## THE EFFECTIVENESS OF PROBLEM BASED LEARNING MODEL

## IN TEACHING INTEGRATED ENGLISH

# OF THE NINTH GRADE STUDENTS AT MTS N 3 PONOROGO



STATE INSTITUTE OF ISLAMIC STUDIES PONOROGO FACULTY OF EDUCATION AND TEACHER TRAINING ENGLISH EDUCATION DEPARTMENT MAY 2022

## ABSTRACT

## Asmara, Fatria Fidia. 2022. The Effectiveness Of Problem Based Learning Model In Teaching Integrated English Of The Ninth Grade Students At MTs N 3 Ponorogo. Thesis, English Education Department, Tarbiyah and Teacher Training Faculty, State Institute for Islamic Studies of Ponorogo (IAIN). Advisor Ima Frafika Sari, M.Pd

#### Key Words: Problem Based Learning, Teaching Integrated English, Reading, Speaking.

One of the effective learning models that can be implemented in teaching integrated English is Problem Based Learning. This learning model focuses on giving the solution for students in the learning process. PBL provides the chance for students to find their problem and also creating the alternative solution to deal with their problems in teaching integrated English that focus on reading and speaking skills.

The purpose of this research was to examine whether there was a significant difference between the students who were taught by the Problem Based Learning model and those who were not taught by the Problem Based Learning model of the ninth grade students at MTs N 3 Ponorogo.

This research applied a quantitative approach and used the quasi-experimental design. This research used two classes as experimental group and control group. The population was taken from the ninth grade students of MTs N 3 Ponorogo. The number of the sample were 30 students of experimental group and 30 students of control group. The technique of data collection were tests and documentation. To analysis it, used t-test formula to know whether there was significant difference on students who are taught by PBL model and those who aren't taught by PBL model. The result of the research showed that the t-test score is higher than the t-table score (3,937 > 2,04841) and the significance level is < 0,05 (0,000) which means that Ho is rejected and Ha is accepted.

So, from the computation above it can be concluded that there is a significant difference between students who are taught by using the Problem Based Learning model and those who aren't taught by using the Problem Based Learning model in the ninth grade students at MTs N 3 Ponorogo. It is important for the teachers to increase and to develop students' knowledge. The teacher should be able to use the appropriate method in teaching integrated English to make the students are more motivated in learning process.



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1

iii

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#### **CHAPTER I**

#### **INTRODUCTION**

This chapter consists of a background of the study, scope and limitation of the study, research questions, research objectives, significance of the study, and the organization of the study.

#### A. Background Of The Study

English is a tool for communication verbal and non-verbal. Communicating is understanding and expressing information, thoughts, feelings, and developing science, technology, and culture. The ability to communicate in the full sense is the ability to discourse, meaning the ability to understand and produce spoken or written texts. That is in four language skills, namely listening, speaking, reading, and writing. These four skills are used to respond or to create discourse in social life. Therefore, English lessons are directed to develop these skills so that students can communicate in English.<sup>1</sup>

At the Islamic Junior High School level, English language learning targets students to reach the functional level, namely being able to communicate spoken and written texts using English to solve problems or fulfill daily needs. So awareness of the nature and importance of English must be owned by students to develop an understanding of the relationship between language and culture therefore can to increase the nation's competitiveness in a global society.<sup>2</sup> It means that it's necessary to teach integrated English to students, especially in reading and speaking skills because there is an increasingly high relationship between reading and speaking skills, namely that students who develop large

<sup>&</sup>lt;sup>1</sup> Standar Isi untuk Satuan Pendidikan Dasar dan Menengah (Jakarta: Badan Standar Nasional Pendidikan, 2006), 123.

<sup>&</sup>lt;sup>2</sup> Standar Isi untuk Satuan Pendidikan Dasar dan Menengah (Jakarta: Badan Standar Nasional Pendidikan, 2006), 124.

reading vocabularies tend to develop large speaking vocabularies. And this ability can not grow by itself so should be trained that requires a person to be responsive.

Teaching integrated English in this research is focused on reading and speaking skills. Reading is a process of decoding written symbols, working from the smaller unit (individual letters) to the large one (word, clause, sentence).<sup>3</sup> It means that reading is a process to understand the text so that the students get the main idea or message from the text. While speaking is a teaching process with some elements that need to be mastered by the students, namely grammar, vocabulary, pronunciation (stress, intonation, and pitch), fluency, and gesture.<sup>4</sup> The elements are needed in the teaching-learning process in teaching speaking skills so that the students are capable of and self-confident in speaking. These elements are needed to measure the capability of the students in speaking using appropriate techniques. By using speaking we can express our idea to communicate with other people. Speaking skill is taught to students to make them capable of communicating by using English correctly.

One way to help students improve their knowledge is through an effective and relevant learning process.<sup>5</sup> With an effective learning model, their responsiveness which emphasizes reading and speaking skills in the learning process will be affected.<sup>6</sup> To enhance or improve comprehension of students thinking, ones have to gradually by using Problem Based Learning Model. The effectiveness of the model was more active learners

<sup>&</sup>lt;sup>3</sup> David Nunan, *Language Teaching Methodology* (New York: Prentice Hall, 1991), 20.

<sup>&</sup>lt;sup>4</sup> Agus Suyudi, "The Use of Everyone is A Teacher Here Technique in Teaching Speaking at MTsN Lembeyan in Academic Year 2017/2018," (Thesis, IAIN Ponorogo, Ponorogo, 2018), 1.

<sup>&</sup>lt;sup>5</sup> Erni Aristianti, Hadi Susanto, and Putut Marwoto, "Implementasi Model Pembelajaran Inkuiri Terbimbing Terhadap Kemampuan Pemecahan Masalah dan Komunikasi Ilmiah Siswa SMA," *Unnes Physics Education Journal, Vol. 7*, Edition 1 (Semarang: March, 2018), 68.

<sup>&</sup>lt;sup>6</sup> Sudin, Hilarius Jago Duda, and Markus Iyus Supiandi, "Pengaruh Model Reading Questioning Answering Terhadap Kemampuan Berpikir Kritis Siswa pada Pokok Bahasan Sistem Pernapasan Manusia," *Jurnal Pendidikan Biologi, Vol. 3*, Edition 1 (2018), 1–8.

in thinking and understanding the material in groups to conduct investigations and inquiry into the real problems around it.<sup>7</sup>

Problem Based Learning is an innovative learning model that can provide active learning conditions for students. This learning model is characterized by real-world problems as the context for students to learn critical thinking and problem-solving abilities and to acquire knowledge that can generate their curiosity.<sup>8</sup> Hou states that one of the advantages is that the students have the opportunity of participating actively in problem-solving so that the students are motivated in the learning process. This learning model is considered good and very effective.<sup>9</sup> They get the impression of a deep and meaningful about what they learned. In its implementation, the Problem Based Learning model began with a problem, then students deepened their knowledge of what they needed to know and already knew to solve the problem. The problems that were raised were real problems in students' daily lives that were considered interesting to solve so that students were encouraged to play an active role in learning.

The Problem-Based Learning Process has 5 stages in teaching integrated English that focuses on reading and speaking skills, namely providing orientation or explanation to students about a problem topic, organizing students to form study groups, guiding individual or group investigations to find solutions to the problems concerned, developing and presenting the results in front of the class, and analyzing and evaluating the learning

<sup>&</sup>lt;sup>7</sup> Harianto, "The Effect of Using Problem Based Learning (PBL) Method Toward Students' Speaking Skill An Experimental Research at The Eleventh Grade Students' of SMA Somba Opu Kabupaten Gowa," (Thesis, Makassar Muhammadiyah University, Makassar, 2018), 3.

<sup>&</sup>lt;sup>8</sup> Dwi Puji Astuti, Prof Siswandari, and Djoko Santoso, "E-Book for Problem Based Learning to Improve Learning Outcome of the Students," Dalam *Proceedings of the International Conference on Teacher Training and Education 2017 (ICTTE 2017)*, ed. Indah Widiastuti, Cucuk Wawan Budiyanto, Hasan Zainnuri, Heru Edi Kurniawan (Surakarta: Atlantis Press, 2017), 221.

<sup>&</sup>lt;sup>9</sup> Jingyu Hou, "Project and Module Based Teaching and Learning," *International Journal of Computer and Information Engineering, Vol.* 8, Edition 3 (January, 2014), 791.

process.<sup>10</sup> With these 5 stages, it will be easier for researchers to conduct research to determine the effectiveness of Problem Based Learning models when used for reading and speaking skills. So that students can solve problems more easily and improve their memory.

By implementing the Problem Based Learning model, learners were expected to be able to use and develop English skills that focus on reading and speaking skills to solve problems using strategies completion. Based on preliminary research conducted on students at MTs N 3 Ponorogo, the researcher found that the students often got bored in English class. There are several problems faced by the students especially in English class. Firstly, most of the reading text contain word that is foreign to students, it caused students to lack understanding. Secondly, the difficulty of students in understanding the reading text is caused by the differences in usage of the word itself. The learning system is centered to the teacher and that students only rely on their hearing. This is certainly creating many problems because all of the teachers are not necessarily fluent in reading and speaking. The several problems caused the students' attention during the English class to be low.

According to Mrs. Mesirah as English teacher in ninth grade of MTs N 3 Ponorogo. She said that there are several problems faced by the students, that caused the students reading and speaking comprehension to be low. Firstly, the students have less motivation towards learning English. Secondly, the students' think that English is difficult. Thirdly, during the time COVID-19 pandemic, students' spirit and enthusiasm were low. These problems have effect to students have weak in reading and their speaking weak too.

Based on the statement above, the researcher has been encouraged to do research in analyzing the effectiveness of the Problem-Based Learning model in teaching integrated English. This learning model needed to improve the students' mindset. The researcher

<sup>&</sup>lt;sup>10</sup> Nurul Rafiqah Nasution, Edy Surya, "Penerapan Model Pembelajaran Berbasis Masalah (Problem Based Learning) Terhadap Kemampuan Berpikir Kreatif Matematika Siswa," *Jurnal Pendidikan Matematika, Vol. 1,* Edition 1 (October, 2017), 1.

wants to examine whether there was a significant difference between the students who were taught by the Problem Based Learning model and those who were not taught by the Problem Based Learning model of the ninth grade students at MTs N 3 Ponorogo that focused on reading and speaking skills. Therefore, the title of the research is "The Effectiveness of Problem Based Learning Model in Teaching Integrated English of the Ninth Grade Students at MTs N 3 Ponorogo".

#### **B.** Scope And Limitation Of The Study

The quantitative of this research contained the scope and limitations of the research on the ninth-grade students at MTs N 3 Ponorogo in the academic year 2021/2022. The researcher has to analyze two classes from ninth grade, namely the 9C class as the experimental class and 9D class as the control class. The experimental class had 30 students and the control class had 30 students, the total number of students used in this research was 60 students. The researcher focus to examine the teaching integrated English especially in reading and speaking by using Problem Based Learning model.

## C. Research Questions

Do the students who are taught by Problem Based Learning model get a better score in teaching integrated English than those who aren't taught by the Problem Based Learning model?

#### D. Research Objectives

Concerning the problem statements, this study has objectives to know whether the students who are taught by the Problem Based Learning model get a better score in teaching integrated English than those who aren't taught by the Problem Based Learning model.

#### E. Significance Of The Study

The researcher hopes that this study expected will have some benefits, both theoretically and practically for readers.

