



**INTEGRATION OF THE STUDENTS' ENVIRONMENTAL
AWARENESS AND ENGLISH PRODUCTIVE SKILLS IN
ENVIRONMENTAL LEARNING MODEL AT SMAN 1
GAMBIRAN BANYUWANGI**

**DISSERTATION
FULFILMENT THE REQUIREMENTS FOR OBTAINING
A DOCTORAL DEGREE**

BY

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**DOCTORAL PROGRAM OF ENVIRONMENT STUDIES
POSTGRADUATE PROGRAM
UNIVERSITAS BRAWIJAYA
MALANG
2019**



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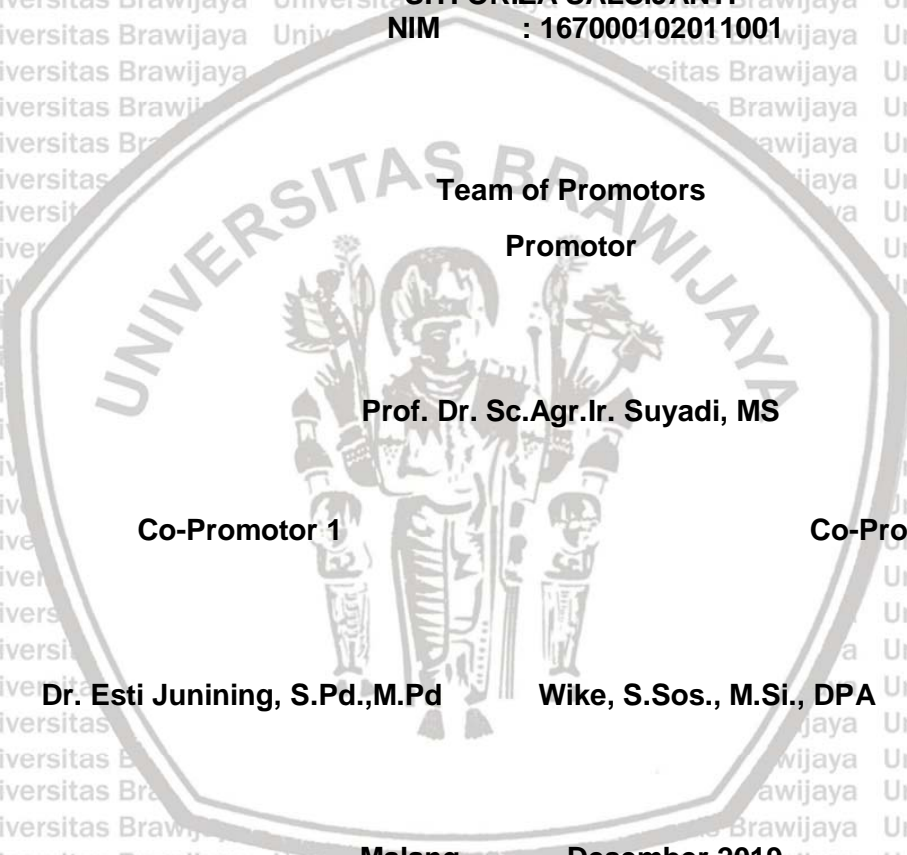
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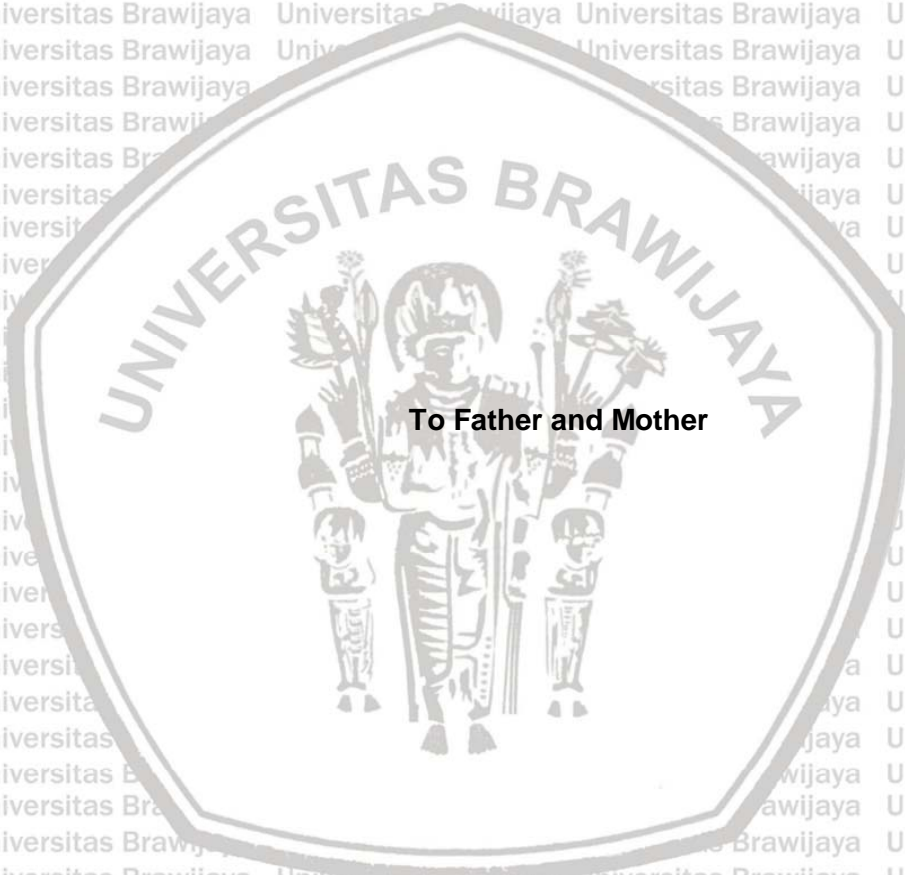
Motto

“What is not started will get never finished”





DEDICATION





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TABLE OF CONTENTS

| | Page. |
|--|-------|
| TITLE PAGE | |
| IDENTITAS TIM PENGUJI DISERTASI | i |
| PERNYATAAN ORISINALITAS DISERTASI | ii |
| MOTTO | iii |
| DEDICATION | iv |
| CURICULUM VITAE | v |
| ACKNOWLEDGEMENTS | vi |
| SUMMARY | vii |
| RINGKASAN | ix |
| TABLE OF CONTENTS | xi |
| LIST OF TABLES | xvi |
| LIST OF FIGURES | xix |
| CHAPTER I INTRODUCTION | 1 |
| 1.1 Background of The Study | 1 |
| 1.2 Research Problem | 13 |
| 1.3 Hypothesis | 13 |
| 1.4 The Objectives of Study | 14 |
| 1.5 The Significance of Study | 14 |
| 1.6 Limination of the Study | 15 |
| CHAPTER II REVIEW OF RELATED LITERATURE | 18 |
| A. Review of Literature | 18 |
| 2.1 Environmental Awareness | 18 |
| 2.2 Environmental Problem | 19 |
| 2.3 The Nature of Education | 20 |
| 2.3.1 Environmental Education | 22 |
| 2.3.2 Teaching Environmental Awareness | 23 |
| 2.4 Learning Models for Teaching Environmental Awareness | 24 |
| 2.5.1 Problem Based Learning | 25 |
| 2.5.2 Project Based Learning | 26 |



| | |
|---|-----------|
| 2.5.3 Discovery Learning | 28 |
| 2.5 Genres Taught on The Basis of 2013 Curriculum | 30 |
| 2.6 Hortatory Exposition | 31 |
| 2.7 Productive Skills | 34 |
| 2.8 Writing Skills | 34 |
| 2.9 Speaking Skills | 36 |
| 2.10 Campaign | 37 |
| 2.11 Relationship Among Students' Environmental Awareness, Parental Involvement, Community Involvement and School Environment | 38 |
| 2.12 Previous Studies | 41 |
| B. CONCEPTUAL FRAMEWORK | 57 |
| 2.13 Theoretical Basis | 57 |
| 2.14 Framework Concept | 75 |
| 2.15 Definition of the Research Variables | 79 |
| 2.16 Analytical Framework | 83 |
| 2.17 The Operational Framework of Research Implementation..... | 84 |
| 2.18 Research Novelty | 86 |
| 2.19 The Originality of Research | 86 |
| CHAPTER III RESEARCH METHODS | 88 |
| 3.1 Location of Research..... | 88 |
| 3.2 Design of Research | 88 |
| 3.3 Population, Sample, and Determinants | 89 |
| 3.4 Variables, Data, Instruments, and Sources of Data..... | 92 |
| 3.5 Method of Data Collection | 94 |
| 3.5.1 Writing Test | 94 |
| 3.5.1.1 Developing and Constructing the Test..... | 95 |
| 3.5.1.1.1 Developing Test Content Specification of the Test..... | 95 |
| 3.5.1.1.2 Writing The Test..... | 96 |
| 3.5.1.2 Teacher, Observer and Validator | 98 |
| 3.5.1.3 Validating the Test | 99 |
| 3.5.1.4 Revision | 100 |

| | |
|---|------------|
| 3.5.1.5 Writing Scoring Method | 100 |
| 3.5.1.6 Writing Pre-test | 103 |
| 3.5.1.7 Writing Post-test | 104 |
| 3.5.2 Speaking Test | 105 |
| 3.5.2.1 Speaking Scoring Method | 106 |
| 3.5.3 Questionnaire | 107 |
| 3.5.3 Observation Checklists | 114 |
| 3.5.4 Field Notes | 115 |
| 3.6 Method of Data Analysis | 115 |
| 3.6.1 Validity Test | 117 |
| 3.6.2 Realibility test | 118 |
| 3.7 Data Analysis Procedure | 119 |
| 3.7.1 Descriptive Statistical Analysis | 119 |
| 3.7.2 Regression Analysis | 120 |
| 3.7.3 Inferential Analysis: PLS Mediation Approach | 122 |
| 3.8 Research Schedule | 129 |
| CHAPTER IV RESEARCH FINDINGS | 131 |
| 4.1 Major Findings | 131 |
| 4.1.1 The Result of Posttest of The Experimental and Control Group | 132 |
| 4.1.2 Normality Test | 133 |
| 4.1.3 Measurement Model (Outer model / Measurement Model) | 136 |
| 4.1.4 Evaluation of Structural Models (Fit Model Test) ... | 139 |
| 4.1.5 Descriptive Analysis of Each Variable | 141 |
| 4.1.5.1 Overview of Motivation To Learn English | 142 |
| 4.1.5.2 Overview of Problem Based Learning (X1) | 144 |
| 4.1.5.3 Overview of Project Based Learning Variable (X2) | 146 |
| 4.1.5.4 Overview of Parental Involvement Variable (X3) | 147 |
| 4.1.5.5 Overview of School Environment | |



