories. All of the Percentage was $73.8 \%$, good categories.

Read the other sources of expressions of giving and asking information related opinion score 3 frequencies 4, percentage $12.5 \%$. Score 4 frequencies 23 , percentage $71.9 \%$. Score 5 frequencies 5, percentage $15.6 \%$. The mean was 4.03 high categories. All of the Percentage was $80.6 \%$, high categories.

Question and answer to the teacher about how to express of giving and asking information related opinion score 2 frequencies 1 , percentage $3.125 \%$. Score 3 frequencies 4 , percentage $12.5 \%$. Score 4 frequencies 21 , percentage $65.6 \%$. Score 5 frequencies 6 , percentage $18.75 \%$. The mean was 4 high categories. All of the Percentage was $80 \%$, good categories.

The teacher makes a group to discuss how to express giving and asking information related opinion score 2 frequencies 1 , percentage $3.125 \%$. Score 3 frequencies 3, percentage $9.4 \%$. Score 4 frequencies 23 , percentage $71.9 \%$. Score 5 frequencies 5 , percentage $15.6 \%$. the mean was 4 high categories. All of the Percentage $80 \%$, high categories.

The teacher facilitates students to record and collect information on how to express of giving and asking information related opinion score 3 frequencies 3, percentage $9.4 \%$. Score 4 frequencies 24 , percentage $75 \%$. Score 5 frequencies 5, percentage $15.6 \%$. The mean was 4.06 high categories. All of the Percentage $81.2 \%$, high categories.

The teacher facilitates students to represent the results of the discussion on how to express of giving and asking information related opinion score 3 frequencies 3 , percentage $9.4 \%$. Score 4 frequencies 22, percentage $68.75 \%$. Score 5 frequencies 7, percentage $21,9 \%$. The
mean was 4.125 high categories. All of the Percentage $82.5 \%$, very high categories.

Teacher facilitates students to exchange information on how to express of giving and asking information related opinion score 2 frequencies 3 , percentage $9.4 \%$. Score 3 frequencies 5 , percentage $15.6 \%$. Score 4 frequencies 16 , percentage $65 \%$. Score 5 frequencies 8 , percentage $25 \%$. The mean was 3.9 high categories. All of the Percentage $78 \%$, good categories.

All main activities teaching and learning, mean 3.97, high categories. Average percentage $79.44 \%$, good categories. Summary activity teaching learning argumentative text using problem-based learning was good.

Table 4.21

## Data Collection Main Activity Teaching-Learning

(Teachers' Observation)

| No | Statements | $\begin{gathered} \text { Score } \\ \text { and } \\ \text { Percent } \end{gathered}$ | Interpretation |
| :---: | :---: | :---: | :---: |
| 20 | Carefully observe the material expressions of giving and asking information related argument on the problem. | 4 | Good |
|  |  | 80 | High |
| 21 | Read the other source of expressions of giving and asking information related argument on the problem. | 4 | Good |
|  |  | 80 | High |
| 22 | Question and answer to the teacher about how to express of giving and asking information related argument on the social problem. | 3 | Medium |
|  |  | 60 | Medium |
| 23 | The teacher makes a group to discuss how to express giving and asking information related argument on the social problem. | 4 | High |
|  |  | 80 | Good |
| 24 | The teacher facilitates students to record and collect information on how to express of giving and asking information related argument on the social problem. | 3 | Medium |
|  |  | 60 | Medium |
| 25 | The teacher facilitates students to represent the results of the discussion related argument on the social problem. | 3 | Medium |
|  |  | 60 | Medium |
| 26 | Teacher facilitates students to exchange information on how to express of giving and asking information related argument on the social problem. | 4 | High |
|  |  | 80 | Good |
|  |  | 3.571 | Medium |
|  |  | 71.43 | Good |

Table 4.21 showed data collection main activity teaching-learning (teachers' observation).Carefully observe the material expressions of giving and asking, score 4 good categories, percentage $80 \%$ high categories. Read the other sources of expressions of giving and asking information related opinion score 4 good categories, percentage $80 \%$ high categories. Question and answer to the teacher about how to express of giving and asking information related opinion score 3 medium categories, percentage $60 \%$ medium categories. The teacher makes a group to discuss how to express giving and asking information related opinion score 4 good categories, percentage $80 \%$ high categories. The teacher facilitates students to record and collect information on how to express of giving and asking information related opinion score3 medium categories, $60 \%$ medium categories. The teacher facilitates students to represent the results of the discussion on how to express of giving and asking information related opinion score 3 medium categories, percentage $60 \%$ medium categories. Teacher facilitates students to exchange information on how to express of giving and asking information related opinion score 4 good categories, percentage $80 \%$ high categories. The mean of all data collection main activity teaching-learning (teachers' observation) was 3.57 medium categories. The mean percentage $71.43 \%$ good categories.
d) Teaching-Learning Main Activity of Argumentative Text Using Problem-Based Learning Data Processing