### **1.** Theoretical Significance

The result of this study is expected to add knowledge and insight, especially about the Problem Based Learning model that effectiveness in teaching integrated English. Besides that, this result helps teachers or researchers to know the effectiveness of teaching integrated English.

#### 2. Practical Significance

After research, it is hoped that it will give benefits and it is useful for :

#### a. Teachers

Become an input for the English teacher especially in MTs N 3 Ponorogo, as an alternative using Problem Based Learning model that is more fun and easily understood by the learners. It helps teachers or researchers as motivation to students in teaching integrated English. By using this model, teachers can find out students' skills and can understand students' abilities.

## **b.** Students

Giving the motivation for students especially in MTs N 3 Ponorogo, providing real experiences to the learners through Problem Based Learning model as a fun way to increase students' knowledge. This research is expected to make students have a good understanding of teaching integrated English.

### c. For the Institution and the School

Problem Based Learning model can be applied to all courses to help develop students' knowledge and problem-solving abilities. Besides, to develop their English capabilities so the school or the institution gets the achievements and compliments among the education school or institution.

#### d. Readers

This study is expected to give a contribution to readers, particularly the students of IAIN Ponorogo in enriching references concerned with the Problem Based Learning model in teaching integrated English.

## e. Researcher

This research expected can be referenced in arranging a thesis for the next researcher and can be used to increase their knowledge and learning process.

## F. Organization Of The Study

The researcher writes this thesis in five chapters. These chapters are related one to another which has aimed to arrange the thesis easier. The organization of this thesis is as follows:

Chapter I is the introduction. The introduction is a general description of the thesis. It consists of a background of the study, scope and limitation of the study, research questions, research objectives, significance of the study, and organization of the study.

Chapter II of the organization is a review of related literature. The review is related to the theoretical background, previous studies, theoretical framework, and hypothesis.

Chapter III of the organization is research methods. This chapter explains the research design, the population and sample, the data collection instrument, the data collection technique, and the data analysis technique.

Chapter IV discusses the research result which contains the general findings, data description, data analysis, and the discussion and interpretation.

Chapter V of the organization is the closing. This last chapter illustrates the conclusion and recommendations.

#### **CHAPTER II**

### **REVIEW RELATED LITERATURE**

In this chapter, the researcher gives an overview of the theoretical background, previous studies, theoretical framework, and hypothesis.

#### A. Theoretical Background

In this research, the researcher is using theories that are relevant to the theme of the discussion. The theories are Problem Based Learning and teaching integrated English.

## 1. Problem Based Learning

Problem-Based Learning consists of the definition of Problem Based Learning, characteristics of Problem Based Learning, steps of Problem Based Learning, advantages and disadvantages of Problem Based Learning.

## a. Definition of Problem Based Learning

Problem-Based Learning is one of the many effective learning models used to solve problems in the learning process. This Learning is defined as the learning occurring through the process of trying to solve or manage problems in real life.<sup>11</sup> In this case, this learning model is an active teaching activity for students who are faced with complex problems in real life. Problems that occur in the environment around students so that students are expected to be able to solve the problem. Opinioned Barrows defined Problem Based Learning as the learning that results from the process of working towards the understanding of a resolution of a problem.<sup>12</sup>

<sup>&</sup>lt;sup>11</sup> Professor Gaynor Sadlo, "Using Problem-Based Learning During Students Placements to embed theory in practice," *International Journal of Practice- Based Learning in Health and Social Care, Vol. 2*, Edition 1 (January, 2014), 7.

<sup>&</sup>lt;sup>12</sup> Terry Barrett, A New Model of Problem-Based Learning: Inspiring Concepts, Practice Strategies and Case Studies from Higher Education (Maynooth: All Ireland Society for Higher Education (AISHE), 2017), 2.

Problem-Based Learning is learning where students work on problems that develop with their knowledge, develop inquiry and learn to improve abilities and develop independence and self-confidence.<sup>13</sup> Problem-Based Learning (PBL) is a learner-centered instructional approach that empowers learners to think critically; analyze and solve complex, real-life problems; find, evaluate and use appropriate learning resources; work collaboratively; demonstrate effective communication skills.

Problem Based Learning is a learning model that uses real problems encountered in the environment as a basis for gaining knowledge and concepts through the ability to think critically and solve problems. PBL is a collaborative process.<sup>14</sup> Learners will compile knowledge by building the reasoning of all knowledge they have and from all that is obtained as a result of activities interacting with fellow individuals. The Problem Based Learning process does not focus on problem-solving with a defined solution, but it allows for the development of other desirable skills and attributes. This includes knowledge acquisition, enhanced group collaboration, and communication. Based on these definitions, it can be concluded that the Problem Based Learning model is a learning model that emphasizes problem-solving based on students' experiences in the real world. With Problem Based Learning, students are expected to be able to solve the problems with a variety of alternative solutions and identify the cause of existing problems. Students' experiences obtained from the environment will be used as materials and materials in solving problems.

<sup>&</sup>lt;sup>13</sup> Rosmawaty Simatupang, Edy Surya, "Pengaruh Problem Based Learning (PBL) Terhadap Kemampuan Penalaran Matematis Siswa," (Thesis, Universitas Negeri Medan, Medan, 2017), 2.

<sup>&</sup>lt;sup>14</sup> Bernadetha Nadeak, Lamhot Naibaho, "The Effectiveness of Problem-Based Learning on Students' Critical Thinking," *Jurnal Dinamika Pendidikan, Vol. 13*, Edition 1 (April, 2020), 2.

#### b. Characteristics of Problem Based Learning

Many learning strategies use problems, but a key and defining characteristic of Problem-Based Learning is that students experience the problem at the start of the learning process before other curriculum inputs. This motivates them to gain new knowledge through independent study, constructing knowledge together in tutorials, and learning from other curriculum inputs. Characteristics of Problem Based Learning are as follows:<sup>15</sup>

- 1) The learning process must begin with problems that are dominated by real problems;
- 2) Learning materials and activities must pay attention to circumstances to attract students' attention;
- 3) The teacher is the supervisor during the learning process;
- 4) Students need to be given time to think or gather information and develop strategies for problem-solving;
- 5) The level of difficulty of the material being studied is not at a high level that can make students despair;
- 6) A comfortable, calm and safe learning environment must be built to develop students' ability to think and solve problems.

#### c. Steps of Problem Based Learning

Problem Based Learning process is used based on problems that exist in the real world. These problems are used as students motivation to learn to integrate and organize information so that they can apply knowledge to solve the problems they face. Problem Based Learning has steps that must be taken during learning.

<sup>&</sup>lt;sup>15</sup> Rosmawaty Simatupang, Edy Surya, "Pengaruh Problem Based Learning (PBL) Terhadap Kemampuan Penalaran Matematis Siswa," (Thesis, Universitas Negeri Medan, Medan, 2017), 1-2.

The steps of Problem Based Learning are as follows:16

1) The phase of student orientation to the problem

The teacher's behavior explains about the purpose of learning, explains about the logistical needs needed, and motivates students involved in problemsolving.

2) The phase of organizing students for learning

The teacher's behavior of helping students define learning tasks related to the problem.

3) The phase of guiding individual or group experiences

The teacher's behavior encourages students to gather appropriate information, carry out experiments and look for the right explanations and solutions.

4) The phare of developing and presenting the work

The teacher's behavior of helps students plan and prepare materials to present and helps them share their assignments with their friends.

5) The phare of analyzing and evaluating the problem-solving process

Helping students reflect or evaluate the investigation process that they use in solving problems.

Based on the explanation above, that Problem Based Learning starts from a problem. Then students use their knowledge of what they already know and what they need to know to solve the problem. Students can choose problems that are considered interesting to solve to motivate students to be active in the learning process.

<sup>&</sup>lt;sup>16</sup> Nurul Rafiqah Nasution, Edy Surya, "Penerapan Model Pembelajaran Berbasis Masalah (Problem Based Learning) Terhadap Kemampuan Berpikir Kreatif Matematika Siswa," *Jurnal Pendidikan Matematika, Vol. 1,* Edition 1 (October, 2017), 1.

### d. Advantages and Disadvantages of Problem Based Learning

The Problem Based Learning model has the advantage of allowing students to do learning by involving themselves directly so that students have an independent nature in learning. students can solve problems in an active and fun learning atmosphere through problem-solving.<sup>17</sup> The advantages of this student-centered learning will foster active learning, increase understanding, store, and build life long learning.<sup>18</sup> Students are better able to remember and understand the material because they are directly involved actively in learning.

According to Sanjaya the following are some of the advantages of Problem Based Learning:<sup>19</sup>

- 1) Problem Based Learning is a good technique to better understand the content of the lesson.
- 2) Problem Based Learning can challenge students' abilities and provide satisfaction to find new knowledge for students.
- 3) Problem Based Learning can improve student learning activities.
- 4) Problem Based Learning can help students how to transfer their knowledge to understand real-life problems.
- 5) Problem Based Learning can help students to develop new knowledge and be responsible for the learning they do.
- 6) Through Problem Based Learning, students can show that every subject is a way of thinking and something that must be understood by students, not just by the teacher or books.

<sup>&</sup>lt;sup>17</sup> Suyadi, Strategi Pembelajaran Pendidikan Karakter (Bandung: PT Remaja Rosdakarya, 2013), 142.

<sup>&</sup>lt;sup>18</sup> Diana F. Wood, *ABC of Learning and Teaching Immedicine Problem Based Learning, National Center for Biotechnology Information* (US: National Library of Medicine, 2003), 11.

<sup>&</sup>lt;sup>19</sup> Wina Sanjaya, *Strategi Pembelajaran Berorientasi Standar Proses Pendidikan* (Jakarta: Kencana, 2013), 220-221.

- 7) Problem Based Learning is considered more fun and liked by students.
- 8) Problem Based Learning can develop students' ability to think critically and develop their ability to adapt to new knowledge.
- 9) Problem Based Learning can provide opportunities for students to apply the knowledge they have in the real world.
- 10) Problem Based Learning can develop students' interest in continuously learning even though studying informal education has ended.

The many advantages of this learning model make this Problem Based Learning model suitable for students. Students have new knowledge from their discoveries which gives students pride. Students can also develop their critical thinking skills to adapt to their new knowledge.

The following are some of the disadvantages of the Problem Based Learning model:<sup>20</sup>

- 1) When students are not confident or unable to solve the problems being studied, students tend to be afraid to try.
- 2) Without understanding to solve the problems being studied, students will not learn what they want to learn.
- 3) The process of implementing Problem Based Learning takes quite a long time.

In addition, a lack of understanding of the problem being solved will make students less motivated to learn.<sup>21</sup> Therefore, in the Problem Based Learning process, the teacher's task is to motivate students to develop their abilities to adapt to new knowledge. Teacher can motivate students by interacting using English language during learning activities.

<sup>&</sup>lt;sup>20</sup> Suyadi, Strategi Pembelajaran Pendidikan Karakter (Bandung: PT Remaja Rosdakarya, 2013), 143.

<sup>&</sup>lt;sup>21</sup> Bekti Wulandari and Herman Dwi, "Pengaruh Problem-Based Learning Terhadap Hasil Belajar Ditinjau Dari Motivasi Belajar PLC di SMK," *Jurnal Pendidikan Vokasi, Vol.* 3, Edition 2 (Juni, 2013), 182.

#### 2. Teaching Integrated English

Teaching integrated English consists of the definition of integrated learning, characteristics of integrated learning, and benefits of integrated learning.