| | |
|---|-----|
| Variable (X4) | 150 |
| 4.1.5.6 Overview of Community Involvement | |
| Variable (X5) | 152 |
| 4.1.5.7 Overview of Environmental | |
| Awareness (Y2) | 154 |
| 4.1.5.8 Overview of English Productive Skills | |
| (Writing skill) Variables | 156 |
| 4.1.5.9 Overview of English Productive Skills | |
| (Speaking skill) Variables | 161 |
| 4.1.5.10 Overview of Environmental Learning | |
| Models (Z) | 164 |
| 4.1.6 Comparison Test (Quasi Experimental Design) | 164 |
| 4.1.6.1 Paired Test in Writing Test | 164 |
| 4.1.6.2 Paired Test in Speaking Test | 167 |
| 4.1.7 The Estimation Results and Hypothesis Testing | 170 |
| 4.1.7.1 The Results and Hypothesis Testing | |
| of Problem Based Learning (X1) | 171 |
| 4.1.7.2 The Results and Hypothesis Testing | |
| of Project Based Learning (X2) | 172 |
| 4.1.7.3 The Results and Hypothesis Testing | |
| of Parental Involvement (X3) | 173 |
| 4.1.7.4 The Results and Hypothesis Testing | |
| of The School Environment (X4) | 175 |
| 4.1.7.5 The Results and Hypothesis Testing | |
| of Community Involvement (X5) | 176 |
| 4.1.7.6 The Results and Hypothesis Testing of | |
| The English Productive Skills (Y1) | |
| and Environmental Awareness (Y2) | 177 |
| 4.1.7.7 The Target of Students' Learning | |
| Achievement | 179 |
| 4.2 Minor Findings | 181 |
| 4.2.1 Univariate Analysis | 181 |
| 4.2.2 Bivariate Analysis | 184 |
| 4.2.2.1 The Relationship Between Learning Motivation | |



| | |
|---|-----|
| and English Learning Outcomes | 186 |
| 4.2.3 The Students' attitude Towards PBL and PjBL | 187 |
| 4.2.3.1 The Students' General Impression of PBL and PjBL | 188 |
| 4.2.3.2 Good Things from PBL and PjBL | 188 |
| 4.2.3.3 Benefits of Learning Writing through Scaffolds and Revision..... | 189 |
| 4.2.3.4 Weaknesses of PBL and PjBL | 189 |
| 4.2.3.5 PBL and PjBL in the Teaching Productive Skills and Environmental Awareness | 190 |
| 4.2.3.6 Additional Comments for PBL and PjBL Implementation | 190 |
| 4.2.4 Findings of the Field Notes | 191 |
| CHAPTER V DISCUSSIONS | 193 |
| 5.1 Interpretation of Research Findings | 193 |
| 5.2 The Achievement of Student Learning Targets | 208 |
| CHAPTER VI RESEARCH IMPLICATIONS | 212 |
| 6.1 Theoretical Implications | 212 |
| 6.2 Practical Implications | 213 |
| CHAPTER VII CONCLUSIONS AND RECOMMENDATIONS | 215 |
| 7.1 Conclusions | 215 |
| 7.2 Recommendations | 216 |
| REFERENCES | 216 |
| APPENDICES..... | 230 |

LIST OF TABLES

2.1 The genres and their social function taught in Senior High School
(Depdiknas, 2013) 30

3.1 The Population of The Study 90

3.2 Nonrandomized Control Group, Pretest-Posttest Design 91

3.3 Variables, Indicators, and Data Sources 93

3.4 Research Instruments and Variables to Measure 94

3.5 Scoring Rubric of Hortatory Exposition Text Adapted from Hartfiel
et al (1985) 101

3.6 The Writing Pre-Test 104

3.7 The Writing Post-Test 105

3.8 The Speaking Test 106

3.9 The 2013 Curriculum Speaking Performance Assessment Rubric . 106

3.10 Questionnaire List..... 108

3.11 Questionnaire of Students' Attitude to PBL and PjBL 114

3.12 The Target of Students' Learning Achievement 115

3.13 Likert Scale ranking 117

3.12 Research Timetable 129

4.1 The Summary of Pretest 132

4.2 The Summary of Posttest 133

4.3 The Normality Test Results of Experiment Class and Control
Class Pretest Scores..... 133

4.4 The Normality Test Results of Experiment Class and Control
Class Posttest Scores 134

4.5 Mann-Whitney U- Statistical Hypothesis Test 135

4.6 Evaluation Summary of Measurement Models (Type B / Formative)..... 136

4.7 Coefficient of Determination 139

4.8 The Strength Level of Structural Models (Global Optimization)..... 140

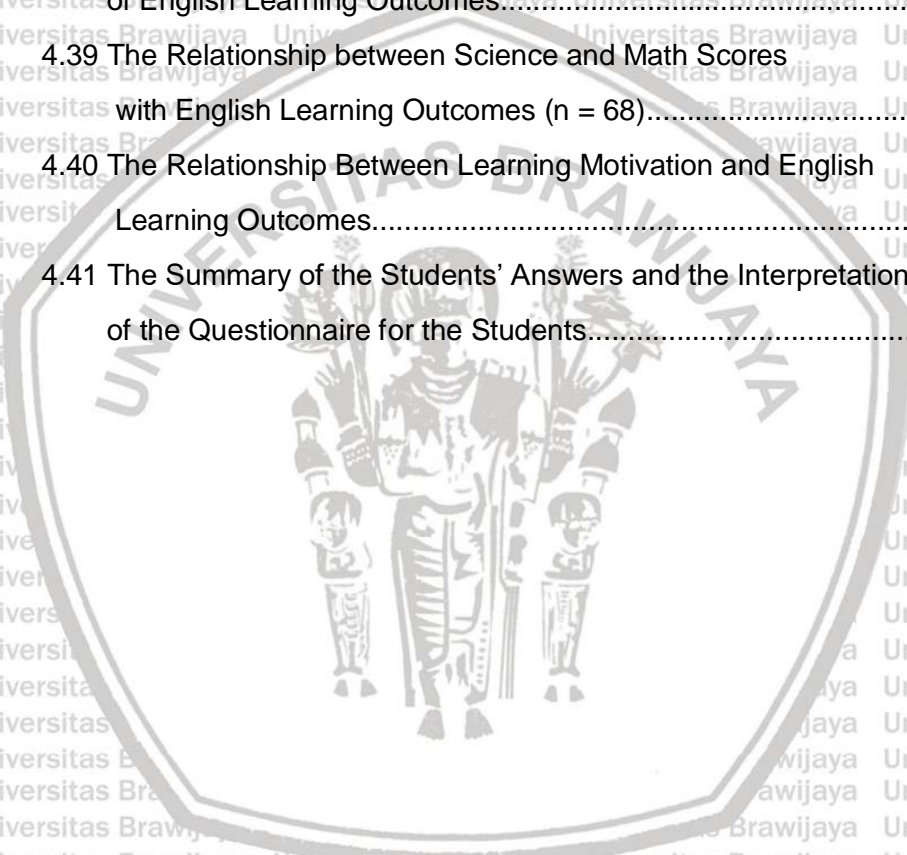
4.9 The Basic Interpretation of Indicator Scores in Research Variables..... 142

4.10 Distribution of Respondents' Responses on Motivation to



| | |
|---|-----|
| Learn English Variables..... | 142 |
| 4.11 Distribution of Respondents' Responses on Problem Based Learning Variable..... | 145 |
| 4.12 The Distribution Frequency of Respondents' Responses to The Project Based Learning Variable..... | 146 |
| 4.13 Distribution of Respondents' Responses on Parent Involvement Variable..... | 147 |
| 4.14 Parents' Job× English Learning Outcomes..... | 149 |
| 4.15 The Frequency Distribution of Respondents' Responses on School Environment Variable..... | 150 |
| 4.16 The Frequency Distribution of Respondents' Responses to Community Involvement Variable..... | 153 |
| 4.17 The Distribution of Respondent' Responses on Environmental Awareness Variable..... | 154 |
| 4.18 Frequency Distribution of Respondents in Content Indicators..... | 156 |
| 4.19 Frequency Distribution of Respondents in Organization Indicators..... | 157 |
| 4.20 Frequency Distribution of Respondents in Vocabulary Indicators..... | 157 |
| 4.21 Frequency Distribution of Respondents in Grammar Indicator..... | 158 |
| 4.22 Frequency Distribution of Respondents in Mechanics Indicator..... | 159 |
| 4.23 Frequency Distribution of Respondents in Fluency Indicator..... | 161 |
| 4.24 Frequency Distribution of Respondents in Content Indicator..... | 162 |
| 4.25 Frequency Distribution of Respondents in Grammar Indicator..... | 162 |
| 4.26 Frequency Distribution of Respondents in Diction Indicator..... | 163 |
| 4.27 Frequency Distribution of Environmental Learning Models..... | 164 |
| 4.28 The Summary of t-Test Between Experimental Class and Control in The Writing Test..... | 165 |
| 4.29 The Summary of t Test Between Experimental Class and Control on The Speaking Test..... | 167 |
| 4.30 The Estimation Results and Hypothesis Testing (Direct Effects).... | 170 |
| 4.31 The Target of Students' Productive Skills Achievement..... | 180 |
| 4.32 The Target of Students' Environmental Awareness Achievement.. | 180 |

| | |
|--|-----|
| 4.33 Overview of Science and Mathematic' Scores..... | 181 |
| 4.34 Students Frequency Distribution Based on Science and Math Scores..... | 182 |
| 4.35 Overview of Learning Motivation Skors..... | 182 |
| 4.36 Frequency Distribution of Students Based on Learning Motivation Scores..... | 183 |
| 4.37 Overview of Score in English Learning Outcomes..... | 183 |
| 4.38 Frequency Distribution of The Students Based on The Scores of English Learning Outcomes..... | 184 |
| 4.39 The Relationship between Science and Math Scores with English Learning Outcomes (n = 68)..... | 185 |
| 4.40 The Relationship Between Learning Motivation and English Learning Outcomes..... | 186 |
| 4.41 The Summary of the Students' Answers and the Interpretations of the Questionnaire for the Students..... | 187 |