Teaching-learning activity of argumentative text using problembased learning part data processing showed at Table 4.22 below:

Table 4.22
Data Processing Main Activity Teaching-Learning
(Students' Observation)


Table 4.22 showed the data processing of main activities teaching learning. Discuss material about expressions giving and asking information related opinion score 2 frequencies 1 , percentage $3.125 \%$. Score 3 frequencies 3, percentage $9.38 \%$. Score 4 frequencies 22 percentage $68.75 \%$. Score 5 frequencies 6, percentage $18.75 \%$. The mean was 4.03 good categories. All of the Percentage was $80.6 \%$, good categories.

Process of information: material about expressions giving and asking information related opinion from the result activities, previous or the results from activities observe and collect information in the meeting with help question on worksheet score 2 frequencies 1 , percentage $3,25 \%$. Score 3 frequencies 7 , percentage $21.9 \%$. Score 4 frequencies 19 , percentage $59.4 \%$. Score 5 frequencies 5 , percentage $15.6 \%$. The mean was 3.87 high categories. All of the percentage was $77.5 \%$, good categories.

Students do some question about the material expressions giving and asking information related opinion score 2 frequencies 2, percentage $6.25 \%$. Score 3 frequencies 6 , percentage $18.75 \%$. Score 4 frequencies 20, percentage $62.5 \%$. Score 5 frequencies 4, percentage $12.5 \%$. The mean was 3.81 high categories. All of the Percentage was $76.2 \%$, good categories.

All main activities teaching and learning, mean 3.9, high categories. Average percentage $78.1 \%$, good categories. Summary activity teaching learning argumentative text using problem based learning was good.

Table 4.23
Data Processing Main Activity Teaching-Learning
(Teachers' Observation)

| No | Statements | Score <br> and <br> Percent | Interpretation |
| :---: | :--- | :---: | :---: |
| 27 | Discuss material about expressions giving and <br> asking information related opinion. | 4 | good |
| 28 | Process of information: material about <br> expressions giving and asking information related <br> opinion collected from the results activities <br> previous or the results from activities observe and <br> collect information in the meeting with help <br> questions on work sheet. | 4 | high |
|  | 80 | good |  |
| 29 | Students do some question about the material <br> expressions giving and asking information related <br> opinion. | 4 | good |
|  | 80 | high |  |
|  |  | 80 | good |

Table 4.23 showed data processing main activity teachinglearning (teachers' observation). Discuss material about expressions giving and asking information related opinion score 4 good categories, percentage $80 \%$ high categories. Process of information: material about expressions giving and asking information related opinion from the result activities, previous or the results from
activities observe and collect information in the meeting with help question on worksheet score 4 good categories, percentage $80 \%$ high categories. Students do some question about the material expressions giving and asking information related opinion score 4 good categories, percentage $80 \%$ high categories. The mean of all data processing main activity teaching-learning (teachers' observation) was 4 good categories. The mean percentage was $80 \%$ high categories.

## e) Teaching-Learning Main Activity of Argumentative Text Using

## Problem-Based Learning

Teaching-learning main activity of argumentative text using problem-based learning part verification showed at Table 4.24 below:

Table 4.24
Verification Main Activity Teaching-Learning
(Students' Observation)