## a. Definition of Integrated Learning

Intellectual and practical skills are foundational to the growth of a student. A modern-day method that can be applied is integrated learning. Integrated learning means combining what students learn in the classroom, with the solution to real-world problems.<sup>22</sup> This means that teacher can teach using an integrated curriculum. This curriculum is about making significant connections between subjects or skills that typically address several different subject areas. Integrating learning can also improve the student learning experience. The integrated approach to learning is designed to focus on learning within the curriculum. It focuses on making connections between concepts and experiences so that information and skills can be applied to new and complex problems or challenges. So integrated learning is used by students to find the right solution to a problem. That way students' enthusiasm for learning can increase and students can be responsive with an emphasis on reading and speaking.

## 1) Reading

According to Sandra Silberstein, reading is a complex information processing skill in which the reader interacts with the text in order to (re) create meaningful discourse.<sup>23</sup> Reading is one of important skill in English. Without reading the reader can't understand about the information of the text. However, reading is a skill for reader in process of activity to get ideas and information to understand what they read.

<sup>&</sup>lt;sup>22</sup> Integrated Learning: Definition, Characteristics, and Benefits (Panchkula: Hallmark Public School, 2020).

<sup>&</sup>lt;sup>23</sup> Sandra Silberstein, *Techniques and Resources in Teaching Reading* (New York: Oxford American English, 1994), 12.

Reading is a process of negotiating meaning; the reader brings to the text a set of schemata for understanding it, and in take is the product of that interaction.<sup>24</sup> Anderson et al, defined reading as the process of making meaning from written text. It needs the harmony of a lot of related sources of information. Garabe defined reading as an interactive process between readers and texts that result in reading fluency. Readers interact with texts as they try to extract meaning and there are different types of knowledge: linguistic or systemic knowledge (bottom-up processing) and schematic knowledge (top-down processing).<sup>25</sup> From the explanation above, there are a lot of definitions of out reading. It can be concluded that reading is a process to understand the ideas between the written and reader to get information and get a conclusion from the text. In other words, the students are able to understand the text. It is one of the ways to students get some information.

#### 2) Speaking

Speaking is one form of language skill as communicative competence that can be developed when it is really used in real life as a means of communication. Speaking is an important means of expressing meanings.<sup>26</sup> Speaking ability is described as the ability to express oneself in life situations, or the ability to report acts or situations in precise words, or the ability to converse, or to express a sequence of ideas fluently.<sup>27</sup> Some definitions about speaking, Valette in her book Modern Language Testing says that speaking is more than pronunciation and intonation.

<sup>&</sup>lt;sup>24</sup> H Douglas Brown, *Language Assessment Principle and Classroom Practices* (New York: Longman, 2004), 189.

<sup>&</sup>lt;sup>25</sup> Abbas Pourhosein Gilakjani, "How Can Students Improve Their Reading Comprehension Skill?," *Journal of Studies in Education, Vol. 6*, Edition 2 (Islamic Azad University Iran: May, 2016), 230

<sup>&</sup>lt;sup>26</sup> Jack C. Richards, *Methodology in Learning Teaching* (UK: Cambridge University Press, 2002), 68.

<sup>&</sup>lt;sup>27</sup> Robert Lado, *Language Testing, The Construction and Use of Foreign Language Test* (New York: McGraw-Hill, 1961), 240.

At the functional level speaking is making one self-understood.<sup>28</sup> Richards states that speaking is a form of language skill as communicative competence that can be developed when it is really used in real life as a means of communication. Speaking is developed as an important means of expressing meaning. Bailey stated that "Speaking is such a fundamental human behavior that we don't stop to analyze it unless there is something noticeable about it".<sup>29</sup> It means that speaking is very important for humans in daily activities to interact with other people. It makes meaning and gives an understanding of the use of language in various contexts.

Jones gave a point of view about speaking in Richards, "In speaking and listening we tend to be getting something done, exploring ideas, working out some aspect of the world, or simply being together".<sup>30</sup> It means that speaking makes simple something done and makes them to an active person for get something out. It gives an easy understanding about all of the ideas in the world. According to Guntur, "Spoken language is skill that develop in a child's life, which is only preceded by the skills of listening, and speaking skills learned".<sup>31</sup> It means that speaking is the mother language. In conclusion, speaking is very important for humans in daily activities to interact with other people for express meaning. It makes them to easily understanding about all of the use of language in various contexts.

2.

<sup>&</sup>lt;sup>28</sup> Rebecca M. Valette, *Modern Language Testing* (New York: Harcourt Brace Jovanovich, Inc, 1977), 129

<sup>&</sup>lt;sup>29</sup> Kathleen M. Bailey, *Practical English Language Teaching: Speaking* (New York: MC Graw Hill, 2005),

<sup>&</sup>lt;sup>30</sup> Jack C. Richards, *Teaching Listening and Speaking from Theory to Practice* (New York: Cambridge University Press, 2008), 19.

<sup>&</sup>lt;sup>31</sup> Henry Guntur Tarigan, *Berbicara* (Bandung: Angkasa, 1984), 3.

### b. Characteristics of Integrated Learning

- 1) It primarily focuses on problem-solving.
- 2) It is a compilation of assessment, curriculum development, and faculty development.
- 3) Integrated learning explores and uses information effectively.
- 4) It enables children to integrate ideas and experiences and apply them to formulate new learning situations.
- 5) Creativity, adaptability, critical reasoning, and collaboration are the key features of integrated learning.
- 6) The method of learning accommodates a variety of learning styles, theories, and multiple intelligences.

### c. Benefits of Integrated Learning

- 1) Integrated learning pays particular attention to an increase in understanding, retention, and application of general concepts.
- 2) It provides a better understanding of the content.
- Integrated learning encourages active participation in relevant real-life experiences.
- 4) It serves as a connection between various curricular disciplines.
- 5) It develops higher-level thinking skills.
- 6) Ensures active participation by triggering the point of interest of students.

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#### **B.** Previous Studies

Considering the topic discussed in this research, there are some researches related to the topic as follows: The first one was presented by Alias Bin Masek under the title "The Effects of Problem Based Learning on Knowledge Acquisition, Critical Thinking, and Intrinsic Motivation of Electrical Engineering Students", 2012. Based on the data analysis which was explained, finally the writer took a conclusion of the research about examine the effects of Problem Based Learning on knowledge acquisition, critical thinking, and intrinsic motivation of electrical engineering students at Polytechnic Education Transformation Campaign.

The electrical engineering students completed pre-test and post-tests based on three instruments: a knowledge acquisition test, translated version of the cornell critical thinking test specimen set, and an intrinsic motivation questionnaire. The data were analyzed using MANCOVA and results were obtained. Students' knowledge acquisition in the Problem Based Learning group was significantly higher than that of their counterparts [F (1,44) = 5.37, p < 0.05], with a medium effect size (d = .68). Students' intrinsic motivation in the Problem Based Learning group was significantly higher than that of their counterparts, [F (1,44) = 5.18, p < 0.05], with medium effect size (d = .68). However, students' critical thinking ability in the Problem Based Learning group was not significantly different from that of their counterparts in the Traditional Learning Approarch group [F (1,44) = .019, p > 0.05]. Therefore, it can be concluded that Problem Based Learning enhances students' knowledge acquisitions and intrinsic motivation, but does not improve students' critical thinking ability as compared to the conventional approach.

Second, The Effect of Problem Based Learning on Students' Critical Thinking Ability. Presented by Hamdi, State University of Medan, 2020. Based on the data analysis which was explained, the writer took a conclusion of the research about determining the effect of Problem Based Learning on students' critical thinking ability in mathematics. This research is literature research that collects data from various literature by the documentation method. To look for various written sources on relevant themes or topics. This type of research is a qualitative study by reviewing and correlating characteristics as well indicators of critical thinking skills based on the Problem Based Learning model. The data that has been collected is then analyzed using descriptive methods to provide an overview of the subject being investigated. From the results of data analysis, it was concluded that there is an influence of Problem Based Learning on students' critical thinking skills. The effect is in the form of a significant increase in students' critical thinking ability when the Problem Based Learning (PBL) model is compared to the regular and conventional learning models. The Problem Based Learning (PBL) model is also by constructivism learning theory and humanistic learning theory.

Another study related to this research was conducted by Badrul Kamil et.al, Raden Intan the Lampung State Islamic University of Lampung, with the title "Students' Critical Thinking Skills in Islamic Schools: The Effect of Problem-Based Learning (PBL) Model". The research was designed with a quasi-experimental with random sampling as the sampling technique. The researcher took a conclusion of this research about determining the Effect of Problem-Based Learning on students' critical thinking skills in Islamic schools. The result of the research shows that the average score of the class where the critical thinking skills through PBL are applied is higher than the class that does not apply Problem Based Learning. The result of the data analysis using the t-test obtained that the value of count higher t-table is 4.119 > 1.997 with a significance level of 5 %, so it is said that the PBL model influences students' critical thinking skills.

The last was presented by Abdul Bashith and Saiful Amin under the title "The Effect of Problem Based Learning on EFL Students' Critical Thinking Skill and Learning

Outcome", 2017. Based on the data analysis, the researcher took the conclusion of the research about examining the effect of Problem Based Learning on EFL students' critical thinking skill and learning outcome. This research was conducted on the 11<sup>th</sup> graders of the social science program at SMAN 6 Malang. The researcher was a quasi-experiment with a non-equivalent control group design. The data analysis used the t-test technique. The research result showed that the PBL learning model affected students' critical thinking skills and learning outcomes in SMAN 6 Malang. The average gain score of the experimental class is 33.10, higher than the control class, which is 16.24. The result of the t-test analysis is 0.000 smaller than the significance of 0.05.

The differences in this research from the research above are that the first is related to the objective of this research is different from the previous research. The first previous research is to focus on examining the effects of Problem Based Learning on knowledge acquisition, critical thinking, and intrinsic motivation. The second one is to determine the effect of Problem Based Learning on students' critical thinking ability. The third one is to determine the effect of Problem-Based Learning on students' critical thinking skills. The last is to examine the effect of Problem Based Learning on English as Foreign Language (EFL) students' critical thinking skill and learning outcome. It is different because the objective of this research is to know the effectiveness of Problem Based Learning model in teaching integrated English learning.

The second difference is related to the object of this research is ninth grade students of MTs N 3 Ponorogo in the academic year 2021/2022. The researcher focused on two classes in the ninth grade, namely the 9C class as an experimental class and 9D class as a control class. The third is related to the research design. The first previous research used experimental research, the second used qualitative research, the third used quasi-experimental with random sampling as the sampling technique, and the last used this research used quantitative research with the quasi-experimental design used to control and experimental class for sampling.

## C. Theoretical Framework

Starting from teaching training courses at MTs N 3 Ponorogo, the researchers found that there were problems with students' abilities, namely students had difficulty understanding the assignments given by the teacher and had difficulty speaking in English. They also have problems in memorizing so they can forget quickly. Therefore, researchers offer a Problem Based Learning model so that it can increase students' knowledge. With this learning model, the learning atmosphere in the classroom is also more effective and lively. The following is a theoretical framework on the Effectiveness of Problem Based Learning Model in teaching integrated English learning of the ninth grade students at MTs N 3 Ponorogo.