LIST OF FIGURES

2.1 The three Elements of Environmental Awareness (Pertanen-Hartell et al, 1999) 58

2.2 The Research Framework 76

2.3 The Research Concept Framework 78

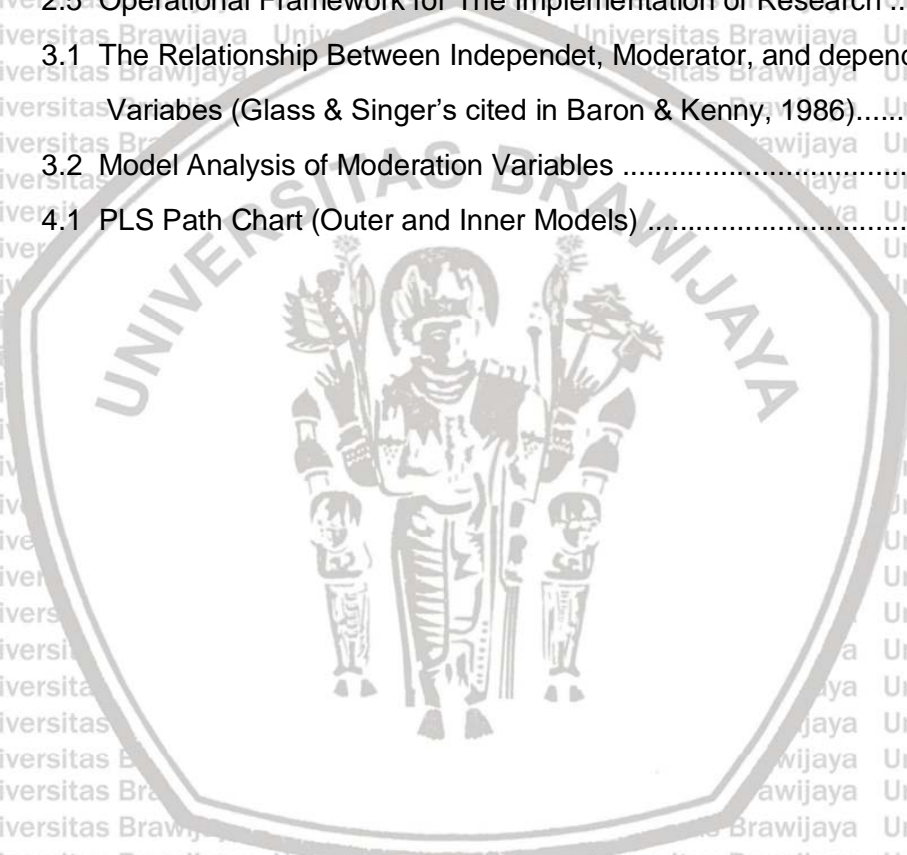
2.4 Data Analysis Framework 83

2.5 Operational Framework for The Implementation of Research 85

3.1 The Relationship Between Independet, Moderator, and dependent Variabes (Glass & Singer's cited in Baron & Kenny, 1986)..... 123

3.2 Model Analysis of Moderation Variables 129

4.1 PLS Path Chart (Outer and Inner Models) 179



CHAPTER I

INTRODUCTION

1.1. Background of the Study

Today the world is facing various environmental problems which are very difficult to solve; pollution, global warming, climate change, waste disposal, etc. In this case, without global rescue measures, the biosphere in which we live will be threatened to perish. Moreover, Jong (2017) stated that studies indicate that Indonesia may be the second-biggest contributor to marine plastic debris worldwide, with an estimated 1.3 million tons originating from the archipelago annually. Furthermore, Langenheim (2017) stated that in Indonesia, the company produces small scale products such as disposable shampoo packages and sweets. In addition, poor waste management infrastructure and scale of challenges have become a sharp focus. The most severely thing is during the rainy season, thousands of tons of garbage are dumped in rivers and waterways and spread on the coast of Indonesia.

Children and teenagers as part of the community, it is crucial for them knowing about environmental education that becomes a prominent role to fulfill the 21st century needs, since it solves environmental problem through matters that is in line to the needs and interest of community that makes us and future generations can enjoy the benefits of our natural heritage. Moreover, UNESCO also actively helped to frame the Education 2030 agenda which is encapsulated in Sustainable Development Goal number 4 (SDG 4). It is clear that education is important in the post-2015 development agenda, and to integrate and frame

education's role in strengthening sustainable development must be further explored. For effectively promotion these aspects, an international development goal on education must continue to support increasing of both educational access and attainment. This goal is to achieve essential improvements to the quality of education in order to catalyse the transformative learning needed for realising a sustainable future for all.

As stated in RI Laws No. 23 of 1997 about Management of Environment, the law states that the aim of environmental management is to achieve conformity, harmony, and continuity between human and the environment also to ensure the interest of the current and next generations. This matter is also stated in the joint decrees of the Minister of Education and Culture and the Minister of the Environment. Kep.07/MENLH/2005 and No.05/VI/KB/2005 decided environmental education done integration with existing subjects.

To implement these two ministerial regulations, school involvement is required. The role of the school here is to form the students' environmental awareness which is urgently needed. According to Cincera and Krajhanzi (2013), they stated that success in producing the desired or intended school program should help students to develop knowledge, attitudes and skills that are important for the obligation of environmentally responsible behavior. Furthermore, Palmar & Neal cited in Cruz & Tantengco (2017) stated that the school system has its segment in encouraging environmental care and education is a perfect institution for increasing environmental awareness and sharpening environmental skill. Since, the researcher is an English teacher, therefore the implementation of environmental education will be done in English subject.

Language as a media of communication is highly needed because it is considered as the most efficient medium in exchanging knowledge and information. Since English is used as an international language, it has an important role in both absorbing and exchanging information, science and technology. Therefore, it is necessary to teach environment education in English lesson because like what Babcook cited in Nkwetisama (2011) that successful language learning equally involves a successful combination of the micro and macro skills acquired into appropriate expressions of communication; and, environmental issues are rich subject matters of communication. According to, UNESCO (2005), establishments of instructor training have the one of a kind position in reorienting instructor education to tackle sustainability, and considering that institutions of instructor education fulfill integral function in the global education community; they have the possible to bring modifications inside instructional systems that will shape the expertise and skill of future generations.

To promote environmental education, since 2006, The Ministry of Environment and The Ministry Education joined together to make Sekolah Adiwiyata or Green School. This school aims to encourage schools to adopt behaviors that are respectful towards the environment. Through some programs, this school creates a caring school environment, supports the development of policies in the field of learning, facilities building such as development of renewable energy at school and development of a waste management system and environmental protection, creation of a healthy and clean school environment, furthermore the use of funds for activities related to solving environmental problems.

SMAN 1 Gambiran is not an Adiwiyata school and this school's brand is volleyball, where various school policies related to the achievement of this sport at the provincial and national levels. As for sports-oriented schools, they should provide space or a lot of places to produce oxygen for the athletes. Oxygen is produced by crops, so the presence of crops in this school is important. In addition, school cleanliness is also important to support healthy athletes. Therefore, the environmental awareness is needed in this school. But, based on the experience of researchers as a teacher at this school shows the students lack of environmental care. Most of them do not care about the cleanliness of class and school. Even the school has a sports brand. This statement is in line with Burke (2014) which states that the latest Mission Australia Youth survey released that week showed environmental degradation number 10 in the list of youth problems facing the nation, with only 12.3 percent from 15 to 19 years - children put it in their three main problems

Students as generations who will inherit nature must be aware of the environment in which they live. Unfortunately, most of the researcher's students do not care about this. They are more interested about Kpop, gadget, fashion, movie and many things except environmental. They do not pay attention if their class is not clean yet, how many papers or plastic glasses and botols they use. The writer believes that they also do not know whether the rivers near their house have been polluted or not.

Technological advances are changing the way we live. This societal shift is leading to more screen time for children. Nowadays, most children are interesting to do indoors activity, such as gaming, watching TV, etc. Actually, children should have the experience about nature before they can be requested

to keep our extra complicated environmental issues. It can not be denied that the role of parents are very important to form their youth conscious of the surrounding environment. Parents are the single-most influential effect in a child's life; the role of mother and father as educators, role models, and mentors is very importance. As society becomes more conscious of the risks that it has imposed upon the planet, the role of parents to educate adolescents about environmental stewardship become more important. Children need the opportunity to improve a private connection with nature. As a consequence, tomorrow's leaders should be outfitted for tomorrow's challenges. In order to avoid the destruction of the environment in where we live like the data from the news mentioned above.

Dealing with the teaching and learning process, there are four skills that should be taught in English teaching, one is receptive skills: listening and reading and another is productive skills: speaking and writing. Receptive skills mean students accept the language which is sent and translate the meaning to conceive the message. Productive skills mean students use the language that they have obtained then produce a message through words spoken or written form that they want others to understand. These four skills should be taught in an integrated way. However, we cannot deny that many students find that writing is difficult for them. Byre (1984) states that writing is difficult for students because they are required to write on their own without any interactive response or feedback either from peers or from the teacher.

This issue becomes worse since many teachers also provides less time for writing activities compared to activities for the other language skills. According to Crandall cited in Yangrifqi (2008), there are four reasons why a teacher is

reluctant to teach writing. The first is the large class that the teacher handles, which makes the teaching of writing is difficult. The second is that the teacher do not have enough time for teaching writing since it is time consuming. The third reason is that the teachers often underestimate the students' writing ability, especially the beginner students. The last reason is the teachers' lack of confidence of their own writing ability. They think if they do not have good ability in writing, they wonder how they could teach writing well. Because of these reasons, many teachers choose to neglect writing skills in teaching English, instead of finding effective ways to solve the problems.

Furthermore, some facts show that many teachers also provide less time for writing activities compared to activities for the other language skills. This condition is strengthened by the result of ETA (English Teacher Association), that is MGMP (Musyawarah Guru Mata Pelajaran), monthly meetings in Banyuwangi. Most of the teachers frankly said that they rarely teach their students writing since according to them writing is not beneficial for the students to pass the national examination (UN). Thus, they are more focus more on reading and mastering vocabulary. In line with the teachers reluctant, the duration of English lesson in 2013 curriculum is only 2 hours per week, in compared to 2004 curriculum, English lesson has 4 hours per week, while the subject matter (basic competency) should be taught is so many. This makes the teachers only have a short of time to teach writing whereas teaching writing takes time consuming.