| No | Statements | Criteria, Score, Percentage, and Percent |  |  |  |  | Mean of Score and Percent | Interpret ation |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Worse | Bad | Quite | Good | Very Good |  |  |
|  |  | 1 | 2 | 3 | 4 | 5 |  |  |
| 30 | The teacher adds the extensiveness theory into the processing information that is of a nature looking for solution from various source that has a different argument to the contrary about expressions giving and asking information related opinion. | 0 | 2 | 7 | 17 | 6 | 3.84 | good |
|  |  | 0.0 | 6.25 | 21.9 | 53.1 | 18.75 | 76.8 | high |
| 31 | Teacher facilitates students in discussion to develop sincerity, accuracy, disciplined and obey rules, work hard, ability apply procedure and ability think inductive and deductive in prove about expressions giving and asking information related opinion. | 0 | 1 | 5 | 20 | 6 | 3.97 | good |
|  |  | 0.0 | 3.13 | 15.6 | 62.5 | 18.75 | 79.4 | high |
| 32 | Students and teacher discuss students' argumentative text during the pre-test. | 0 | 1 | 5 | 19 | 7 | 4 | good |
|  |  | 0.0 | 3.25 | 15.6 | 59.4 | 21.9 | 80 | high |
|  |  |  |  |  |  |  | 3.94 | good |
|  |  |  |  |  |  |  | 78.73 | high |

Table 4.24 showed the verification of main learning and teaching activities. The teacher adds the extensiveness theory into the
processing information that is of a nature looking for solution from various source that has a different argument to the contrary about expressions giving and asking information related opinion score 2 frequencies 2, percentage $6.25 \%$. Score 3 frequencies 7, percentage $21.9 \%$. Score 4 frequencies 17 , percentage $51.3 \%$. Score 5 frequencies 6 , percentage $18.75 \%$. The mean was 3.84 high categories. All of the percentage was $76.8 \%$, good categories.

Teacher facilitates students in discussion to develop sincerity, accuracy, disciplined and obey rules, work hard, ability apply procedure and ability think inductive and deductive in prove about expressions giving and asking information related opinion score 2 frequencies 1 , percentage $3.125 \%$. Score 3 frequencies 5 , percentage $15.6 \%$. Score 4 frequencies 20 , percentage $62.5 \%$. Score 5 frequencies 6 , percentage $18.75 \%$. The mean was 3.97 high categories. All of the percentage was $79.4 \%$, good categories.

Students and teacher discuss students' argumentative text during pre-test score 2 frequencies 1 , percentage $3.125 \%$. Score 3 frequencies 5 , percentage $15.6 \%$. Score 4 frequencies 19 , percentage $59.4 \%$. Score 5 frequencies 7 , percentage $21.9 \%$. The mean was 4 high categories. All of the Percentage was $80 \%$ good categories.

All main activities teaching and learning was 3.94, high categories. Average percentage $78.73 \%$, good categories. Summary activity teaching learning argumentative text using problem-based learning was good.

Table 4.25
Verification Main Activity Teaching-Learning
(Teachers' Observation)

| No | Statements | Score <br> and <br> Percent | Interpretation |
| :---: | :--- | :---: | :---: |
| 30 | The teacher adds the extensiveness theory into <br> the processing information that is of a nature <br> looking for solution from various sources that has <br> a different argument to the contrary about <br> expressions giving and asking opinion. | 4 | Good |
| 3 | Teacher facilitates students in discussion to <br> develop sincerity, accuracy, disciplined and obey <br> rules, work hard, ability apply procedure and <br> ability think inductive and deductive in prove <br> about expressions giving and asking information <br> related opinion. | 30 | High |
|  | 60 | Medium |  |
| 32 | Students and teacher discuss students' <br> argumentative text during the pre-test. | 4 | Good |
|  |  | 80 | High |
|  |  | 73.33 | Good |

Table 4.25 showed data verification main activity teachinglearning (teachers' observation). The teacher adds the extensiveness theory into the processing information that is of a nature looking for solution from various source that has a different argument to the contrary about expressions giving and asking information related opinion score 4 good categories, percentage $80 \%$ high categories. Teacher facilitates students in discussion to develop sincerity, accuracy, disciplined and obey rules, work hard, ability apply procedure and ability think inductive and deductive in prove about expressions giving and asking information related opinion score 3 medium categories, percentage $60 \%$ medium. Students and teacher discuss students' argumentative text during pre-test score 4 good categories, percentage $80 \%$ high categories. The mean of all verification main activity teaching-learning (teachers' observation) was 3.67 good categories, percentage $73.33 \%$ high categories.