## **D.** Hypothesis

The hypothesis is simply an educated and testable guess about the answer to your research question. A hypothesis is often described as an attempt by the researcher to explain the phenomenon of interest. Hypotheses can take various forms, depending on the question being asked and the type of study being conducted. A key feature of all hypotheses is that each must make a prediction. Remember that hypotheses are the researcher's attempt to explain the phenomenon being studied, and that explanation should involve a prediction about the variables being studied.<sup>32</sup>

From the explanation, the researcher takes the hypothesis that:

- Ho : There is no significant different scores in teaching integrated English who are taught by using Problem Based Learning model and who are not taught by using Problem Based Learning model.
- Ha : There is do significant different scores in teaching integrated English who are taught by using Problem Based Learning model and who are not taught by using Problem Based Learning model.



<sup>32</sup> Geoffrey Marczyk, David De Matteo and David Festinger, *Essentials of Research Designand Methodology*, (Canada: John Willey & Sons, Inc., 2005), 8.

#### **CHAPTER III**

#### **RESEARCH METHODS**

This chapter provides the research methodology with the purpose to guide the research to work automatically. It consists of the research design, the population and sample, the data collection instrument, the data collection technique, and the data analysis technique.

## A. The Research Design

A research design is simply the framework or plan for a study that is used as a guide in collecting and analyzing the data. According to Pandey research design is the plan, structure, and strategy of investigation conceived to obtain answers to research questions and to control variance.<sup>33</sup> This research used a quantitative approach. Quantitative research methodology is used to examine certain populations or samples with random sampling techniques, data collection using research instruments, and data analysis using statistics with the aim of testing hypotheses.<sup>34</sup>

This research is an experimental study that aims to know whether the students who are taught by the Problem Based Learning model get a better score in teaching integrated English than students who aren't taught by the Problem Based Learning model of the ninth-grade students at MTs N 3 Ponorogo. This type of research is quasi-experimental. Quasi-experimental research aims to reveal a causal relationship by involving the control group and the experimental group. This research used two classes, namely the experimental class represented by class 9C and the control class represented by class 9D. The experimental class was taught using the Problem Based Learning model, while the control class was taught as a comparison and taught using discussion and question and answer.

<sup>&</sup>lt;sup>33</sup> Prabhat Pandey, Meenu Mishra Pandey, *Research Methodology: Tools and Techniques* (Romania: Bridge Center, 2015), 18.

<sup>&</sup>lt;sup>34</sup> Fakultas Tarbiyah dan Ilmu Keguruan, *PEDOMAN PENULISAN SKRIPSI Fakultas Tarbiyah dan Ilmu Keguruan* (Ponorogo: IAIN Ponorogo, 2020), 9.

The research variable is something that is determined by the researcher to be studied to obtain information, then conclude.<sup>35</sup> There are two variables, namely the independent variable (X) which we want to see the effect on the dependent variable (Y).

1. The independent variable (X)

The variable that affects or the variable that causes the dependent variable to arise. In this research, the independent variable is the Problem Based Learning model.

2. The dependent variable (Y)

The variable that is affected or the variable that is the result of the existence of an independent variable. In this research, the dependent variable is teaching integrated English.

This research design used pre-test and post-test control group design, the experimental class and control class had to get a pre-test and post-test. Pre-test was given to determine the initial state of the experimental class and control class. Pre-test results are good if the scores of the two classes are not significantly different. The post-test was given after carrying out the learning activities of the two classes to find out the final results.

|  |  | Table   | e 3.1  |             |  |
|--|--|---|--|-------------|--|
|  |  | The Resear  | ch Design  |             |  |
|  | Class  | Pre Test  | Treatment  | Post Test   |  |
|  | Experimental   | 01  | Х  | O2          |  |
|  | Control  | O3  |  | 04          |  |
| Notes :<br>X :<br>O1 :<br>O2 :<br>O3 :<br>O4 : | Treatment by<br>Pre Test for t<br>Post Test for<br>Pre Test for t<br>Post Test for t | v using Proble<br>the experime<br>the experime<br>the control cl<br>the control c | em Based Le<br>ntal class<br>ental class<br>ass<br>elass | arning mode |  |

<sup>&</sup>lt;sup>35</sup> Suharsimin Arikunto, Prosedur Penelitian Suatu Pendekatan Praktik (Jakarta: PT Rineka Cipta, 2013),

The researcher conducted three steps in this research:

1. Pre Research Step

The first step is preparation. The researcher determines the experimental group and control group, and prepares of lesson plan and instrument to get the data.

2. Research Step

The second step is action. The teacher applies the treatment in the experimental group. The researcher taught in the class by using the Problem Based Learning model. In this treatment to get data from two tests, the tests are pre-test and post-test.

3. Data Analysis Step

The third step is collecting data. The collected data was then analyzed by the researcher. The steps are as follows:

- a. Collect the post-test scores from the experimental class and the control class
- b. Test the data using the t-test

The t-test is one of the statistical tests that is used to test the correctness or error of the null hypothesis which declares that between two samples mean which randomly taken from the same population there is no significant difference.<sup>36</sup>

## **B.** The Population And Sample

A population is all members of any well-defined class of people, events or objects.<sup>37</sup> It can be concluded that the population is the entire subject that will be conducted research. The population of the research was the ninth grade students at MTs N 3 Ponorogo in the academic year 2021-2022. The ninth grade students were chosen because they were in the transition from the Islamic Junior High School, considered that they had already recognized the whole of Senior High School subjects and their thinking started critically.

<sup>&</sup>lt;sup>36</sup> Retno Widyaningrum, *Statistika* (Yogyakarta: Pustaka Felicha, 2013), 151.

<sup>&</sup>lt;sup>37</sup> Donald Ary, Lucy Cheser Jacobs, Chris Sorensen, and Asghar Razavieh, *Introduction to Research in Education Eighth Edition* (Canada: Wadsworth, 2010), 148.

The sample is a subgroup of the target population that the researcher plans to study for generalizing about the target population.<sup>38</sup> It means that the sample is a target population that is observed, and the sample was selected by using the cluster sampling technique. Sampling is the technique of selecting a suitable sample, representative of the population it is taken, to determine parameters or characteristics of the whole population.<sup>39</sup> The researcher used cluster sampling instead of selecting individual units from the population, entire groups or clusters are selected at random. We divide the population into clusters (usually along geographic boundaries) and randomly select some clusters from all clusters to measure all units within sampled clusters in the end.<sup>40</sup>

From the statements above, the researcher took two classes from the ninth grade students as the sample. It was class 9C was an experimental class with 30 students and 9D was a control class with 30 students. The total sample of the research was 60 students.

## C. The Data Collection Instrument

The data collection instrument is the selected equipment and the use of the researcher to gather data to make systematic study easier. Data means observations or evidence. The scientific-educational researcher requires the data utilizing some standardized research tools or self-designed instruments.<sup>41</sup> In this research, the instrument to collect data is a test. The test is constructed by the researcher based on the standardized procedure of making the test is divided into two parts, namely pre-test and post-test. The pre-test is directed at the beginning study before the treatment and the post-test is given after the treatment to gain information about students' ability before the treatment and the

<sup>&</sup>lt;sup>38</sup> John W. Creswell, *Educational Research: Planning, Conducting and Evaluating Quantitative and Qualitative Research* (New York: PEARSON, 2002), 143.

<sup>&</sup>lt;sup>39</sup> Kultar Singh, *Quantitative Social Research Methods* (New Delhi: Sage Publications Inc, 2007), 102.

<sup>&</sup>lt;sup>40</sup> Kultar Singh, *Quantitative Social Research Methods* (New Delhi: Sage Publications Inc, 2007), 105.

<sup>&</sup>lt;sup>41</sup> Yogesh Kumar Singh, *Fundamental of Research Methodology and Statistic* (New Delhi: New Age International, 2006), 213.

teaching process. The post-test is to gain information about students' ability after the teaching integrated English process.

The instruments of this research:

1. The Pre-Test

The pre-test is a test to determine initial data. Before giving treatment, the researcher gave a pre-test to the students. It consists of 15 items and the students must answer those questions. It aims to find out the students' ability before using the Problem Based Learning model at ninth grade students of MTs N 3 Ponorogo.

2. The Treatment

After giving the pre-test, the treatment would carry out in two and four meetings with each meeting conducted for a half hour. The researcher conducted a Problem Based Learning model treatment for ninth grade C students with even and odd absent groups alternately according to the school schedule and this treatment was carried out for four meetings in each experimental class group.

In the control class, the researcher also grouped the ninth grade D students according to the odd and even absences alternately, in the control class treatment was carried out for two meetings. Class groupings and time limits during the treatment were carried out because the school was still in the COVID-19 pandemic, so the school implemented a health protocol by limiting the number of students in class.

3. The Post-Test

After giving the treatment, the researcher gave a post-test to the students with the same number of items as the pre-test. It consists of 15 items of multiple choices. The quantitative data was being taken from the result of the test that consisted of multiple choices tests. In collecting data, the researcher applied an instrument that is a multiple choices test. The instrument of data collection can show in the table 3.2:

| The title of the research | Variable of the research | Indicator                         |
|---------------------------|--------------------------|-----------------------------------|
| THE EFFECTIVENESS         |                          | 1 The orientation of the problem  |
| OF PROBLEM BASED          |                          | 1. The orientation of the problem |
| LEARNING MODEL IN         | Problem Based            | 2. Organize the students to learn |
| TEACHING                  | Loarning Model           | 3. To lead the investigation of   |
| INTEGRATED                |                          | individuals or groups             |
| ENGLISH LEARNING          |                          | 4. Develop and presents the       |
| OF THE NINTH GRADE        |                          | results of the work               |
| STUDENTS AT MTS N         | Teaching                 | 5. Analyze and evaluate the       |
| 3 PONOROGO                | Integrated English       | process of problem-solving        |

Table 3.2 The Data Collection Instrument

In scoring the students' work, the researcher uses the criteria as follows:

- 1. The 1 score was assigned if the students answer the test correctly.
- 2. The 0 score was assigned if the students answer the test incorrectly.

## **D.** The Data Collection Technique

#### 1. Preparation

The researcher makes three steps for preparation, as follows:

- a. Firstly, the writer consulted the headmaster of MTs N 3 Ponorogo and asked permission to conduct the test on the selected students of the ninth grade.
- b. The implementation of the instrument test was conducted with the help of other teacher to get the data.
- c. Before the test, the respondents were given instructions and explanations related to the test.

#### 2. Implementation

The implementation of an instrument test was conducted for 3 months, because of the situation of pandemic Covid-19 we can not use a long time. The teachinglearning process still applies in the healthy protocol by Covid-19. Each meeting in the learning process in the classroom has a duration of 30 minutes, besides that in each class, there are only half of all students in the class who are adjusted for odd and even absent groups which causes students to take turns to go to school. On 12<sup>nd</sup> February 2022 until 28<sup>th</sup> February 2022 the researcher has stopped research because the school has been closed for a while. After that, the researcher continued the research on 5<sup>th</sup> March 2022.

The implementation of this instrumented test, the researcher began on the 15<sup>th</sup> of January 2022 and lasted on the 5<sup>th</sup> of March 2021. The pre-test is started on 15<sup>th</sup> January 2022 there was conducted in 9C and 9D classes with odd absent numbers, on 28<sup>th</sup> January 2022 a pre-test was held for classes 9C and 9D with even absent numbers. The post-test of students' ability began on the 4<sup>th</sup> of February 2022 in class 9D with even absent numbers, on 11<sup>st</sup> February 2022 in class 9D with odd absent numbers, on 11<sup>st</sup> February 2022 in class 9D with odd absent numbers, and 5<sup>th</sup> March 2022 in class 9C with even absent numbers. The data were taken by test and that will be the primary data where as the common data are taken from school information and that's consists of school data.