The problems faced by students in writing that most of SMAN 1 Gambiran students lack writing skills, where their writing are unsatisfactory in many ways, ranging from poor grammar and syntax to unclear organizations. Besides that, the reason and arguments of their writing are also weak. The most difficult

problem is the fact that students' reading skills are also bad. For example, they cannot recognize the main idea of the argument in their reading, so they cannot develop these points in their writing. In addition, students' writings are not satisfactory in grammar and syntax. The organization of their writing is also unclear. These are the causes of weakness of the students' writing organization and writing contain.

According to Richards (2019), There are various reasons many students evade writing task. The primary reason could be one or more as follows: a) They have difficulty getting started because of too many tasks, b) They have need to concentrate to write and form essays c) They struggle to use various writing mechanisms, d) They are not efficient in finding the right words to express ideas, d) They strive to evolve their ideas well, e) They struggle to find their ideas while writing them on paper, f) They feel that the writing process is boring, g) They feel that their essays have never been change as they wish, h) They realize that their work is still careless although most of their time and effort is spent, i) They are dysgraphic, which causes a lot of struggle at the basic processing level, j) They are dyslexic, which causes their spelling to be very bad and disturbing automatically the mechanism of their writing.

Besides the teaching writing problem, teaching speaking is also a further problem in high school. We cannot deny that the speaking skill is still considered by the students as the most difficult skill to be mastered besides the writing skills.

Based on the writer's observation, most of the writer's students in senior high school can hardly use English for communicative objectives. When the students have already had a certain idea in their mind, they are stuck in expressing their idea orally. This problem may also exist because the students themselves are

reluctant to practice English. It is because of some aspects: 1) inhibition, 2) lack of idea, 3) low motivation and 4) preference to mother tongue use (Ur, 1996).

According to Nunan (2003), speaking and writing are considered as productive skills due to learners have a set of circumstances to produce the language itself. They implicate producing language rather than receiving it. We use the language that we obtained and produce a message through words spoken or written that we want others to understand. To realize the future goals and to overcome the problems above, some learning models used to teach environmental education which is appropriate with the opportunities for students to construct their knowledge through engaging in self directed inquiry, problem solving, critical thinking, and reflections in a real world context. There is an assumptions which believes on, if people become more concerned about the environment and related problems, in turn, they will become more aware, so that they are more compelled to act towards the environment in more liable ways (Fahlquist, 2008 cited in Aminrad et al, 2013). Furthermore, the results of Aminrad et al's study concluded that the most of students were often influenced by environmental issues had better perception about environmental subject (Aminrad et al, 2013).

Based on the problem above, to make the students realize that they should have responsibility to their environmental and to instill the values of environmental awareness. This conditionshould be instilled through a systematic and synergic education process by giving special attention in the form of educational curriculum nuanced environmental awareness for students from an early on. With this effort is expected to internalize environmental sustainability more real and bring goodness to the society, the researcher arranged two

learning models used to teach environmental education to make the students aware about their environments through the theme of environmental issues in learning activity: 1) problem based learning and 2) project based learning. These models are students centered pedagogy that students learn about a subject through the experience of solving problem.

According to 2013 Curriculum, Problem Based Learning (PBL) is a learning model design, so that students gain important knowledge which makes them capable at solving problems. While, Project-based learning (PjBL) is a learning model that is based on a constructivist approach, which includes the construction of knowledge with various perspectives in social activities, and generates self-awareness to learn and know (Duffy & Cunningham, 1996 cited in Tamim & Grant, 2003). Since SMAN 1 Gambiran is located in the countryside, all of the students live in the villages. Through problem based activity, the students are requested to find out the environmental problems in their village.

In 2013 curriculum, there are 5 phases in problem based learning that need to be done: 1) Problem orientation of the students problem. 2) Group organization. 3) Group supervision. 4) Group presentation and 5) Problem solution process. After, the students have finished the three phases, they should present their work and then collect it as a report paper.

To engage and strengthen the students on environmental awareness, the writer arranged project based learning through environmental campaign. They were assigned to carry out campaigns about reducing plastic waste on the X and XII grade classes, based on the study by Jong in The Jakarta Post, 2017.

According to 2013 curriculum, there are 6 stages in project based learning that

need to be done: Stage 1 (Starting with essential questions), Stages 2 (Designing a project), Stages 3 (Creating schedule), Stages 4 (Monitoring the students and the progress of project), Stage 5 (Assessing the outcome), and Stage 6 (Evaluating the experience).

According to the syllabus of the 2013 Curriculum for Senior High School, there are 11 text types that need to be taught: recount, descriptive, narrative, report, analytical exposition, explanation, hortatory exposition, news item, discussion, procedure and review. The distribution of the teaching of the texts are: in the first semester of grade X, the students are taught descriptive and recount, while in the second semester, they are taught narrative and report. In the first semester grade XI, the students are taught analytical exposition and narrative, while in the second semester, they are taught explanation and hortatory exposition. In the first semester grade XII, students are taught news item and discussion, in the second semester, they are taught procedure and review.

Among those text types, the most suitable text that can teach environmental awareness through environmental issues such as water, air and land pollution is a hortatory exposition text. Hortatory exposition is a piece of text that presents one side of an issue (Anderson & Anderson, 1997). The purpose of this text is to persuade audiences (listener/reader) that something should or should not be the case or be done (Depdiknas, 2013).

The hortatory exposition text has three text organizations. They are thesis, arguments, and recommendations (Depdiknas, 2013). It has specific language features as follows: 1) The use of words that show the author's attitude

(modality). 2) The use of words that express feeling (emotive words) and 3) The use of words to link cause and effect (Anderson and Anderson, 1997).

Furthermore, Anderson and Anderson (1997) state that the schematic structures of a text are the steps for constructing a text and it can be put in a diagram. It is called a scaffold or a guide for constructing a piece of text.

According to Bramer and Sedley (1981), asking question is a good method to discover details of experience and one of the best ways to discover ideas. It is useful in narrowing down a broad subject of a manageable topic and in discovering what to say about topic. Furthermore, the results of Dewi study shows that the teacher faced some benefits, those are connecting students' prior knowledge to new concept, engaging students' attention, minimizing the level of students' confusion, and building students' self-confidence in providing scaffolding in teaching writing News Item text (Dewi, 2013). In this study the researcher modifies both theories by explaining the text structures into questions to ease the students ability to write every element of hortatory exposition text. In the hope that writing lessons are no longer confusing but exciting and fun. The scaffolding of a hortatory exposition will be used in this research as follows:

The first paragraph of hortatory exposition is Thesis. There are three questions to build the Thesis, 1) What is the problem in your environment? 2) Where does it happen? 3) How do you feel about that?

Furthermore, the second paragraph is First Argument. To write the First Argument, there are four questions, 1) What do you know about the problem? 2) Does the problem harm to the people surrounding? 3) What is the evidence that you get from it? And 4) What is the impact to the people/villagers?

For the Second Argument, there are two questions, 1) What is another impact caused by the problem? And 2) What is the evidence you get from it? The fourth paragraph is the Third Argument. In this argument, there are two questions, 1) What is the worst impact caused by the problem? 2) What is the evidence you get from it?

The last paragraph is Recommendation. For Recommendation, there are five questions, 1) How do you feel about the problem? 2) What should you do to face the problem? 3) How many solutions do you have to overcome the problem? 4) What are they? (If any) 5) How the people/villagers feel after that? (See appendix 1)

After the students learned problem based learning model where the students conducted surveys to look for environmental problems in their village. Next assignment was project based learning model where the students were assigned to carry out campaigns in class X and XII with the theme Reducing Plastic Waste at School (See appendix 2).

School efforts to establish students to care and protect the environment through various lessons and methods are mostly done by schools that also care about the environment. There is a theory that assumes that the degree to which students understand that the context of the school is to meet their psychological needs and determines the level of student involvement in school. Furthermore, in the self-system approach, school involvement is also hypothesized to be soft and responsive to the interactions between individuals and the learning environment.

(Connell, 1990; Skinner & Belmont, 1993 as cited in Wang & Helcombe, 2010). All efforts are made by schools and teachers, to improve students' learning

motivation and concern for their environment, but it is undeniable that the greatest motivation lies in the students themselves that formed from the families in which they are raised. Furthermore, it is undeniable that the existence of a society or community where the students live and interact affects a little awareness of the students' environment and their learning motivation.

Based on the problems faced by the SMAN 1 Gambiran students, the researcher solved the problem by conducting an experimental study and a combination of problem based learning and project based learning were implemented to examine their effectiveness. In addition, the researchers also described the relationship between parents involvement, community involvement school environment and community involvement on the students' environmental awareness. At the end of the result was a new environmental learning method in English lessons. Therefore, a quantitative descriptive study entitled "Integration of the Students' Environmental Awareness and English Productive Skills in Environment Learning Model at SMAN 1 Gambiran Banyuwangi" was conducted.

1.1 Research Problems

According to the background above, the problems of the study are elaborated as follows:

- 1) How is the effect of Problem Based Environmental Learning on the students' environmental awareness and writing skills?
- 2) How is the effect of Project Based Environmental Learning on the students' environmental awareness and speaking skills?
- 3) How is the environmental learning model appropriate to increase students' environmental awareness?

1.2 Hypotheses

In order to answer the research questions, the research hypothesis related to the problem is formulated as follows:

1) $H_{1.1}$: there is an effect of problem based learning on the students' environmental awareness and writing skills.

H_0 : there is no effect of problem based learning on the students' environmental awareness and writing skills.

2) $H_{1.2}$: there is an effect of project based learning on the students' environmental awareness and speaking skills.

H_0 : there is no effect of project based learning on the students' environmental awareness and speaking skills.

1.3 Objectives of the Study

Based on the research problem above, the objectives of this study are to identify, explain, measure and analyze as follows:

1) whether there is a significant effect of the students who are taught by using problem based learning on their environmental awareness and writing skills;

2) whether there is a significant effect of the students who are taught by using project based learning on their environmental awareness and speaking skills; and

3) develop environmental learning model which is appropriate to increase the students' environmental awareness.

1.4 Significance of the Study

According to Collins dictionary (2018), practical is related to the application of knowledge for useful purposes, rather than with theory, speculation, estimation etc. While, scientific according to Merriam-Webster dictionary is carried out by means of science or in accordance with the results of investigations by science. The result of this study is expected to have both theoretical and practical contribution especially for English teachers and other researcher. For the English teachers, the process of this research would provide them with an alternative technique to teach environmental awareness. Other researchers, especially who are interested in teaching environmental education are expected to replicate the process focusing on other text types and level of the students.