## f) Teaching-Learning Main Activity of Argumentative Text Using

## Problem-Based Learning Generalization Through

## Communication

Teaching-learning activity of argumentative text using problembased learning through communication showed at Table 4.26 below:

Table 4.26
Generalization Through Communication Main Activity Teaching-Learning
(Students' Observation)

| No | Statements | Criteria, Score, Percentage, and Percent |  |  |  |  | Mean of Score and Percent | Interpret ation |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Worse | Bad | Quite | Good | Very Good |  |  |
|  |  | 1 | 2 | 3 | 4 | 5 |  |  |
| 33 | Students discuss to conclude about how to express giving and asking information related opinion about how to solve the problem. | 0 | 2 | 6 | 18 | 5 | 3.71 | good |
|  |  | 0.0 | 6.25 | 18.75 | 56.25 | 15.6 | 74.2 | high |
| 34 | Students present the results of group discussions on how to express giving and asking information related opinion. | 1 | 4 | 3 | 16 | 8 | 3.13 | medium |
|  |  | 3.125 | 12.5 | 9.38 | 50 | 25 | 62.6 | high |
| 35 | Every group presentation expressed their argument responses through the expressions giving and asking information related opinion. | 0 | 2 | 3 | 20 | 7 | 4 | good |
|  |  | 0.0 | 6.25 | 9.38 | 62.5 | 21.9 | 80 | high |
| 36 | Group Presentation provide the opportunities for students from the other groups to answer questions about how to express giving and asking information related opinion. | 0 | 1 | 3 | 19 | 9 | 4.125 | good |
|  |  | 0.0 | 3.13 | 9.38 | 59.4 | 28.1 | 82.5 | very <br> high |
|  |  |  |  |  |  |  | 3.74 | good |
|  |  |  |  |  |  |  | 74.8 | high |

Table 4.26 showed the generalization with communication activity learning and teaching main. Students discuss to conclude about how to express giving and asking information related opinion and how to solve the problem score 2 frequencies 2, percentage $6.25 \%$. Score 3 frequencies 6, percentage $18.75 \%$. Score 4 frequencies 18 , percentage $56.25 \%$. Score 5 frequencies 5 , percentage $15.6 \%$. The mean was 3.71 good categories. All of the Percentage was $74.2 \%$, high categories.

Students present the results of group discussions on how to express giving and asking information related opinion score 1 frequencies 1 , percentage $3.125 \%$. Score 2 frequencies 4 , percentage $12.5 \%$. Score 3 frequencies 3, percentage $9.38 \%$. Score 4 frequencies 16, percentage $50 \%$. Score 5 frequencies $25 \%$. The mean was 3.13 medium categories. All of the percentage $62.6 \%$, high categories.

Every group presentation expressed their argument on group responses through the expressions giving and asking information related opinion about how to solve the problem score 2 frequencies 2 , percentage $6.25 \%$. Score 3 , frequencies 3, percentage $9.38 \%$. Score 4 frequencies 20 , percentage $62.5 \%$. Score 7 frequencies 7 , percentage $21.9 \%$. The mean was 4 good categories. All of the percentage $80 \%$.

Group presentation provide the opportunities for students from other groups to answer and questions about how to express giving and asking information related opinion about how to solve the problem score 2 frequencies 1, percentage $3.125 \%$. Score 3 frequencies 3, percentage $9.38 \%$. Score 4 frequencies 19 , percentage $59.4 \%$. Score 5 frequencies 9, percentage $28.1 \%$. The mean was $4.125 \%$. all of the Percentage was $82.5 \%$.

All main activities teaching and learning, mean 3.74, good categories. Average percentage $74.8 \%$, high categories. Summary activity teaching learning argumentative text using problem-based learning was good.

Table 4.27
Generalization Through Communication Main Activity Teaching-Learning
(Teachers' Observation)

| No | Statements | $\begin{aligned} & \text { Score } \\ & \text { and } \\ & \text { Percent } \end{aligned}$ | Interpretation |
| :---: | :---: | :---: | :---: |
| 33 | Students discuss to conclude about how to express giving and asking information related opinion about how to solve the problem. | 3 | Medium |
|  |  | 60 | Medium |
| 34 | Students present the results of group discussions on how to express giving and asking information related opinion. | 4 | High |
|  |  | 80 | High |
| 35 | Every group presentation expressed their argument responses through the expressions giving and asking information related opinion. | 4 | Good |
|  |  | 80 | High |
| 36 | Group Presentation provide the opportunities for students from the other groups to answer questions about how to express giving and asking information related opinion. | 4 | Good |
|  |  | 80 | High |
|  |  | 3.75 | Good |
|  |  | 75 | High |