### E. The Data Analysis Technique

A test is a method of measuring a person's ability, knowledge, or performance in a given domain, it is an instrument a set of techniques, procedures, or items that requires performance on the part of the test-taker. To qualify as a test, the method must be explicit and structured: multiple-choice questions with prescribed correct answers; a writing prompt with a scoring rubric; an oral interview based on a question script, and a checklist of expected responses to be filled in by the administrator. The research conducted the test to collect data with the kind of test multiple choices. A good instrument must meet two requirements, they are:

## 1. Validity

Validity is one measure that shows the level of instrument validity. Valid means that the instrument can measure what is to be measured. by far the most complex criterion of an effective test and arguably the most important principle is validity, the extent to which inferences made from assessment results are appropriate, meaningful, and useful in terms of the purpose of the assessment.<sup>42</sup> A valid instrument means the measuring instrument used to obtain data with high validity. On the other hand, an instrument that is less valid means it has low validity. The high and low validity of the instrument shows that the collected data deviates or does not deviate from the intended validity description.

The validity of the instrument was carried out before being given to the research class. The validity test aims to find out if the test used can measure students' skills. Analysis of the validity of the test in this study was carried out using the SPSS 23 program. The validity used in this study was item validity by comparing the significance values. Items are said to be valid if the significance value is <0.05.

The r-table was 0,455, when the table of r result (coefficient of correlation) was below the r-table it could be concluded that the items were not valid instruments. Thus, the item was said to be a valid instrument if the coefficient of correlation was more than 0,455.

Steps to find out the validity of test such follow:

- a. Open the SPSS 23 program.
- b. Input the data from Microsoft excel to the data view.
- c. Click on "analyze-correlate bivariate".
- d. Drag all the data into the variables column.

<sup>&</sup>lt;sup>42</sup> H. Douglas Brown, Language Assessment Principle and Classroom Practice (New York: Longman, 2003),

e. Click "OK".

To measure the validity of the instrument of research, the researcher put a total sample of 19 respondents. The researcher gave 15 multiple choice questions for this class. So, the researcher calculated the validity test from the result of multiple-choice questions. The result calculation item validity instrument could be shown in the table 3.3.

|      |                     | Table 3.3            |                     |
|------|---------------------|----------------------|---------------------|
|      | The Result of       | of Validity Calcula  | ation               |
| Item | "r" Calculated      | "r" Table            | Criteria            |
| 1    | 0,929               | 0,4555               | <mark>V</mark> alid |
| 2    | 0,929               | 0,455 <mark>5</mark> | Valid               |
| 3    | 0,970               | <mark>0,</mark> 4555 | Valid               |
| 4    | <mark>0,970</mark>  | 0,4555               | Valid               |
| 5    | 0,89 <mark>8</mark> | 0,4555               | Valid               |
| 6    | 0,898               | 0,4555               | Valid               |
| 7    | 0,970               | <mark>0,4</mark> 555 | Valid               |
| 8    | 0,929               | <mark>0</mark> ,4555 | Valid               |
| 9    | 0,929               | 0,4555               | Valid               |
| 10   | 0,970               | 0,4555               | Valid               |
| 11   | 0,929               | 0,4555               | Valid               |
| 12   | 0,970               | 0,4555               | Valid               |
| 13   | 0,970               | 0,4555               | Valid               |
| 14   | 0,898               | 0,4555               | Valid               |
| 15   | 0,929               | 0,4555               | Valid               |

#### 2. Reliability

Reliability is the constancy of the test instrument in assessing what is being assessed. This means that the assessment tool if used will always give relatively the same results. Reliability refers to an instrument that can be trusted to be used as a data collection tool because the instrument is already good. A reliable test is consistent and dependable. According to James Dean, reliability is the extent to which the result can be considered or stable<sup>43</sup>.

Reliability analysis in this research used the SPSS 23 program with Cronbach's Alpha statistical test. The basis for decision making in the reliability test if the Cronbach's Alpha value > r-table, to measure the reliability of the students' ability using multiple-choice test. Steps to find out the reliability of test such as follow:

- a. Open the SPSS 23 program.
- b. Input the data from Microsoft excel to the data view.
- c. Click on "analyze scale reliability analysis"
- d. Drag all the data into the items column.
- e. Click "OK".

| Table             | 3.4              |
|-------------------|------------------|
| The Result of The | Reliability Test |

| <b>Reliability Statistics</b> |            |  |
|-------------------------------|------------|--|
| Cronbach's Alpha              | N of Items |  |
| 0,780                         | 16         |  |

#### 3. Assumption Test

After the test was given to the students in pre-test and post-test, then the results of the test were being analyzed with the assumption test. The tests there are tests of normality and test of homogeneity.

## a. Normality test

A normality test is used to know whether the data from both group samples examined comes from the population or distribution or not.<sup>44</sup> It means normality tests are used to determine if a data set is well-modeled by a normal distribution and to compute how likely it is for a random variable underlying the data set to be normally

<sup>&</sup>lt;sup>43</sup> James Dean Brown, *Testing in Language Program: a Comprehension Guide to English Language Assessment* (New York: Mc Graw Hill ESL/ELT, 2005), 175.

<sup>&</sup>lt;sup>44</sup> James Dean Brown, *Testing Language Programs: A Comprehensive Guide To English Language Assessment* (New York: Mc Graw Hill, 2005), 27.

distributed. A normality test is used to determine whether sample data has been drawn from a normally distributed population. In this research, the researcher was used SPSS 23 program for windows to calculate the normality test.

Steps to find out the normality test such as follow:

1) Open the SPSS 23 program.

2) Input the total value according to the column in the data view.

3) Click on "analyze – nonparametric tests – legacy dialogs – sample K-S".

4) Drag the data into the test variable list.

5) Click "OK".

## b. Homogeneity

A homogeneity test is used to know the similarity of the populations and to know before we compare some of the groups.<sup>45</sup> It means that a homogeneity test was conducted to determine whether the data in the variables X and Y were homogeneous or not. In this research, the researcher has used the SPSS program for windows to calculate the homogeneity test. Steps of the homogeneity test such as follows:

- 1) Open the SPSS 23 program.
- 2) Input the data from Microsoft excel into the data view.
- 3) Click on "analyze descriptive statistics explore".
- 4) Drag the data into the dependent list.
- 5) Click on "plots power estimation continue OK".

## 4. Hypothesis Testing

For testing the hypothesis, the research was used the t-test to know whether there is a difference between variables in the study. Hypothesis testing to check whether the data collected supports certain statements or predictions. The researcher will use SPSS 23 program for windows to analyze the t-test. Steps of calculation t-test:

<sup>45</sup> Retno Widyaningrum, Statistika (Yogyakarta: Pustaka Felicha, 2013), 212.

- a. Open the SPSS 23 program.
- b. Click on "variable view" add name and use decimal "0".
- c. Input the data from Microsoft excel to the data view.
- d. Click on "analyze compare means paired samples t-test".
- e. Drag the data into paired variables.
- f. Click "OK".

The criteria of hypothesis testing, are as below:

- a. Ho is rejected and Ha is accepted if the t-test < 5% significant level, There is do significant different score in teaching integrated English who are taught by using Problem Based Learning model and who are not taught by using Problem Based Learning model.</li>
- b. Ho is accepted and Ha is rejected if the t-test > 5% significant level, There is no significant different score in teaching integrated English who are taught by using Problem Based Learning model and who are not taught by using Problem Based Learning model.



#### **CHAPTER IV**

#### **RESEARCH RESULT**

In this chapter, the researcher discusses the general findings, data description, data analysis, and the discussion and interpretation.

### A. The General Findings

### 1. The Geographical Location of MTs N 3 Ponorogo

Madrasah Tsanawiyah is a formal educational institution. The location of MTs N 3 Ponorogo at the street of Letjend S. Sukowati, the number of 90, Ngunut, Kec. Babadan, Kab. Ponorogo, Prov. East Java. The edge of the highway is on the Ponorogo-Magetan route. There are two school buildings, the main building is located at that location and the old building is  $\pm 200$  meters from the main building.

## 2. Vision, Mission, and Main of MTs N 3 Ponorogo

#### a. Vision

MTs N 3 Ponorogo have vision is "mewujudkan MTs N 3 Ponorogo unggul

dalam IMTAQ dan IPTEK serta peduli lingkungan". They are 8 indicators of vision :

- 1) Excellence in Faith and piety to God Almighty.
- 2) Excellence in Curriculum Development which refers to 8 educational standards.
- 3) Excellence in Active, Innovative, Creative, Effective, and Fun Execution with a SCIENTIFIC approach.
- 4) Excellence in Academic and Non-Academic Achievements.
- 5) Excellence in honesty, discipline, caring, politeness, confidence in interacting with the social and natural environment.
- 6) Excellence in Learning and self-development integrated with Environmental Education and (Prevention, Eradication, Abuse, and Illicit Trafficking of Drugs).

- 7) Excellence in the character of Madrasah citizens who have a noble character, are free from drugs, and care about the preservation of environmental functions.
- 8) Excellence in creating a clean, beautiful and comfortable Madrasah environment to prevent pollution and environmental damage.

#### **b.** Mission

MTs N 3 Ponorogo has eight missions to realize the vision above, namely:

- 1) To increase faith and piety to God Almighty through the cultivation of character and religious activity programs.
- 2) Realizing curriculum development which includes 8 educational standards.
- 3) Realizing the implementation of Active, Innovative, Creative, Effective, and fun learning with the SCIENTIFIC approach.
- 4) To improve academic and non-academic achievements.
- 5) To improve the attitude of honesty, discipline, caring, politeness, and confidence in interacting with the social and natural environment.
- 6) Realizing learning and self-development that is integrated with Environmental Education and (Prevention, Eradication, Abuse, and Illicit Trafficking of Drugs).
- 7) Realizing the character of Madrasah citizens who are virtuous, free from drugs, and care about the preservation of environmental functions.
- 8) Realizing a clean, beautiful, and comfortable Madrasah environment to prevent pollution and environmental damage.
- c. Goal
  - 1) Improving the quality of Islamic religious attitudes and practices of Madrasah residents.
  - Increasing awareness of Madrasah residents towards the cleanliness and beauty of the Madrasah environment.

- 3) Improving the quality and quantity of facilities/infrastructure as well as facilities that support the improvement of academic and non-academic achievements.
- 4) Increasing student test scores from existing standards.
- 5) Development of students' interests, talents, and abilities in Arabic and English.
- 6) To have an Art Team that can perform at least at district-level events.