According to Collins dictionary (2018), policy is a set of ideas or plans that are used as a reference for making decision or judgment, mainly in politics, economics, or business. This research is also expected to contribute the idea to the education policy, especially environmental education in English lesson in schools. Since, only a little matter discussed about environment in English lesson in high school.

1.5 Limitation of Study

This study is conducted under the following limitation:

- 1) This study was conducted mainly for the experimentation of the implementation of problem based learning and project based learning in the teaching of hortatory exposition writing and speaking. A combination of scaffolds

and survey (PBL) in writing and campaign (PjBL) as a one package in teaching students' productive skills is believed to be more effective than the conventional method in helping the students develop their productive skills.

2) Related to the hortatory exposition text, this study concerned in thesis, arguments and recommendation about environmental problems that students got in their village and Reducing Plastic Wastes in School as the topic of students' campaign.

3) As it has been described earlier, that the objectives of the study are to identify, explain, measure and analyze the effect of problem based learning on the students' environmental awareness and writing skills and the effect of project based learning on the students' environmental awareness and speaking skills.

Thus to know whether the students have matched with the objective of the study, the target of students' learning achievement is presented in the following table.

Table 1.1 The Target of Students' Learning Achievement

| No | Aspects | Aspect | Target |
|----|--------------|---|--------|
| 1 | Cognitive | The students writing score reach above 75 in a 0-100 scale. | 70 % |
| | | The students speaking score reach above 75 in a 0-100 scale | 70 % |
| 2 | Affective | The students use drinking bottles brought from home | 50 % |
| | | The students already throw garbage in the proper places. | 50 % |
| 3 | Psicomotoric | The students writing score reach above 75 in a 0-100 scale. | 70 % |
| | | The students speaking score reach above 75 in a 0-100 scale | 70 % |

4) Only four classes of the eleventh graders of State Senior High School of 1 Gambiran in the academic year 2018/2019 who are selected by SMAN 1

Gambiran, Banyuwangi are chosen as the subjects. Two of the classes XI MIPA 1 and XI MIPA 4 were the experimental/treatment groups and the other XI MIPA 2 and XI MIPA 3 as the control groups.

5) The study was conducted within the first semester of 2018/2019 academic year. For the consideration of this study, the experiment was conducted within a period of two months or 8 meetings.

6) There are many effects on using certain media and technique in the classroom on the students. However, this study concentrates on investigating the effectiveness of problem based learning and project based learning in terms of students' environmental awareness and achievement. This study also deals with parental involvement, school environment and community involvement, this study measured the findings statistically based on the students' answers in the questionnaires with the linkert scale and the observation during the process of treatment.

CHAPTER II

REVIEW OF RELATED LITERATURES

A. Review of Literature

This part presents the review of literatures. It covers 10 major sections: environment awareness, environmental problem, environmental degradation, the nature of education, learning models to teach environmental awareness, genres taught in the basis of 2013 curriculum, hortatory exposition text, campaign, relationship between students' environmental awareness, parental involvement and school environment and the last, previous studies.

2.1 Environment Awareness.

We live in the environment where it encompasses all living and non-living objects and we use all the environmental resources like air, water and land to fulfill our needs. According to Merriam-Webster dictionary, environment is the circumstances, objects, or conditions by which one is surrounded (Merriam and Webster, 2017). Environment is a great important component in our life but sometimes we ignore it. We know that all human activities have an impact to the environment but we only realize it, if we are in peril. As stated by Maulidya et al, that lack of people environment awareness makes the environmental problem more complicated (Maulidya et al, 2014). When we exceed the carrying capacity of the environment, it creates a serious problem of environment degradation.

Therefore, we need to create awareness to protect our environment. Awareness is the behaviour of someone who voluntarily obeys all the rules and aware of his duties and responsibilities (Hasibuan, 2012), whereas Neolaka cited in Basahona

(2015), stated that environmental awareness is the soul's awakening state in terms of the environment, and can be seen in the actions and behavior of each individual.

Awareness of various environmental problems is needed especially for students, who will become the foundation of our future. Sustainability is not possible without awareness of the environmental situation and actions and also improvements accompanied by training (Freire, (1972) cited in Cruz & Tantengco, 2017). Furthermore, Ajzen (1991) & Sengupta et al (2000) stated that Environmental awareness has many meanings that accommodate various disciplines about the environment but also attitudes and will, trusted values, and various skills needed to solve problems related to the environment, as responsible global citizens(Sengupta et al (2000) cited in Cruz & Tantengco, 2017).

2.2 Environmental Problem

In our lives, we are given so many things like water, air, and land, which are very important for our lives. We can't even live without it. The air helps us breathe, water can be used for drinking, washing, etc. Land is the substance that we step on and we have it in very large quantities. Therefore, in fact, we will never lack them, water, air and land that really have a big role in human life from our ancestors to our descendants.

As time goes by, we live in an era where people think that life is not enough with just natural elements, people need a lot of high-tech equipment and most are made of chemicals and electronics. With that, life looks easy. We can

reach many places and life becomes easier. It all makes us feel that everything is in human hands.

However, some of them can be dangerous pollutants for us and for our earth. Pollutants are the designation that causes pollution, the entry of contaminants into the natural elements. Pollutants can be formed as chemicals such as pesticides. Many farmers use pesticides excessively to keep pests away from their crops without thinking about their effects on the soil and plants. Finally, it causes contamination and damage for the environment. Environmental problem is a complex problem, and students face it in their daily life around their schools and neighbourhoods. According to Tapilow (2017), study in two Junior High School in Bandung, they resume that there are seven environmental problems from the students' perception : flood, cigar smoke, burning garbage, vehicle emission, polluted river, garbage strewn and industrial emission that occur around the students.

2.3 The Nature of Education

In the past, education was aimed at preparing people to find work, and this is still a major component of education. Today in the 21st century, education also teaches people about the world in which they live, which allows them to understand and appreciate their lives and how to interact with others. Apart from that education helps people make informed decisions, and also learns about critical thinking skills while at school, which helps them make better decisions.

Rabindranath Tagore in Parankimalil (2012) stated, education opens the human mind which gives inner awareness so that it can find the highest truth and love which gives importance to life. Weather, Dewey (1916 quoted in Parankimalil

2012) states that Education is a process of experience. Because life is growth, education means helping inner growth without being limited by age. The growth process is the process of adjustment for each phase and adds to the development of one's skills. Like the meaning of education, so it is very complex.

The basic nature of education is:

a) Education is a lifelong process- Education is a lifelong process because every stage of a person's life is important from the point of education,

b) Education is a logical, orderly process and forms a comprehensive system - referring to its various activities through systematic institutions and regulations,

c) Education is an individual and community self-development - referring to the social empowerment of the community, which influences the improvement of the quality of society in every aspect, d) Education is a modification of human

behavior - Modified and enhanced through the educational process, e) Education

is training - the human senses, thoughts, behaviors, activities; skills are trained in ways that are socially constructive and desirable, f) Education is an order and

direction - referring to the direction and instructions to improve the abilities and personality of students, g) Education is a living soul - referring to education for life

is what distinguishes humans from animals, h) Education is the rebuilding of sustainable self-experience - According to the definition of education John Dewey reconstructs and transforms our experience in a socially desirable direction. i)

Education is the strength and treasure in man through which he has the right to be the highest ruler on earth (Dewey cited in Parankimalil 2012).

Therefore, the role of education is innumerable for society and mankind. It is important for every community and every nation to provide their citizen with prosperity, happiness and comfortness.

2.3.1 Environmental Education

Environmental education is a learning process that intends to expand individual information and attention about natural problems and how to overcome these difficulties. In addition, education instills trust and fosters attitudes, inspiration, and responsibility for solving various environmental problems and educating students to make appropriate environmental movements in the fields they are working on (Rinkesh, 2009).

Based on the Tbilisi Declaration (1977), there are five environmental education objectives:

- 1) Awareness - to assist social groups and individuals gain awareness and sensitivity to the total environment and allied problems.
- 2) Knowledge - to assist social groups and individuals gain a variety of experiences in, and gain a basic understanding of, the environment and related issues.
- 3) Attitude - to assist social groups and individuals obtain various values and a sense of caring for the environment and self-motivation to participate actively in the improvement and protection of the environment
- 4) Skills - to assist social groups and individuals acquire skills to identify and solve environmental problems.
- 5) Participants - to provide opportunities for social groups and individuals to engage passionately at all levels at work to solve environmental problems.

2.3.2 Teaching Environmental Awareness through Ecolinguistics

In the era where more and more children are disconnected from the nature, whether in their hands we will inherit this planet, we need a movement that make them aware and care about environmental problems to grow the next generation of conservation leaders. The answer to that anxiety is environmental education. As Cambell (2016) stated that environmental education provides important opportunities for students to become engaged in real world issue that transcend classroom walls. They can relate their classroom studies to the complex environmental issues comforting our planet and they can acquire at once the skills they'll need to be creative problem solvers and powerful advocates. Furthermore, Duncan (2010, cited in PLT Blog, 2016), stated that in the second decade of the 21st century, preparing our students to be good environmental citizens is some of the most important work we can do. It is for our children, and the next generation.

There are many people think seriously about environment and aware of the consequences of not going green. When a teacher helps students to understand the importance of saving our resources and protecting the environment, children will carry those green values into adulthood. With a little help from teachers and other adults who care, these kids are going to change the world we live in for the better (Newingham & Beth, 2015).

In language teaching a new science emerged that taught the concept of the environment, namely ecolinguistics. This branch of linguistics was pioneered by Einar Haugen, he defined language ecology as a study of interactions between certain languages and their environment (Haugen, 1972 cited in

Nordquist, 2019). Moreover, Fill (1999) in Dash (2019) stated language can play a role in the development and possibility of providing solutions to ecological and environmental problems. Furthermore, Dash (2019) stated that ecolinguistics is applied linguistics that studies discourse that is beneficial or unfavorable for the survival of the Earth.

2.4 Learning Models for Teaching Environmental Awareness

According to UNESCO, Environmental education could be a approach of implementing the goals of environmental protection. it's not a separate branch of science however long knowledge base field of study. It suggests that education towards protection associated improvement of the atmosphere and education as a development tools for rising the standard of lifetime of human communities.