Table 4.27 showed generalization through communication main activity teaching-learning (teachers' observation). Students discuss to conclude about how to express giving and asking information related opinion and how to solve the problem score 3 medium categories, percentage $60 \%$ medium categories. Students present the results of group discussions on how to express giving and asking information related opinion score 4 good categories, percentage $80 \%$ high categories. Every group presentation expressed their argument on group responses through the expressions giving and asking information related opinion about how to solve the problem score 4 good categories, percentage $80 \%$ high categories. Group presentation provide the opportunities for students from other groups to answer and questions about how to express giving and asking information related opinion about how to solve the problem score 4 good categories, percentage $80 \%$ high categories. The mean of all
generalization through communication main activity teachinglearning (teachers' observation) was 3.75 good categories the mean percentage was $75 \%$ high categories.
g) Main Activity Teaching-Learning of Argumentative Text Using

## Problem-Based Learning Generalization Through

## Communication

Activity teaching learning argumentative text using problem-based learning generalization with communication showed at Table 4.28 below:

Table 4.28
Generalization Through Creativity Main Activity Teaching-Learning
(Students' Observation)

| No | Statements | Criteria, Score, Percentage, and Percent |  |  |  |  | Mean of Score and Percent | Interpr etation |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Worse | Bad | Quite | Good | Very Good |  |  |
|  |  | 1 | 2 | 3 | 4 | 5 |  |  |
| 37 | Conclude important points that appear in learning activities about how to express giving and asking information related opinion. | 0 | 2 | 3 | 23 | 4 | 3.91 | good |
|  |  | 0.0 | 6.25 | 9.38 | 71.8 | 12.5 | 78.2 | high |
| 38 | Students ask about things that have not been understood about how to express giving and asking information related opinion. | 0 | 0 | 8 | 19 | 5 | 3.91 | good |
|  |  | 0.0 | 0.0 | 25 | 59.4 | 15.6 | 78.2 | high |
| 39 | Teacher gives a few questions for students to answer related to the material on how to express giving and asking information related opinion. | 0 | 2 | 4 | 20 | 6 | 3.94 | good |
|  |  | 0.0 | 6.25 | 12.5 | 62.5 | 18.75 | 78.8 | high |
|  |  |  |  |  |  |  | 3.92 | good |
|  |  |  |  |  |  |  | 78.4 | high |

Tale 4.28 showed the generalization with creativity main activity of teaching-learning. Conclude important points that appear in learning activities about how to express giving and asking information related opinion score 2 frequencies 2, percentage $6.25 \%$. Score 3 frequencies 3 , percentage $9.38 \%$. Score 4 frequencies 23 , percentage $71.8 \%$. Score 5 frequencies 4, percentage $12.5 \%$. The mean was 3.91 good categories. All of the percentage was $78.2 \%$ high categories.

Students ask about things that have not been understood about how to express giving and asking information related opinion score 3 frequencies 8 , percentage $25 \%$. Score 4 frequencies 19 , percentage $59.4 \%$. Score 5 frequencies 5, percentage $15.6 \%$. The mean was 3.91 good categories. All of the Percentage $78.2 \%$ high categories.

Teacher gives a few questions for students to answer related to the material on how to express giving and asking information related opinion score 2 frequencies 2 , percentage $6.25 \%$. Score 3 frequencies 4 , percentage $12.5 \%$. Score 4 frequencies 20 , percentage $62.5 \%$. Score 5 frequencies 6, percentage $18.75 \%$. The mean was 3.94 good categories. All of the Percentage $78.8 \%$, high categories.

All main activity teaching and learning, mean 3.92, good categories. Average percentage $78.4 \%$; high categories. Summary activity teaching learning argumentative using problem-based learning was good.

Table 4.29
Generalization Through Creativity Main Activity Teaching-Learning
(Teachers' Observation)

| No | Statements | Score <br> and <br> Percent | Interpretation |
| :---: | :--- | :---: | :---: |
|  | Conclude important points that appear in learning <br> activities about how to express giving and asking <br> information related opinion. | 4 | good |
| 38 | Students ask about things that have not been <br> understood about how to express giving and <br> asking information related opinion. | 80 | high |
|  | Teacher gives a few questions for students to <br> answer related to the material on how to express <br> giving and asking information related opinion. | 60 | medium |
|  |  | 60 | medium |
|  |  | 3.333 | medium |
|  |  | 66.67 | medium |

Table 4.29 showed generalization through creativity main activity teaching learning (teachers’ observation). Conclude important points that appear in learning activities about how to express giving and
asking information related opinion score 4 good categories, percentage $80 \%$ high categories. Students ask about things that have not been understood about how to express giving and asking information related opinion score 3 medium categories, percentage $60 \%$ medium categories. Teacher gives a few questions for students to answer related to the material on how to express giving and asking information related opinion score 3 medium categories, percentage $60 \%$ medium categories. The mean of all generalization through creativity main activity teaching-learning (teachers' observation) was 3.33 medium categories. The mean percentage was 66.67 high categories.