### 3. Students Data of MTs N 3 Ponorogo

Students on MTs N 3 Ponorogo as researchers conducted in 2021/2022 amounted to 566 from class seventh grade until ninth grade. The details of the students can be seen in the table 4.1:

|   |                                   | 10            | abie 4.1         |      |              |  |
|---|-----------------------------------|---------------|------------------|------|--------------|--|
|   | Students Data of MTs N 3 Ponorogo |               |                  |      |              |  |
|   | Number                            | Class         | Boy              | Girl | All Students |  |
|   | 1                                 | Class of VII  | <mark>9</mark> 3 | 105  | 198          |  |
| ſ | 2                                 | Class of VIII | 83               | 92   | 175          |  |
| ſ | 3                                 | Class of IX   | 93               | 100  | 193          |  |
|   | All Students                      |               | 269              | 297  | 566          |  |

Table 1 1

## 4. Teachers Data of MTs N 3 Ponorogo

Teachers on MTs N 3 Ponorogo as researchers conducted in 2021/2022 amounted to 60 from Civil Servants or not Civil Servants. The details of the teachers

can be seen in the table 4.2:

| Teachers Da        | ta of MT | .2<br>s N 3 Po | norogo      |  |
|--------------------|----------|----------------|-------------|--|
| Teacher            | Boy      | Girl           | All Teacher |  |
| Civil Servants     | 13       | 24             | 33          |  |
| Not Civil Servants | 14       | 9              | 14          |  |
|                    | 26       | 33             | 60          |  |

Table 4.2

## **B.** Data Description

The researcher used a quasi-experimental design in this research study and the population of this study was the ninth grade students of MTs N 3 Ponorogo in the academic year 2021/2022. The researcher took two classes as the sample was applied randomly in this study, these classes are 9C for the experimental class and 9D for the

control class. The total students of the experimental and control class were 60 students with each class having 30 students. In the experimental class (9C), the students were taught using Problem Based Learning Model. Then, in the control class, the students were taught by teacher lecturing as normally. Before and after giving the treatments of the Problem Based Learning Model, the researcher gave pre-test before treatments and post-test after treatments to experimental and control classes to get data from students. At the end of the research, the researcher compares the score of teaching integrated English by using the Problem Based Learning Model and the scores of teaching integrated English by using teacher' lecturing normally.

### 1. The Schedules of Research

Schedule of the experimental class (9C), the researcher has required six meetings. The first meeting was pre-test, the second until the fifth meeting was treatments by using Problem Based Learning Model and the sixth meeting was post-test. Furthermore, in the control class (9D), the researcher was required four meetings. The students were given a pre-test in the first meeting, the second and the third meeting were treatments by using teacher' lecturing, and the fourth meeting was a post-test. The schedule of experimental and control classes can be seen in the table 4.3 and 4.4.

| Table 4.3                                  |
|--|
| Research Schedule of Experimental Class 9C |

| Absent Number | Date                           | JP | Activities                   |
|---------------|--------------------------------|----|------------------------------|
|               | 15 <sup>th</sup> January 2022  | 1  | Pre Test                     |
|               | 21 <sup>st</sup> January 2022  | 1  | First Treatment              |
| Odd           | 29th January 2022              | 3  | Second – Fourth<br>Treatment |
| P O           | 5 <sup>th</sup> February 2022  | 1  | Post Test                    |
| -             | 28th January 2022              | 1  | Pre Test                     |
|               | 4 <sup>th</sup> February 2022  | 1  | First Treatment              |
| Even          | 12 <sup>nd</sup> February 2022 | 3  | Second – Fourth<br>Treatment |
|               | 5 <sup>th</sup> March 2022     | 1  | Post Test                    |

| Absent Number | Date                           | JP | Activities                  |
|---------------|--------------------------------|----|-----------------------------|
|               | 15 <sup>th</sup> January 2022  | 1  | Pre Test                    |
| Odd           | 5 <sup>th</sup> February 2022  | 2  | First – Second<br>Treatment |
|               | 11 <sup>st</sup> February 2022 | 1  | Post Test                   |
|               | 28 <sup>th</sup> January 2022  | 1  | Pre Test                    |
| Euro          | 28 <sup>th</sup> January 2022  | 1  | First Treatment             |
| Even          | 4 <sup>th</sup> February 2022  | 1  | Second Treatment            |
|               | 4 <sup>th</sup> February 2022  | 1  | Post Test                   |

Table 4.4 Research Schedule of Control Class 9D

#### 2. The Procedures of The Research in Experimental and Control Class

In the experimental class (9C), the researcher taught the students using Problem Based Learning Model with four meetings and each meeting is only 30 minutes. At the first meeting, the researcher conducts preliminary activities such as the teacher greets to students, checking student attendance, and giving English books to students as a guide for learning. The teacher also invites students to observe the picture on the cover of the book so that students participate actively in understanding the picture by asking the following questions: "The title of this song is ...(Ninety Three Million Miles), Have you heard the song before? It is a nice song and quite popular among teenagers." "It is a happy song. If you want to know the song, you can see it on YouTube. It's a very nice song."

In addition, the teacher invites students to understand the lyrics of the song by asking several questions such as: "Anybody knows what the song is about?" "What do we need to do to know the message of a song? This is what we are going to do.". After that, the teacher mentions and explains the learning objectives in the chapter that will be taught for this research such as : "Look everybody. It is writen here that we are going to learn to ... to get the message of a song." "What for? Why do we need to sing songs, to

understand the message of a song? Many songs affect our life. We learn this song in order to be a better person."

After the preliminary activities are completed, the teacher enters to the core activity, namely doing the treatment stages using the Problem Based Learning model. The first stage is giving orientation to the students' problem. At this stage, the teacher explains to students about the song "Ninety Three Million Miles" and asks students to listen, sing together, and invites students to repeat the teacher's words on each line of song lyrics so that students get used to saying words in English and students can understand the song.

The second stage in the Problem Based Learning model is organizing students where the teacher arranges students to form groups and asks students to find the meaning of the words in the song. The teacher also asks students to come to him when they have problems so that everything can be resolved properly. After the students complete the task, the teacher rereads each song lyric and the students interpret it. The last activity at the first meeting was the closing activity where the teacher asked about the students' difficulties during the learning process, the teacher conveyed the activities to be carried out at the next meeting, and the teacher said closing greetings.

The second until fourth meetings were carried out on the same day. At the second meeting, the teacher did preliminary activities such as greeting, checking student attendance, and reviewing the previous material. The teacher also informs the material that will be studied at today's meeting. The next activity is the core activity at the stage of guiding individual and group investigations where the teacher asks students to analyze the content of the song's message according to the sentence that leads. At the third meeting, the teacher went through the stages of developing and presenting the results where after the students completed the task above, each group was asked to present the results of their work in front of the class.

At the fourth meeting, the teacher did the stages of analyzing and evaluating the process and the results of problem-solving in which the teacher reviewed the material that had been presented to the students and corrected the students' work. After doing all the stages of the Problem Based Learning model, the teacher conducts closing activities by asking students to collect worksheets and say closing greetings. At the end of the meeting the teacher gave a list of guidelines for leading the prayer because when the teacher asked the students to lead the prayer in English, the students could not do it so the teacher wrote it on the whiteboard. After that, the teacher and students prayed together with a list of leading prayers using English.

Before the teacher did the treatment in the experimental class, the teacher gave a pre-test to determine the condition of the students before the teacher applied the treatment. After the teacher applied the treatment, the teacher gave a post-test to find out the results of the treatment using the Problem Based Learning model. The pre-test and post-test consist of 15 items of multiple choice questions.

In the control class (9D), the teacher taught using the teacher's method with two meetings and each meeting for 30 minutes. At the first meeting, the teacher greets to students, checks student attendance, gives a hand book like an experimental class, and explains the song "Ninety Three Million Miles". The teacher explains about the learning objectives. The teacher asks students to repeat what the teacher says in each song lyric so that students can read using English correctly and asks students to form groups to find the meaning of words and the contents of the song's message according to the sentences that lead.

At the second meeting, each group completed the task at the previous meeting, then students were asked to present their work in front of the class. At the end of the meeting the teacher gave a list of guidelines for leading the prayer because when the teacher asked the students to lead the prayer in English, the students could not do it so the teacher wrote it on the whiteboard. After that, the teacher and students prayed together with a list of leading prayers using English. Before the teacher conducts learning in the control class, the teacher gives a pre-test to determine the condition of the students before the teacher learns. After the teacher did the lesson, the teacher gave a post-test to find out the results using the teacher's method and to know students' abilities. The pre-test and post-test consist of 15 items multiple-choice questions.

## **3.** Teaching Integrated English Score of Experimental Class (9C)

The following are the results of teaching integrated English scores with treatment using the Problem Based Learning model in the experimental class.

|  |         | T <mark>ab</mark> | le 4.5       |            |   |
|--|---------|-------------------|--------------|------------|---|
|  | The Stu | dents' Score      | in Experimer | ntal Class |   |
|  | Number  | Name              | Pre-Test     | Post-Test  |   |
|  | 1       | AJA               | 12           | 12         |   |
|  | 2       | ANE               | -11          | 11         |   |
|  | 3       | AKS               | 13           | 12         |   |
|  | 4       | ATH               | 11           | 10         |   |
|  | 5       | AER               | 11           | 12         |   |
|  | 6       | AWR               | 10           | 10         |   |
|  | 7       | CMH               | 11           | 11         |   |
|  | 8       | DEP               | 12           | 11         |   |
|  | 9       | DNS               | 10           | 10         |   |
|  | 10      | DINAF             | 10           | 12         |   |
|  | 11      | DR                | 11           | 13         |   |
|  | 12      | ERS               | 11           | 11         |   |
|  | 13      | HBZ               | 11           | 12         |   |
|  | 14      | JARP              | 10           | 12         |   |
|  | 15      | JRPF              | 11           | 11         |   |
|  | 16      | LMK               | 10           | 10         |   |
|  | 17      | MMM               | 10           | 12         |   |
|  | 18      | MFFT              | 10           | 12         |   |
|  | 19      | MTR               | 10           | 13         | ~ |
|  | 20      | NAP               | 11           | 12         |   |
|  | 21      | NAW               | 10           | 11         |   |
|  | 22      | QM                | 11           | 11         |   |
|  | 23      | RT                | 11           | 11         |   |
|  | 24      | RSN               | 11           | 12         |   |
|  | 25      | RRP               | 10           | 14         |   |
|  | 26      | SPSB              | 11           | 13         |   |
|  | 27      | SFN               | 10           | 14         |   |
|  | 28      | UFM               | 10           | 14         |   |

| 29    | YFN | 11    | 11   |
|-------|-----|-------|------|
| 30    | NQM | 11    | 14   |
| TOTAL |     | 322   | 354  |
| MEAN  |     | 10,73 | 11,8 |
|       |     |       |      |

From the table 4.5, it can be seen that the highest score for the pretest in the experimental class was 13 while the lowest score for the pretest was 10. The highest score for the post-test was 14 while the lowest score for the post-test was 10. The average score for the pretest was 10,73 and the post-test was 11,8. The results of calculating the scores of students in the experimental class can be seen in the table 4.6.

| Total Pre-Test in Experimental Class |  |    |     |     |      |  |
|--------------------------------------|--|----|-----|-----|------|--|
|                                      | Frequency Percent Valid Percent Cumulative Percent |    |     |     |      |  |
|                                      | 10   | 12 | 40  | 40  | 40   |  |
|                                      | 11   | 15 | 50  | 50  | 90   |  |
| Valid                                | 12   | 2  | 6,7 | 6,7 | 96,7 |  |
|                                      | 13   | 1  | 3,3 | 3,3 | 100  |  |
|                                      | Total  | 30 | 100 | 100 |      |  |

Table 4.6

From the table 4.6, it can be seen that there were various scores on students' ability. There was 40% or 12 students got pre-test score 10, 50% or 15 students got pretest score 11, 6,7% or 2 students got pre-test score 12, 3,3% or 1 student got pre-test score 13. The histogram can be realized like in the picture 4.1.



#### Picture 4.1

#### Histogram for Pre-Test in Experimental Class

From the picture 4.1, it can be seen that Mean = 10,73 and Standard Deviation

= 0.74. To determine the category of teaching integrated English was good, medium, or low, the researcher made some score groups using the standard as follows:

- a. Pre-test score less than Mean Standard Deviation (10,73 0,74 = 9,99) for category low.
- b. Pre-test score between Mean Standard Deviation (10,73 0.74 = 9.99) to Mean + Standard Deviation (10,73 + 0,74 = 11,47) for category medium.
- c. Pre-test score more than Mean + Standard Deviation (10,73 + 0,74 = 11,47) for category good.