Traditional teaching and learning is that the method of the transmission of information from teacher to student. it's primarily a unidirectional method. This pedagogy will hinder the event of individual student's active and inventive talents, and students United Nations agency expertise solely this model of education might not be thought-about comfortable for the wants of a future educated group.

The opposite of ancient teaching is artistic movement that essentially discuss a theory concerning however students learn. creative person theory has been one among the most recent catchwords in instruction circles in recent years. It not solely emphasizes active and cooperative learning, however additionally needs students and academics to find and construct information along.

There are some learning methods such as Problem based Learning, Project Based Learning, and Discovery Learning considered as a constuctivist

based learning. They are suitable to teach environmental education that contains environmental issues that students as the citizens face every day.

2.4.1 Problem Based Learning.

Problem primarily based learning (PBL) is associate educational methodology of active, case active learning focused on the investigation and backbone of untidy, hospital real-world issues. (Barrows, 1986). According to Tan (2003), PBL is associate innovation in learning, as a result of in PBL, students' thinking ability is optimized through a scientific cluster or team work method so students will empower, sharpen, check and develop their thinking ability continuously (Tan, 2013 cited in Febriasari & Supriatna, 2017).

In line with Barrows and Tan, Deville (2012) defines PBL as a pedagogical strategy uses open ended / ill –structured problems that mirror real world problems. The authenticity of the problems help students to transfer their knowledge and skill beyond the classroom to prepare them for the workplace and life in rapidly changing world. The open ended nature of problem gives students the flexibility to approach it from different angles, to take different thematic sideliness according to their personal interest. This gives them control of the learning process, capturing their interest and motivating them to learn. Furthermore, according to the activity theory of learning portrays learning as the process of actively interacting with environment. Tools are used to mediate between the students and their learning goals (Barab 2004, as cited in Devilee, 2012).

According to Pannin (2001) there are eight stages in PBL, namely: (1) identify problems, (2) collecting data, (3) analyzing the data, (4) solve problems

based on existing data and analysis, (5) choose how to solve the problem, (6) plan the implementation of problem solving, (7) tested a set of plans, and (8) action to solve the problem.

2.4.2 Project Based Learning.

Project-based learning (PjBL) is a teaching model which is based on the constructivist approach to learning, which entails the construction of knowledge with multiple perspectives, within a social activity, and allows for self-awareness of learning and knowing while being context dependent (Duffy & Cunningham, 1996 cited in Tamim & Grant, 2003).

Thomas (2000, cited in Tamim & Grant 2003) establishes five criteria for PjBL: projects must be central to the curriculum, focused on problems that encourage students to struggle with key concepts, engage the students in constructivist inquiry and realistic. Furthermore, Grant (2002) discusses that common features to PjBL implementation are an anchor of the activity, a task, an investigation, provision of resources, scaffolding, collaboration, and opportunities for reflection and transfer.

Project Based Learning is carried out based on existing questions and problems and is realized through projects or student assignments. The curriculum in higher education, encourages students to be independent by applying the concepts learned, developing them, and producing useful outcome. But no doubt, sometimes the topics raised by students are too broad and after going through discussions and studying the material, then students can use simpler topics. Then students identify subtleties that were previously unknown. In general, the limitations of assignments in PjBL are broader than assignments in conventional

classes but their application can spend a lot of time in one semester, but all depend on the teacher's pedagogical goals so that students understand the concept of learning.

There are several characteristics possessed by PjBL activities:

- a) Starting with student questions that will become the main concept.
- b) Investigations that build knowledge must be passed by students, so students can understand the learning objectives to be achieved
- c) Students as the center of the project and the teacher acts as a guide and facilitator
- d) Projects must be based on facts and be useful to students in the future
- e) There is an assignment through a process, and produce a product, in the end students and teachers reflect on it.

If we learn project-based learning in the most general way, we can divide it down into the following nine steps:

- 1) The teacher-coach sets the stage for students with real-life samples of the projects they will be doing.
- 2) Students act as project designers, possibly creating a forum for display or competition.
- 3) Students discuss and gather background information needed for their designs.
- 4) The teacher and students negotiate the criteria for evaluating the projects.
- 5) Students gather the materials necessary for the project.

- 6) Students create their projects.
- 7) Students prepare to present their projects.
- 8) Students present their projects.
- 9) Students reflect the method and assess the project.

2.4.3. Discovery Learning

Bruner (1966, cited in Ikhsanudin, 2014) stated Discovery Learning can be defined as a learning in which students are not presented with the final subject matter, but students are asked to search and find it themselves. Discovery Learning is a method of Inquiry-Based Instruction learning. This theory encourages students to build on past experiences and knowledge, use their intuition, imagination and creativity, and find new information to find facts, correlations and new truths. Learning is not the same as absorbing what is said or read, but actively seeking answers and solutions.

There are 5 stages of Discovery Learning Model as follows:

Stage 1: Problem Solving.

Instructors/teachers should guide and motivate learners to seek for solutions by integrating existing and newly acquired information and simplifying knowledge. In this way, students are the power behind learning, play an active role and build wider applications for their skills through activities that encourage risk, problem solving and inquiry.

Stage 2: Learner Management.

Instructors should allow participants to work either alone or with others, and learn at their own pace. This flexibility makes learning the exact opposite of a static sequencing of lessons and activities, relieves learners from unnecessary stress, and makes them feel they own learning.

Stage 3: Integrating and Connecting.

Stage 4: Information Analysis and Interpretation.

Instructors/teachers must teach students how to combine old knowledge with new ones, and promote them to touch to the real world. Learning steps known by the students form the basis of new information, promoting students to expand what they know and create something new.

Discovery Learning is oriented towards the learning process and not content based, and it refers to the idea that learning is not just a collection of facts. Students are trained to learn, analyze and interpret the information obtained, rather than memorizing the correct answer.

Stage 5: Failure and Feedback.

Learning does not only happen when we find the right answers. It also happens through failure and mistake. Discovery learning does not refer on the right end result, but new things that students find in the process. And that is the teacher's awareness and obligation to provide feedback, because without it learning is incomplete (Bruner, 1961 as cited in Papas, 2014)

The discovery learning education session must be well designed and interactive. The instructor/teachers must use various efforts like games, stories or

videos and other interesting techniques that will build interest, curiosity, and guide students in new ways of thinking, acting, evaluating and reflecting.

The methods used in Discovery Learning can be different, but the aim is always similar, so that students can achieve the final results themselves. By exploring and controlling situations, trying to answer questions and controversies, or doan experiment, students will tend to remember concepts and knowledge that has just been obtained.

2.5 Genres Taught on the basis of 2013 Curriculum

Principally, genre is considered as a text type (Christy, 1990, as cited in Yangrifqi, 2008). Anyhow, Christie and Rothery (1994, as cited in Emilia, 2005) define genre as staged, goal-oriented social process. They define genres as goal oriented because each genre has its specific goal that people should achive. Moreover, they also define genre as staged because it usually takes several stages for people to achieve their goals. In other words that genres are not just text types, but when we are looking at genres, we are interested in their way to achieve the social perpose that they usually do in several steps. The following are the genres presented alphabetically and their social functions that should be taught in 2013 curriculum for senior high school students.

Table 2.1 The genres and their social function taught in Senior High School (Depdiknas, 2013)

| GENRES | SOCIAL FUNCTION |
|-----------------------|--|
| Analytical Exposition | To persuade the reader or listen that something is in the case. |
| Descriptive | To describe a particular person, place, or thing. |
| Discussion | To provide at least two different points of views about an issue |

| | |
|----------------------|---|
| Explanation | To explain the process happen in the formation or activity related to natural or social-cultural phenomenon. |
| Hortatory Exposition | To convince the reader or listener that something should or not should in the case |
| Narrative | To amuse/entertain and to relate with actual vicarious experience in different way |
| News Item | To inform the readers, listeners, or viewers about events of the day which are considered important or newsworthy |
| Procedure | To describe how something is achieved through a series of actions or steps |
| Recount | To retell events for the aim of informing or entertaining |
| Report | To describe the situation about natural man-made and social phenomena in our environment. |
| Review | To give critique to an event or artwork for public audiences |

This study focuses on hortatory exposition, this genre is presented remaining part of this section.

2.6 Hortatory Exposition

Genre is usually defined as text type. According to 2013Curriculum, there are eight genres that should be taught to senior high school students. They are analytical exposition, descriptive, hortatory exposition, narrative, news items, procedure, recount, and report. In fact, there are only 4 out of 8 genres which are taught in the second grade of senior high school: analytical exposition (semester 1); procedure, report, and hortatory exposition (semester 2). Since this study focuses on the genre of hortatory exposition, further elaboration of hortatory exposition is presented below.

In general, the term exposition refers to the genre whose social purpose is to argue (or persuade) a case or against a particular point of view or position.

Hortatory exposition is a text type whose purpose is to persuade readers that

something should or should not happen (Depdiknas, 2013). It means that a writer is using hortatory exposition when he/she wants to persuade readers to do something concerning a particular case. To arrive at this point, the writer needs to recommend something for the readers to do. In line with that, Martin (1985), as cited in Maria (2008) stated that hortatory is made to convince people to do something. If the term analytical suggests that the text have the function of convincing the readers that the thesis is well formulated, the term hortatory then suggests that the function of the text is to persuade the reader to do what the thesis recommends.

The generic structure of hortatory exposition consists of thesis, argument, and recommendation. Thesis consists of announcement of the issue concern and writer's position. The argument consists of point of view and elaboration. The point of view is used to redefine the main argument in the thesis. The writer gives elaboration by developing and supporting each point/argument. In the recommendation part, the writer gives recommendations about what should or should not to do. To made a writer easier to write a hortatory exposition she need scaffold, according to Anderson and Anderson (1997), exposition scaffold is a schematic formed by the three steps. The steps for constucting an exposition scaffold are:

1) An introductory statement

The author's point of view is called the thesis of the argument and this is given in the introduction. The introduction can include a preview of the arguments that will follow in the next section of the text. A question or emotional statement can be used to get audience attention.

2) A series of arguments to convince the audience

A new paragraph is used for each new argument. Each new paragraph begins with a topic sentence that introduced a new argument. After the topic sentence comes details that support the argument. Emotive words are used to persuade the audience into believing the author.

3). Recommendations about what should or should not to be done.

The author restates his/her thesis (point of view). A recommendation what has been explained in the arguments above may be include here.