## 3) Teaching Learning Last Part Activity of Argumentative Text Using Problem-Based Learning

Teaching-learning last part activity of argumentative text using problem-based learning activity showed at Table 4.30 below:

Table 4.30
Last Part Activity
(Students' Observation)


Table 4.30 showed the last part activity. Students make a resume with teacher guidance regarding important points that appear in learning activities about expressions of giving and asking information related to opinion score 3 frequencies 8 , percentage $25 \%$. Score 4 frequencies 21 , percentage $65.6 \%$. Score 5 frequencies 3 , percentage $9.38 \%$. The mean was 3.84 good categories. All of the percentage was $76.8 \%$ high categories.

Students are given homework for subject matter about expressions of giving and asking information related to opinion score 3 frequencies 6, percentage $18.75 \%$. Score 4 frequencies 21, percentage $65.5 \%$. Score 5 frequencies 5 , percentage $15.6 \%$. The mean was 3.97 good categories. All of the Percentage was $79.4 \%$.

Students schedule the material or project/product/portfolio/performance tasks that must be learned at the next meeting outside school hours or at home score 2 frequencies 1 , percentage $3.125 \%$. Score 3 frequencies 7, percentage $21.9 \%$. Score 4 frequencies 20, percentage $62.5 \%$. Score 5 frequencies 4, percentage $12.5 \%$. The mean was 3.84 good categories. All of the percentage was $76.8 \%$, good categories.

Teacher checks the material presented in the discussion and discussion about the expressions of giving and asking for information related to opinion score 2 frequencies 2 , percentage $6.25 \%$. Score 3 , frequencies 3 , percentage $9.38 \%$. Score 4 frequencies 21 , percentage $65.6 \%$. Score 5 frequencies 6 , percentage $18.75 \%$. The mean was 3.97 good categories. All of the Percentage was $79.4 \%$ was good categories.

Teacher gives awards for disclosure speakers from each context using transactional interaction texts to groups that have good performance and cooperation score 2 frequencies 1 , percentage
$3.125 \%$. Score 3 frequencies 4 , percentage $12.5 \%$. Score 4 frequencies 22 , percentage $68.75 \%$. Score 5 frequencies 5 , percentage $15.6 \%$. The mean was 3.97 good categories. All of the percentage $79.4 \%$, high categories.

All main activities teaching and learning, mean 3.92 good categories. Average percentage $78.36 \%$ high categories. Summary activity teaching learning argumentative text using problem-based learning was good.

Table 4.31
Last Part Activity Teaching-Learning
(Teachers' Observation)

| No | Statements | Score and Percent | Interpretation |
| :---: | :---: | :---: | :---: |
| 40 | Students make a resume with teacher guidance regarding important points that appear in leaming a ctivities about expressions of giving and asking forinformation relatedto opinion. | 4 | Good |
|  |  | 80 | High |
| 41 | Students are given homework for subject matter about expressions of giving and asking for information related to opinion | 3 | Medium |
|  |  | 60 | Medium |
| 42 | Students schedule the material or project/product/portfolio/performance tasks that must be leamed at the next meeting outside schools hours or at home. | 3 | Medium |
|  |  | 60 | Medium |
| 43 | Teacher checks the material presentedin the discussion aboutthe expressions of giving and asking for information related to opinion | 3 | Medium |
|  |  | 60 | Medium |
| 44 | Teacher gives awards for disclosure speakers from each context using transactional interaction texts to groups that have good performance and cooperative. | 4 | Good |
|  |  | 80 | high |
|  |  | 3.4 | medium |
|  |  | 68 | high |

Table 4.31 showed last part activity teaching-learning (teachers’ observation). Students make a resume with teacher guidance regarding important points that appear in learning activities about expressions of giving and asking information related to opinion score 4 good categories, percentage $80 \%$ good categories. Students are
given homework for subject matter about expressions of giving and asking information related to opinion score 3 medium categories, percentage $60 \%$ medium categories. Students schedule the material or project/product/portfolio/performance tasks that must be learned at the next meeting outside school hours or at home score 3 medium categories, percentage $60 \%$ medium categories. Teacher checks the material presented in the discussion and discussion about the expressions of giving and asking for information related to opinion score 3 medium categories, percentage $60 \%$ medium categories. Teacher gives awards for disclosure speakers from each context using transactional interaction texts to groups that have good performance and cooperation score 4 good categories, percentage $80 \%$ good categories. The mean of all last part activity teaching-learning (teachers' observation) was 3.4 medium categories. The mean percentage $68 \%$ high categories.