From the results above, it can be seen the categorized are the pre-test score which is less than 9,99 is categorized as low, the pre-test score which is between 9,99 to 11,47 is categorized as a medium, and the pre-test score which is more than 11,47 is categorized as good. The categories score from the explanation above can be seen clearly in the table 4.7.

|  | 1 40                 |           |            |          |  |
|--|----------------------|-----------|------------|----------|--|
| The Categorization of Students' Pre-Test in Experimental Class |                      |           |            |          |  |
| Number   | Score                | Frequency | Percentage | Category |  |
| 1  | Less than 9,99       | 0         | 0%         | Low      |  |
| 2  | Between 9,99 – 11,47 | 27        | 90%        | Medium   |  |
| 3  | More than 11,47      | 3         | 10%        | Good     |  |

Total

Table 4.7

From the table 4.7, it can be seen that the pre-test score of teaching integrated

100%

English in the experimental class was in the percentage of 90% category medium, and a percentage of 10% is category good.

30

| Total Post-Test in Experimental Class |    |           |         |               |                    |
|---------------------------------------|----|-----------|---------|---------------|--------------------|
|                                       |    | Frequency | Percent | Valid Percent | Cumulative Percent |
| Val: 4                                | 10 | 4         | 13,3    | 13,3          | 13,3               |
| v and                                 | 11 | 9         | 30      | 30            | 43,3               |

Table 4.8

| 12    | 10 | 33,3 | 33,3 | 76,7 |
|-------|----|------|------|------|
| 13    | 3  | 10   | 10   | 86,7 |
| 14    | 4  | 13,3 | 13,3 | 100  |
| Total | 30 | 100  | 100  |      |

From the table 4.8, it can be seen that there were various teaching integrated English. There was 13,3% or 4 students got post-test score 10, 30% or 9 students got post-test score 11, 33,3% or 10 students got post-test score 12, 10% or 3 students got pre-test score 13, 13,3% or 4 students got post-test score 14. Total frequency was 30 students or 100% got pre-test scores 10, 11, 12, 13, and 14. Based on the table 4.8, the histogram can be realized like in the picture 4.2.





Histogram for Post-Test in Experimental Class

From the picture 4.2, it can be seen that Mean = 11,8 and Standard Deviation =

1,215. To determine the category of teaching integrated English was good, medium, or low, the researcher made some score groups using the standard:

- a. Post-test score less than Mean Standard Deviation (11,8 1,215 = 10,585) for category low.
- b. Post-test score between Mean Standard Deviation (11, 8 1, 215 = 10, 585) to Mean
  - + Standard Deviation (11,8 + 1,215 = 13,015) for category medium.

c. Post-test score more than Mean + Standard Deviation (11,8 + 1,215 = 13,015) for category good.

From the results above, it can be seen that the categorized are a post-test score that is less than 10,585 is categorized as low, a post-test score that is between 10,585 to 13,015 is categorized as a medium, and a post-test score that is more than 13,015 is categorized good. The categories score from the explanation above can be seen clearly in the table 4.9.

|        | The Categorization of Students' Post-Test in Experimental Class |                  |                      |        |  |
|--------|---|------------------|----------------------|--------|--|
| Number | Score Frequency Percentage Catego                               |                  |                      |        |  |
| 1      | Less than 10,585  | 4                | <mark>1</mark> 3,33% | Low    |  |
| 2      | Between than 10,585 – 13,015                                    | <mark>2</mark> 2 | 73,33%               | Medium |  |
| 3      | More than 13,015  | 4                | 13,33%               | Good   |  |
|        | Total   | 30               | 100%                 |        |  |

Table 4.9

From the table 4.9, it can be seen that the post-test score of teaching integrated English in the experimental class was in the percentage of 13,33% category low, a percentage of 73,33% is medium, and the percentage of 13,3% is category good.

## 4. Teaching Integrated English Score of Control Class (9D)

The results of teaching integrated English scores not treated using the Problem Based Learning model but in this control class using the teacher's method. From the table 4.10, it can be seen that the highest score for the pre-test in the control class was 13 while the lowest score for the pre-test was 10. The highest score for the post-test was 14 while the lowest score for the post-test was 10. The average score for the pre-test was 10,8 and the post-test was 11,9. The results of calculating the scores of students in the control class can be seen in the table 4.11.

) N O R O

| Table - | 4.10 |
|---------|------|
|---------|------|

#### The Students' Score in Control Class

| Number | Name        | Pre-Test | Post-Test |
|--------|-------------|----------|-----------|
| 1      | ANR         | 10       | 11        |
| 2      | ARM         | 10       | 11        |
| 3      | AAAA        | 10       | 11        |
| 4      | AFR         | 10       | 12        |
| 5      | AWA         | 11       | 14        |
| 6      | AAF         | 10       | 13        |
| 7      | CYD         | 11       | 14        |
| 8      | DA          | 11       | 14        |
| 9      | DY          | 11       | 11        |
| 10     | DSTA        | 10       | 14        |
| 11     | EF          | 11       | 12        |
| 12     | ENR         | 10       | 11        |
| 13     | FDF         | 10       | 12        |
| 14     | HNA         | 11       | 11        |
| 15     | ITA         | 11       | 12        |
| 16     | KCW         | 12       | 10        |
| 17     | KA          | 12       | 11        |
| 18     | MR          | 13       | 11        |
| 19     | MY          | 11       | 10        |
| 20     | MI          | 11       | 12        |
| 21     | MSM         | 10       | 13        |
| 22     | NAP         | 11       | 11        |
| 23     | NFS         | 12       | 12        |
| 24     | RQB         | 10       | 12        |
| 25     | RDS         | 10       | 11        |
| 26     | RAA         | 11       | 10        |
| 27     | RRS         | 11       | 13        |
| 28     | STP         | 11       | 12        |
| 29     | VPA         | 10       | 13        |
| 30     | ZAM         | 12       | 13        |
| T      | OTAL        | 324      | 357       |
| N      | <b>IEAN</b> | 10,8     | 11,9      |

| 1 able 4.11 | Tał | ole | 4.1 | 1 |
|-------------|-----|-----|-----|---|
|-------------|-----|-----|-----|---|

| Total Pre | -Test in | Control | Class |
|-----------|----------|---------|-------|
|-----------|----------|---------|-------|

|       |       | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
|       | 10    | 12        | 40      | 40            | 40                 |
|       | 11    | 13        | 43,3    | 43,3          | 83,3               |
| Valid | 12    | 4         | 13,3    | 13,3          | 96,7               |
|       | 13    | 1         | 3,3     | 3,3           | 100                |
|       | Total | 30        | 100     | 100           |                    |

From the table 4.11, it can be seen that there were various scores on teaching integrated English. There was 40% or 12 students got pre-test score 10, 43,3% or 13 students got pre-test score 11, 13,3% or 4 students got pre-test score 12, 3,3% or 1 student got pre-test score 13. Total frequency was 30 students or 100% got pre-test



scores 10, 11, 12, and 13. Based on the table 4.11, the histogram can be realized like in the pictuce 4.3.



From the picture above, it can be seen that Mean = 10.8 and Standard Deviation = 0.805. To determine the category of students' ability was good, medium, or low, the researcher made some score groups using the standard:

- a. Pre-test score less than Mean Standard Deviation (10,8 0,805 = 9,995) for category low.
- b. Pre-test score between Mean Standard Deviation (10,8 0,805 = 9,995) to Mean + Standard Deviation (10,8 + 0,805 = 11,605) for category medium.
- c. Pre-test score more than Mean + Standard Deviation (10,8 + 0,805 = 11,605) for category good.

From the results above, it can be seen the categorized are the pre-test score which is less than 9,995 is categorized as low, the pre-test score which is between 9,995 to 11,605 is categorized as medium, and the pre-test score which is more than 11,605 is

categorized as good. The categories score from the explanation above can be seen clearly in the table 4.12.

| Table 4 | 4. | 1 | 2 |
|---------|----|---|---|
|---------|----|---|---|

The Categorization of Students' Pre-Test in Control Class

| Number | Score                 | Frequency | Percentage | Category |
|--------|-----------------------|-----------|------------|----------|
| 1      | Less than 9,995       | 0         | 0%         | Low      |
| 2      | Between 9,99 – 11,605 | 25        | 83,3%      | Medium   |
| 3      | More than 11,605      | 5         | 16,7%      | Good     |
|        | Total                 | 30        | 100%       |          |

From the table 4.12, it can be seen that the pre-test score of teaching integrated

English in the experimental class was in a percentage of 83,3% category medium, and a percentage of 16,7% is category good.

|  |       |    | Table 4.1 | 3    |      |  |  |  |
|--|-------|----|-----------|------|------|--|--|--|
| Total Post-Test in Control Class                   |       |    |           |      |      |  |  |  |
| Frequency Percent Valid Percent Cumulative Percent |       |    |           |      |      |  |  |  |
|  | 10    | 3  | 10        | 10   | 10   |  |  |  |
| Valid  | 11    | 10 | 33,3      | 33,3 | 43,3 |  |  |  |
|  | 12    | 8  | 26,7      | 26,7 | 70   |  |  |  |
|  | 13    | 5  | 16,7      | 16,7 | 86,7 |  |  |  |
|  | 14    | 4  | 13,3      | 13,3 | 100  |  |  |  |
|  | Total | 30 | 100       | 100  |      |  |  |  |

From the table 4.13, it can be seen that there were various scores on teaching integrated English . There was 10% or 3 students got post-test score 10, 33,3% or 10 students got post-test score 11, 26,7% or 8 students got post-test score 12, 16,7% or 5 students got pre-test score 13, 13,3% or 4 students got post-test score 14. Total frequency was 30 students or 100% got pre-test scores 11, 12, 13, and 14. Based on the table 4.13, the histogram can be realized like the picture 4.4.

From the picture 4.4, it can be seen that Mean = 11,9 and Standard Deviation = 1,213. To determine the category of students' ability was good, medium, or low, the researcher made some score groups using the standard:

- a. Post-test score less than Mean Standard Deviation (11,9 1,213 = 10,687) for category low.
- b. Post-test score between Mean Standard Deviation (11,9-1,213 = 10,687) to Mean + Standard Deviation (11,9 + 1,213 = 13,133) for category medium.
- c. Post-test score more than Mean + Standard Deviation (11,9 + 1,213 = 13,133) for category good.



From the results above, it can be seen that the categorized are a post-test score that is less than 10,687 is categorized as low, a post-test score that is between 10,687 to 13,133 is categorized as a medium, and a post-test score that is more than 13,133 is categorized good. The categories score from the explanation above can be seen clearly in the table 4.14.

| The Categorization of Students' Post-Test in Control Class |                              |           |            |          |  |  |
|--|------------------------------|-----------|------------|----------|--|--|
| Number   | Score                        | Frequency | Percentage | Category |  |  |
| 1  | Less than 10,687             | 3         | 10%        | Low      |  |  |
| 2  | Between than 10,687 – 13,133 | 23        | 76,7%      | Medium   |  |  |
| 3  | More than 13,133             | 4         | 13,3%      | Good     |  |  |
| - F  | <u>' O N O I</u>             | RO        | GC         |          |  |  |

Table 4.14

|  | Total | 30 | 100% |  |
|--|-------|----|------|--|
|--|-------|----|------|--|

From the table 4.14, it can be seen that the post-test score of teaching integrated English in the control class was in the percentage of 10% is category low, a percentage of 76,7% is category medium, and the percentage of 13,3% is category good.