This study used this scaffold to help the students making a hortatory exposition text in order to make a report about the problem and the solution what they find in the field. However, the resercher adds and modifies the scaffold proposed by Anderson and Anderson (1997) above because the researcher found the constucting that they made likes an Analitical exposition construction, weather in hortatory, the last structure is recomendation. Furthermore, the researcher believes that it will be difficult for her students to understand the explanation about what is needed to write in every element of an exposition text in the scaffold above. Therefore, the researcher modifies the explanation in each consttruction into questions to simplify the students.

According to Bramer and Sedley (1981) (cited in Yangrifqi, 2008), asking questions is a good method for finding specific experiences and ideas. This is useful in reducing comprehensive subjects to manageable topics and giving students the opportunity to find out what they need to be said about the topic.

Based on what Bramer and Sedley (1981) stated above the researcher modified the Anderson and Andeson's (1997) exposition scaffold becomes the scaffold using question presented in The Appendix 2.1.

2.7 Productive Skills

The main goal of most EFL students is to acquire language skills that will permit them to communicate effectively. Skills relate to various aspects of using language like listening, reading, writing or speaking. Skills can be divided into two types: receptive and productive. Receptive skills are used to understand reading or listening. While, productive skills comprise producing language those are speaking or writing. According to Golkova & Hubackova (2014), productive skills are also known as active skills, mean the delivery of information that a language user produces in oral or written form (Golkova & Hubackova, 2014). In this dissertation, researcher will focus more in productive skills.

Productive skills are crucial as they give students the opportunity to practice real life activities in classroom. Productive language is the language used to convey information or ideas both in writing and orally. According to McDonough, et al (2003), they stated that for communication speaking is needed. It concern conveying ideas and opinions, conveying a wish or a desire to do something; negotiating and/or solving a particular problem. Therefore, speaking is the oral production of a language and the other hand writing is the written form of a language

2.8 Writing Skills

English is compulsory subject in Indonesia, but still, English is taught as EFL (English as a Foreign Language). Thus, writing is taught as one of the skills

in EFL. According to Ghaith (2002), writing is a complex process that allows writers to explore thoughts and ideas, and make them visible and concrete.

Writing encourages thinking and learning to motivate communication and makes thought open for reflection. When thought is written down, ideas can be examined, reconsidered, added to, rearranged, and changed (Ghaith, 2002).

Why writing is important to be taught in Senior High School, because it is used extensively in higher education and in the workplace. If students do not know how to express themselves in writing, they will not be able to communicate well with professors, employers, or just about anyone else in the future. Many of professional communication is done in writing: proposals, memos, reports, applications, e-mails, and more are part of the daily life of a college student later in the future. Even if students manage to learn the material in their college classes without knowing how to write well, they will not be able to express their knowledge to the other people.

According to Harmer (2004), he stated that there are four reasons for teaching writing in EFL. The first is reinforcement. This refers to an activity that gives visual demonstration of language construction for both the understanding of how it all fit together and as aid to committing the new language to memory.

The second is language development. It helps the student to learn as part of continuing learning experience. The next reason is the language learning style. It refers to the students who have problems at picking up language by looking and seeing. Writing is appropriate for the students with this kind of learning style. The last reason is it is a basic skill, which is as important as the other language skill.

2.9 Speaking Skills

Speaking is to use language in an ordinary voice by speaking words.

Besides speaking is the ability to know and use language or express themselves through words, one of them is giving a speech (Hornby, 1987). According to Nunan (1999), Speaking is a process of interconnected and influential in constructing meaning which involves the activities of producing, receiving, and processing information. The form and meaning depends on the real space and objects in which the activity takes place, including the participants themselves, the physical environment, their experiences and the purpose for speaking. We can say that speaking is an important skill which is used to communicate with others. By speaking, people are capable to recognize what kinds of situations in the world and shares information. People who have capability in speaking will be better in communication to another.

Speaking is an important aspect of second or foreign language learning and teaching. Even though its benefit, for many years, teaching speaking was considered as an activity of repetition or memorising the dialogues. However, at this time where the aim of teaching speaking should increase students' communicative skills, so students can express their intentions, feelings and ideas and learn how to follow social and cultural rules that are proper in each state of communicative circumstance.

What is meant by teaching speaking is to teach EFL learners to: First, produce the English speech sounds and sound patterns. Second, use word and sentence stress, intonation patterns and the rhythm of the second language. Third, chose suitable words and sentences according to the proper social setting, audience, situation and subject matter. Fourth, organize their thoughts in a meaningful and logical sequence. Fifth, use language as a means of

expressing values and judgments. The last, use the language quickly and confidently with few unnatural pauses, which is called as fluency (Nunan, 2003).

According to Harmer (2004), he stated that there are three reasons for speaking task in EFL. The first is rehearsal. This refers to an activity to get the students have a free discussion outside the classroom, such as the role playing at the hotel reception desk that gives them experience while practicing like in real life. It is a way for the students to feel what communicating in the foreign language. The second is feedback. This is an activity where students try to use all the language skills they have learned, then the teacher can give a reflection on the student's performance. The last is engagement. Good speaking activities must be very motivating. Where all students participate fully and if the teacher organizes activities correctly, it can provide sympathetic and useful feedback (Harmer, 2004).

2.10 Campaign

Public awareness is important to develop enthusiasm and support, stimulate self-mobilisation and people action. Awareness raising need strategies of effective communication to get the desired outcome. One of the means is campaign. Campaign is to organise a series of activities to try to achieve something (Cambridge dictionary, 2017). The aims of awareness campaigns are generally to increase concern, informing the targeted audience, creating a positive image, and attempts to change their behaviour.

People believe that life in all practical times is one of over consumption and environmental pollution. Global warming or mass extinction is a fact that our environment is being slowly trashed and over-used. A small part of the worlds

population slowly went green in order to make good impact for lovely planet, but that is not enough. As stated by Cruz & Tantengco (2017), Everyone has a responsibility to implement and carry out life and activities that are sustainable. With a variety of real activities, we will be much easier to fulfill the goals of achieving a sustainable future.

2.11 Relationship Among Students' Environmental Awareness, Parental Involvement, Community Involvement and School Environment

Lately, the lifestyle of love the environmental or go green is familiar. Green Lifestyle has even become a trend of today's lifestyle for some societies. In line with the increasingly widespread of global warming issues, the environmentalists increasingly incentive to conduct environmental conservation movement. Unfortunately, there are some people who are less concerned about go green activities. They are more concerned with their own survival. The worse thing, they actually contribute to the destruction of nature and the environment.

Learning occurs continuously in the family environment. In the family, parents have an important role in educating their children. When children are still in kindergarten or elementary school, they simply want to imitate and obey their parents. What is implanted in a child at that age will always be remembered and applied until he grows up, than it becomes a habit for him. According to Berk (2008 as cited in Blažević, 2016), the family styles of care describes as a combination of parent's behaviour in different life situations based on which the permanent educational climate is created in the family.

The influence of parents is also seen in their children learning and achievement in school. According to Hill (2004), Parent involvement is where

parents are actively involved in meaningful two-way communication, and involve themselves with student learning and school activities (Hill & Tyson, 2009). There are three types of parental involvement: 1) Involvement of parental behavior reflects home and school-based engagement strategies, such as active communication between home and school, volunteering at school, and helping with homework, 2) Cognitive-intellectual parental involvement includes involvement at home and includes the role of parents in exposing their children to activities and experiences that stimulate education, 3) Parental personal involvement reflects the attitudes and desires of parents towards school and education and conveys the importance of learning by socializing about the values and benefits of education (Hill & Tyson, 2009).

Community involvement also influences students' environmental awareness and students' learning progress. As stated by Preston (2013), Community involvement in school is a medium to add and enhance the cognitive, social, emotional, and spiritual development of students. For several reasons, rural schools are ideally positioned to foster high levels of community involvement in school. Because of size and limited student enrolment, rural schools and their communities tend to be socially connected and socially cohesive (Haas & Nachtigal, 1998; Mitchell, 2000; Parker, 2001 as cited in Preston, 2013).

According to Humm et. al (2005), there are four indicators of community involvement: community influence (adults who feel they can influence decisions affecting their local area), community cohesion (people who feel that their local area is a place where people from different backgrounds can get on well together), social capital (people who have helped or been helped by others) and

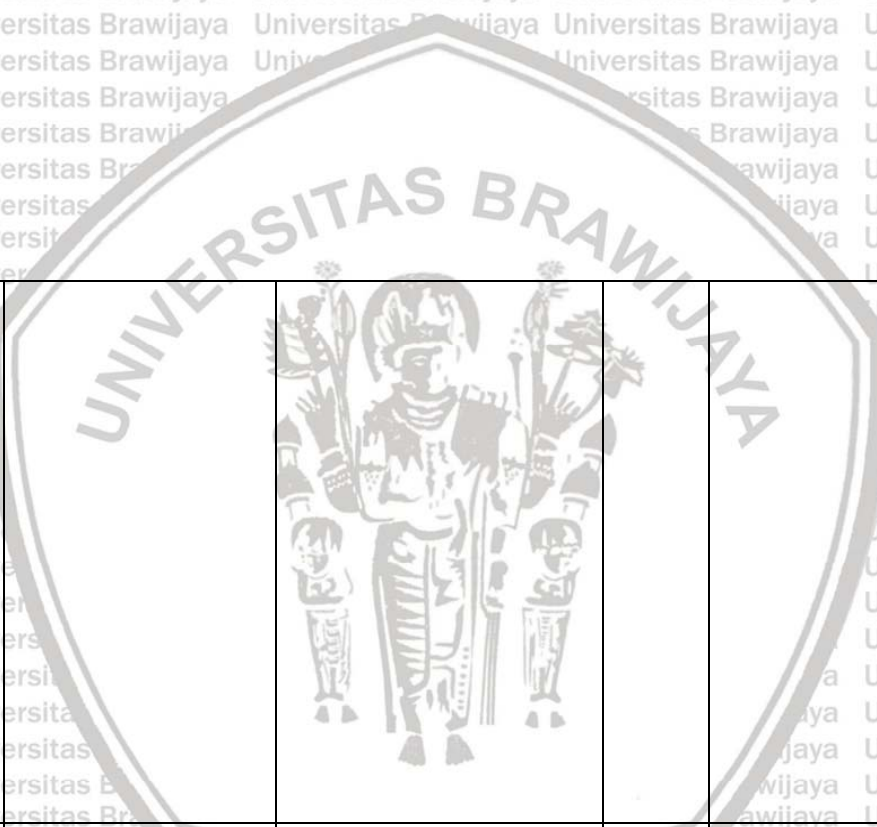
condition of the community and voluntary sector (Extent and influence of the voluntary and community sector in the locality).