## 4) All of the Teaching-Learning Activity Argumentative Text Using

 Problem-Based LearningAll of the teaching-learning activity argumentative text using problem based learning showed at Table 4.32 below:

Table 4.32
All of the Teaching -Learning Activity

| No | Element | Ideal <br> Score | Average <br> of Score <br> Result | Percentage | Categories |
| ---: | :--- | :---: | :---: | :---: | :---: |
| I. Introduction |  |  |  |  |  |
| 1 | Orientation | 5 | 3.82 | 76.45 | High |
| 2 | Apperception | 5 | 4 | 79.97 | High |
| 3 | Motivation | 5 | 3.9 | 78 | High |
| 4 | Guide Reference | 5 | 4.025 | 80.5 | High |


| II. Main Activity |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | Simulation | 5 | 3.95 | 78.92 | High |
| 6 | Problem <br> Statement | 5 | 4.125 | 82.5 | High |
| 7 | Data Collection | 5 | 3.97 | 79.44 | High |
| 8 | Data Processing | 5 | 3.905 | 78.1 | High |
| 9 | Verification | 5 | 3.94 | 78.73 | High |
| 10 | Generalization <br> Through <br> Communication | 5 | 3.74 | 74.83 | High |
| 11 | Generalization <br> Through <br> Creativity | 5 | 3.92 | 78.4 | High |
| III. Last Part |  |  |  |  |  |
| 12 | Closing | 5 | 3.918 | 78.36 | High |
| Mean |  |  | 3.94 | 78.68 | High |

Table 4.32 showed activity teaching-learning argumentative text using problem-based learning: part introduction: orientation score average 3.82 , percentage $76.45 \%$ : high categories. Apperception score average 4 , percentage $79.97 \%$, high categories. Motivation average score 3.9 , percentage 78 , high categories. Guide reference score average 4.025 , percentage 80.5 , high categories.

Table 4.32 showed activity teaching learning argumentative text using problem-based learning: simulation score average 3.95, percentage $78.92 \%$, high categories. Problem statement score average 4.125 , percentage 79.44 , high categories. Data collection score average 3.97 , percentage 79.44 , high categories. Data processing score average 3.905 , percentage $78.1 \%$, high categories. Verification
score average 3.94, percentage $78.73 \%$, high categories. Generalization through communication score average 3.74, percentage $74.83 \%$, high categories. Generalization with creativity score average 3.92 , percentage $78.4 \%$, high categories.

Table 4.32 showed activity teaching learning argumentative text using problem-based learning part closing average score 3.918, percentage $78.36 \%$, high categories. All activity teaching learning argumentative text using problem-based learning score average 3.94, percentage $78.68 \%$, high categories.

## C. Testing Hypothesis

The data obtained from experimental class and control class are calculated with the assumption as follow:

If $t_{0}>t_{t}$ : the alternative hypothesis $\left(H_{a}\right)$ is accepted and the null hypothesis is rejected $\left(H_{0}\right)$. It means problem-based Learning approach is effective to use in teaching writing argumentative text at the eleventh grade of MAS Mathla'ul Anwar.

If $t_{0}<t_{t}$ : the alternative hypothesis $\left(H_{a}\right)$ is rejected and the null hypothesis $\left(H_{0}\right)$ is accepted. It means problem-based learning approach is not effective to use in teaching writing argumentative text at the eleventh grade of MAS Mathla'ul Anwar Pusat Menes.

From the result of calculation above, it is obtained that the mark of $t_{0}(\mathrm{t}$ observation) is 46.34 , the degree of freedom (df) is $58 . t_{t}$ ( t table) in the $5 \%$ significance level is 1.67 while $t_{t}(\mathrm{t}$ table) in the $1 \%$ significance level is 2.39 . afterward the researcher compared the data with $t_{t}$ ( t table) both at $5 \%$ significance level and at the $1 \%$ significance level. Therefore $t_{0}: t_{t}=46.34>$ 1.68 in the $5 \%$ significance level and $t_{0}: t_{t}=46.34>2.39$ in the $1 \%$ significance level.