### C. Data Analysis

Data analysis is the process of checking and processing to convert it into useful information, get conclusions, and help in solving a problem. In the data analysis, there are two tests namely the assumption test and the hypothesis test.

#### 1. Assumption Test

In quantitative research, the assumption test is carried out before hypothesis testing because it is a statistical requirement that must be carried out by researchers. The assumption test is to find out whether the data being tested is normal and homogeneous.

## a. Normality Test

A normality test is used to determine whether the data is normally distributed or abnormally distributed. Normality assumption test aims to test a regression model, the independent variable, and the dependent variable. A good regression model is one that has a normal or close to normal data distribution. Data are tested against the null hypothesis that it is normally distributed. In this research, the researcher calculated the normality test using the Kolmogorov-Smirnov from the SPSS 23 program. The results of normal or abnormal calculations can be corrected with the Kolmogorov-Smirnov table at a significance level of 5% or 0.05. If the asymptotic significance score (2-tailed) is lower than 5%, it can be concluded that the data is normally distributed. However, if the asymptotic significance score (2tailed) is higher than 5%, it can be concluded that the data is abnormally distributed. Calculation of normality test data using the Kolmogorov-Smirnov program SPSS 23

can be seen in the table 4.15.

| Table 4.15 |  |
|------------|--|
|------------|--|

The Result of The Normality Test

| One-Sample Kolmogorov-Smirnov Test   |                   |                         |                          |                    |                     |
|--|-------------------|-------------------------|--------------------------|--------------------|---------------------|
|  |                   | Pretest<br>Experimental | Posttest<br>Experimental | Pretest<br>Control | Posttest<br>Control |
| Ν  |                   | 30                      | 30                       | 30                 | 30                  |
| Normal   | Mean              | 10,73                   | 11,80                    | 10,80              | 11,90               |
| Parameters <sup>a,b</sup>  | Std. Deviation    | 0,740                   | 1,215                    | 0,805              | 1,213               |
| Most   | Absolute          | 0,259                   | 0,201                    | 0,240              | 0,204               |
| Extreme  | Positive          | 0,259                   | 0,201                    | 0,240              | 0,204               |
| Differences  | Negative          | -0,241                  | -0,132                   | -0,198             | -0,129              |
| Test Statistic   |                   | 0,259                   | 0,201                    | 0,240              | 0,204               |
| Asymp. Sig. (2-tailed) 0,000 <sup>c</sup> 0,003 <sup>c</sup> 0,000 <sup>c</sup> 0,003 <sup>c</sup> |                   |                         |                          |                    |                     |
| a. Test distribution is Normal.  |                   |                         |                          |                    |                     |
| b. Calculated from data.   |                   |                         |                          |                    |                     |
| c. Lilliefors Si   | gnificance Correc | ction.                  |                          |                    |                     |

Based on the calculation table 4.15 showed that the asymptotic significance score (2-tailed) of the pre-test in the experimental class was 0,000 and post-test in the experimental class was 0,003. The asymptotic significance score (2-tailed) of the pretest in the control class was 0,000 and post-test in the control class was 0,003. It means that the asymptotic significance score (2-tailed) is less than 5% so that the data is normally distributed.

## **b.** Homogeneity Test

A homogeneity test is used to determine whether the data is homogeneous or not. In this research, the researchers calculated the homogeneity test using the SPSS 23 program. The calculation results are homogeneous or not homogeneous, can be corrected with the SPSS 23 program at a significance level of 5% or 0.05. If the significance value is higher than 5%, it can be concluded that the data is homogeneous. However, if the significance score is lower than 5%, it can be concluded that the data is not homogeneous.

|               | Table 4.16      |      |
|---------------|-----------------|------|
| The Result of | The Homogeneity | Test |

| Test of Homogeneity of Variance |                                      |       |   |        |       |  |
|---------------------------------|--------------------------------------|-------|---|--------|-------|--|
| Levene Statistic df1 df2 Sig.   |                                      |       |   |        |       |  |
|                                 | Based on Mean                        | 0,012 | 1 | 58     | 0,913 |  |
|                                 | Based on Median                      | 0,029 | 1 | 58     | 0,864 |  |
| Score                           | Based on Median and with adjusted df | 0,029 | 1 | 57,551 | 0,864 |  |
|                                 | Based on trimmed mean                | 0,010 | 1 | 58     | 0,919 |  |

Based on the table 4.16, it can be seen that the significance value is 0,913, 0,864, 0,864, 0,919, it means that the significance score is higher than 5% so it can be concluded that the data is homogeneous.

## c. Hypothesis Testing

Hypothesis testing aims to check whether the data collected supports certain statements or predictions. Researchers used the T-test on the SPSS 23 program to analyze between variables in the study. Ho is rejected and Ha is accepted if the t-test < 5% significant level, There is do significant different scores in teaching integrated English who are taught by using Problem Based Learning model. While Ho is accepted and Ha is rejected if the t-test > 5% significant level, There is no significant different scores in teaching integrated English who are taught by using Problem Based Learning model.

> Table 4.17 Paired Samples Statistics

|        |                       | Mean  | N  | Std.<br>Deviation | Std. Error<br>Mean |
|--------|-----------------------|-------|----|-------------------|--------------------|
| Doin 1 | Pretest Experimental  | 10,73 | 30 | 0,740             | 0,135              |
| Pair I | Posttest Experimental | 11,80 | 30 | 1,215             | 0,222              |
| Doin 2 | Pretest Control       | 10,80 | 30 | 0,805             | 0,147              |
| Pair 2 | Posttest Control      | 11,90 | 30 | 1,213             | 0,222              |

From the table 4.17, it can be seen that mean of the experimental class in pre-test 10,73 with standard deviation 0,740 and mean in post-test 11,80 with standard deviation 1,215. Mean of the control class in pre-test 10,80 with standard deviation 0,805 and mean in post-test 11,90 with standard deviation 1,213.

| Table 4 | 1.18 |
|---------|------|
|---------|------|

Paired Samples Correlations

|        |   | N  | Correlation | Sig.  |
|--------|---|----|-------------|-------|
| Pair 1 | Pretest Experimental &<br>Posttest Experimental | 30 | -0,100      | 0,600 |
| Pair 2 | Pretest Control &<br>Posttest Control           | 30 | -0,162      | 0,391 |

From the table 4.18, it can be seen that significant score of the experimental class was 0,600 with correlation 0,100 and significant score of the control class was 0,391 with correlation 0,162.

|  |                                      |   | Ta     | able 4.19              |  |        |        |                    |    |       |
|--|--------------------------------------|---|--------|------------------------|--|--------|--------|--------------------|----|-------|
|  | The Result of The Hypothesis Testing |   |        |                        |  |        |        |                    |    |       |
|  | Paired Samples Test                  |   |        |                        |  |        |        |                    |    |       |
|  | Paired Differences                   |   |        |                        |  | t      | df     | Sig.<br>(2-tailed) |    |       |
|  |                                      |   | Mean   | Std. Std.<br>Dev. Mean | 95%<br>Confidence<br>Interval of the<br>Difference |        |        |                    |    |       |
|  |                                      |   |        |                        |  | Lower  | Upper  |                    |    |       |
|  | Pair<br>1                            | Pretest Experimental –<br>Posttest Experimental | -1,067 | 1,484                  | 0,271  | -1,621 | -0,513 | -3,937             | 29 | 0,000 |
|  | Pair<br>2                            | Pretest Control –<br>Posttest Control           | -1,100 | 1,561                  | 0,285  | -1,683 | -0,517 | -3,859             | 29 | 0,001 |



From the calculation results in table 4.19, it is stated that the significant score (2-tailed) in the experimental class is 0,000 and in the control class is 0,001. It means that the significant score (2-tailed) is less than 0,05 so Ho is rejected and Ha is accepted because 0,000 <0,05. The result of calculating the hypothesis is that there is do significant different scores in teaching integrated English who are taught by using Problem Based Learning model.

## **D.** The Discussion And Interpretation

The purpose of interpretation is to answer the research problem or explain how the research objectives are achieved, interpret research findings, integrate research findings, modify existing theories or develop new theories, and explain other implications of research results including the limitations of research findings. To answer this goal, a discussion of the research findings is carried out using logic and linking them to existing theories.<sup>46</sup>

From the results of hypothesis testing conducted by the researcher, it is stated that there is do significant different scores in teaching integrated English who are taught by using Problem Based Learning model. As explained by Nurul Rafiqah Nasution and Edy Surya in chapter III that to achieve effective learning there are the following steps. In the first step, the teacher provides orientation and explanation to students about the material being taught, second, the teacher asks students to analyze a text to find meaning, third, the teacher makes student study groups, fourth, the teacher asks students to present their work in front of the class. Fifth, the teacher evaluates the learning process that has been carried out. With the above steps the researcher conducted research on the ninth grade students of MTs N 3 Ponorogo with a total sample of 60 students from the experimental class and the control class and this researcher focused to analyzed the message of a song by using

<sup>&</sup>lt;sup>46</sup> Fakultas Tarbiyah dan Ilmu Keguruan, *PEDOMAN PENULISAN SKRIPSI Fakultas Tarbiyah dan Ilmu Keguruan* (Ponorogo: IAIN Ponorogo, 2020), 28-29.

Problem Based Learning Model. When students have difficulty solving problems, with the guidance of the teacher, it will make it easier for students to find the right solution.

#### **CHAPTER V**

#### CLOSING

In this chapter, the researcher discusses the conclusion and recommendations of this research.

## A. CONCLUSION

The ability of students in English learning should be trained, one of which is to train their reading and speaking skills to be able to solve their problems and increase students' knowledge so that students become more active in learning. Therefore, the researcher was to examine whether there was a significant difference between the students who were taught by the Problem Based Learning model and those who were not taught by the Problem Based Learning model of the ninth grade students at MTs N 3 Ponorogo. The results of hypothesis testing state that there is a significant difference in scores in the teaching of integrated English learning taught using the Problem Based Learning model, in which the t-test value is higher than the t-table value (3.937 > 2.04841) and the significance level is <0.05 (0.000). The significance value (2-tailed) in the experimental class is 0.000 and in the control class is 0.001 meaning that the experimental class is effective applied teaching English learning for the ninth grade students at MTs N 3 Ponorogo. With this learning model, students are very enthusiastic to read and communicate with each other, because when students experience problems in solving problems, students will actively ask the teacher and with the guidance of the teacher, students can easily solve their problems. It is create an active learning environment in the class and the class becomes alive.

#### **B.** Recommendations

Based on the result above, the researcher gives some recommendations as follows:

#### **1. For English Teachers**

The teachers should be using an innovative and creative strategy for teaching English to students so that students don't feel bored, lazy, and confused in learning English. One way is that teachers can use and provide Problem Based Learning model to students because this model allows students to improve their thinking and creativity in solving problems. In addition, teachers must have preparation before teaching using the Problem Based Learning model.

## 2. For Students

The researcher hopes that the students will ask the teacher if they still do not understand the procedure of the Problem Based Learning model. Researcher hope that students will have great motivation to improve their knowledge.

## 3. For Readers

Researcher hope that the results of this study can be used as a reference or basic information to conduct further research. Researcher hope that this reference can be useful and increase understanding of the Problem Based Learning model for students' thinking.



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