The statistic hypothesis states if $t_{o}$ higher than $t_{t}$, it shows that $H_{a}$ (alternative hypothesis) is accepted and $H_{o}$ (null hypothesis) is rejected. It means that problem-based learning approach is effective in teaching writing on argumentative text.

## D. Interpretation of The Data

Based on the result of the analysis above, it can be concluded that the use of Problem-Based Learning (PBL) approach is effective in teaching writing argumentative text than not using PBL approach in learning process. It can be proved from the average score of post-test of students in the experimental class 81.28 is greater than the average score of pre-test of students in the same class is 45.06. There is an increase of average score of

When Problem-Based Learning approach is applied to students in the $11^{\text {th }}$ grade IPA 1 (Experimental Class) MAS Mathla'ul Anwar Pusat Menes in teaching writing argumentative text, students become more motivated because in Problem-Based Learning approach, students have opportunities to imagine and express their idea about the problem in learning activities. The lesson becomes enjoy because the main discussion is not the subject of the language itself but the subject matter or content area. PBL assumes that the target language is not the main purpose in learning but as a medium of learning. The effect of PBL to students are given the students opportunities to solve the problem. The students not only explain the problem of the topic, but also students can express the idea how to solve the problem. The researcher saw from the students' answer, they were more active and enjoy to express their idea.

In other hand the students and teachers' observation show the mean of score average are 3.94 , and percentage $78.68 \%$, high categories. So, the researcher conclude, that the students believe to this approach, because this approach help the students to express and solve the problem.

Different thing occurred when giving teaching writing argumentative text to students at the $11^{\text {th }}$ IPA 2 (Control Class) MAS Mathla'ul Anwar Pusat Menes. Students in this class are taught without using PBL approach. So that, students feel depressed and less interested because the main focus in learning process is the target language (English) itself.

From here it can be concluded that the use of Problem-Based Learning approach in teaching and learning process is effective, especially in writing ability. Because the goal of PBL is the students can solve the problem by their idea. So teaching will become more interesting and enjoy.

## CHAPTER V

## CONCLUSION AND SUGGESTION

## A. Conclusion

Based on the result of research conducted towards samples (consists of 32 students in the experimental class and 28 students in the control class) about "The Effectiveness of Problem-Based Learning in Teaching Writing on Argumentative Text", then it can be concluded that:

1. From the result of the pre-test and post-test between experimental class (using experimental learning strategy) and control class (without experimental learning strategy) the researcher concluded that score of experimental class is better than score of control class, it can be shown from the result of the data analysis that mean of variable $X$ is 45.06 and after treatment the mean of variable X is 81.28 . it means the mean of variable X is in good category.
2. From the result of the score experimental class, pre-test 1442 , and post-test score 2601 . The pre-test score of control class was 1012 , and post-test was 1134. The result of analysis of the research show the value of $t_{0} 46.34$ it is higher than the value of $t_{\text {table }}$ is 1.67 the level significance $5 \%$. It means $H_{a}$ (alternative hypothesis) of results is accepted and $H_{0}$ (null hypothesis) is rejected. It means that significance is problem-based learning is effective to use in teaching writing of argumentative text at the eleventh grade students of MAS Mathla'ul Anwar Pusat Menes.

## B. Suggestions

After conducting research about the effectiveness of problem-based learning in teaching writing on argumentative text, the researcher would like to give some suggestion such as:
a. For the Teachers

1. Teachers may use the PBL approach as effective and innovative teaching approach to improve their students' writing ability. But it would be better if PBL approach is combined with other teaching approach, so that the achievement in learning will be more maximal.
2. The teacher should be able to various and interesting approach or technique, method, and media in teaching learning especially in writing activity.
b. For The Headmasters

The headmasters should regularly conduct training for teachers in schools, especially training how to teach effectively, interactively and interesting using up-to-date teaching approach, so that the knowledge can be delivered maximally to the students.
c. For the Students

Students should be more eager in studying, not just in the schools but wherever they are. Students do not get stuck with the lessons they get in the class, but students also have to be more creative looking for various sources of learning, such as in the school library, on the internet etc.

## d. For Other Researchers

Researchers can use the research that has been formulated in this paper as a reference for conducting and developing further uses other references such as from book, internationals journals and other studies in order that the obtained data will be more valid and credible.

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