Some school environments fulfill students' needs and promote their concern more effectively than others do on the students' achievement. According to Wang & Helcombe (2010), there are five aspects of school environment:

- 1) promotion of performance goals illustrates the extent to which students perceive that their teacher teaches social skills and social comparisons among students, encourages positive competition among students, and defines efforts to achieve high grades as the main objectives of learning, 2) promotion of mastery goals support student interpreting that their teachers encourage effort, self-improvement, reward, and value mastery as the main goal of learning 3) support of autonomy concerns students' perceptions that teachers give opportunities to them to participate in decision making related to academic assignments and school management and allow for student to share ideas in class discussion,
- 4) promotion of discussion maintains students' perceptions that teachers support students to socialize and discuss their ideas with one another during class, and
- 5) teacher social support refer to the students believe their teachers to be helpful, supportive, responsive, openly, and caring (Wang & Helcombe, 2010).

2.12 Previous Studies

| No | Author | Title | Year | Source | Research Focus | Research Approach and Result | Comparing with This Dissertation |
|----|----------------------------------|---|------|--|---|--|---|
| 1 | Aminrad,Zakaria, Hadi and Sakari | Relationship Between Awareness, Knowledge and Attitudes Towards Environmental Education Among Secondary School Students in Malaysia | 2013 | World Applied Sciences journal, Vol. 22 | This research focuses on the relationship between environmental awareness, knowledge and attitude as objectives and components of environmental education among secondary school students | This research used survey as a method. The outcome of the study shows the high level of environmental awareness and knowledge plus positif attitude of the students may come from the family situation, teacher, media, private reading and school curriculum. | This research aims to measure the level of awareness on the secondary school students whereas this dissertation aims to teach and engage environmental awareness on the senior high school students |
| 2 | Maulidya, Mudzakir and Sanjaya | Case Study the Environmental Literacy of Fast Learner Middle School Students in Indonesia | 2014 | International Journal of Science and Research (IJSR), Vol. 3 | This research focuses on measuring junior high school students' environmental literacy | The research used descriptive method. The instrument used Middle School Environmental Literacy Instrument/ Survey | This research aims to identify the environmental literacy: knowlege, cognitive, affective and behavior practices of selected students on junior high |

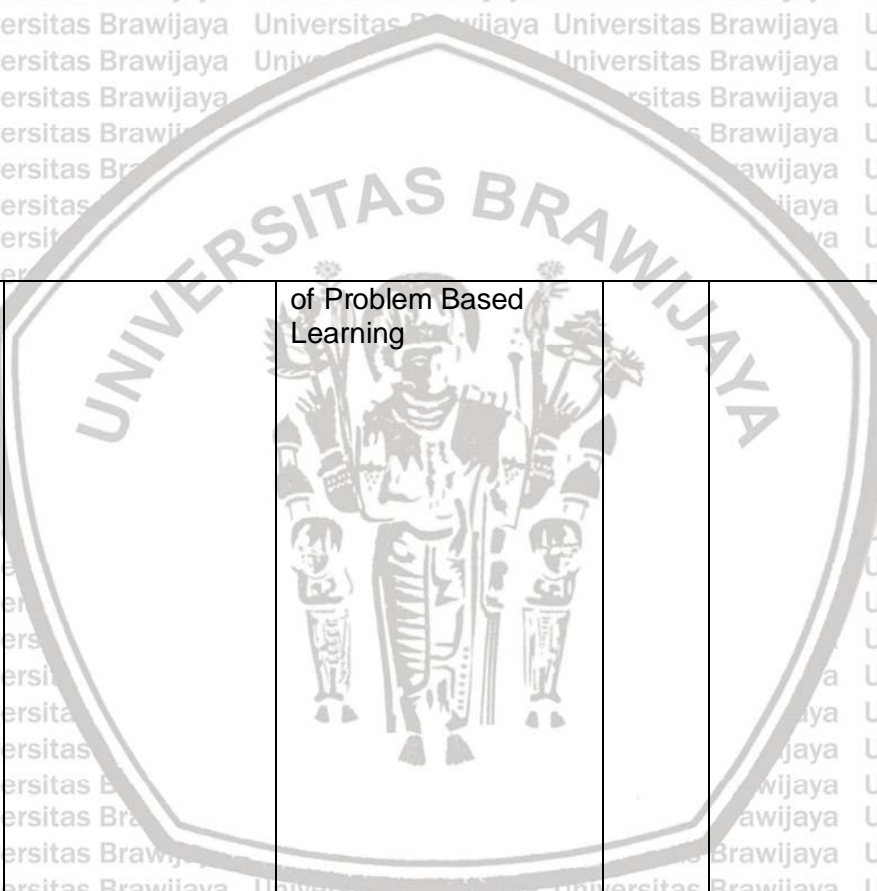


| No | Author | Title | Year | Source | Research Focus | Research Approach and Result | Comparing with This Dissertation |
|----|--------------------------|--|------|-------------------------|--|---|--|
| 3 | Cruz, J and Tantengco, N | Students' Environmental Awareness and Practises: Basis for Development of Advocacy Program | 2017 | Mimbar Pendidikan Vol.2 | This research focuses on the students' environmental awareness and the practices of the students chosen at Sta. Elena High School in the Philippines | The research used descriptive method. Instrument used EAS (Environmental Awareness Scale).The result of the study shows students manifestation moderate | This research aims to recognize the students' environmental awareness and practices of selected students on senior high school by interview, whereas this dissertation study will use some |

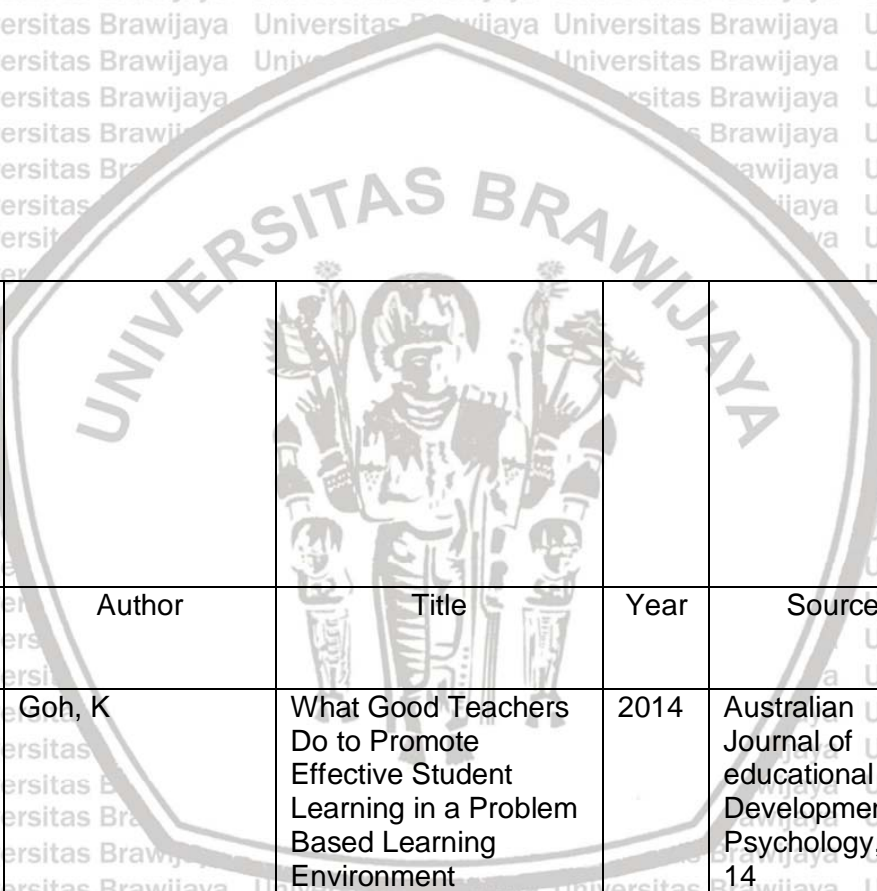


| No | Author | Title | Year | Source | Research Focus | Research Approach and Result | Comparing with This Dissertation |
|----|---------------------------|---|------|---|--|---|---|
| 4 | Golkova, D & Hubackova, S | Productive Skills in Second Language Learning | 2014 | Procedia Social and Behavioral Sciences Journal | This research focused on the area of productive skills: speaking and writing in second/foreign language learning on undergraduate foriegn students in Czech Republic | This research is descriptive study to compare the differences between Czech and English on teaching speaking and writing. The result showed Czech which is a foreign language is more difficult to learn than English in the field of proper nouns and adjective. 2)Verbs in Czech, a foreign language, are more difficult to master than English | The object of this study is undergraduate foreigner students in University of Hrade Kralove Czech Republic. This study also concerned to compare the teaching speaking and writing of Czech and English, whereas this disertation focuses on senior high school students and also teaches environmental awareness through writing and speaking. |

| No | Author | Title | Year | Source | Research Focus | Research Approach and Result | Comparing with This Dissertation |
|----|-----------------------------------|--|------|-------------------------|--|--|--|
| 5 | Cahyono, B. Y & Mutiaraningrum, I | Indonesian EFL Students' Proficiency in Writing and Ability in Speaking across Personality Learning Styles | 2016 | Scholink Online Journal | This research aimed at examining Indonesian EFL students' proficiency in writing and ability in public speaking across personality learning styles: extroversion and introversion. | This research is descriptive study. The result showed: 1) there are strong correlation between Indonesian EFL students' proficiency in writing and their ability in speaking. 2) Both the proficiency in writing of the extrovert students and introvert students strongly correlate with the ability in speaking of the two groups of students. | This research focused on examining undergraduate students in productive skills: argumentative writing and public speaking ability observed from a perspective personality learning styles: extroversion and introversion, whereas this dissertation focusses on improving high school students' productive skills through environmental education. |
| 6 | Tapilouw, M. C., et als | Junior High School Students' Perception about Simple Environmental Problem as an Impact | 2017 | Journal of Physics | This research focuses to explore junior high school students' perception about | This research is descriptive study. The result showed: 1) Junior High School | This study used open ended question to find the students' perception about |



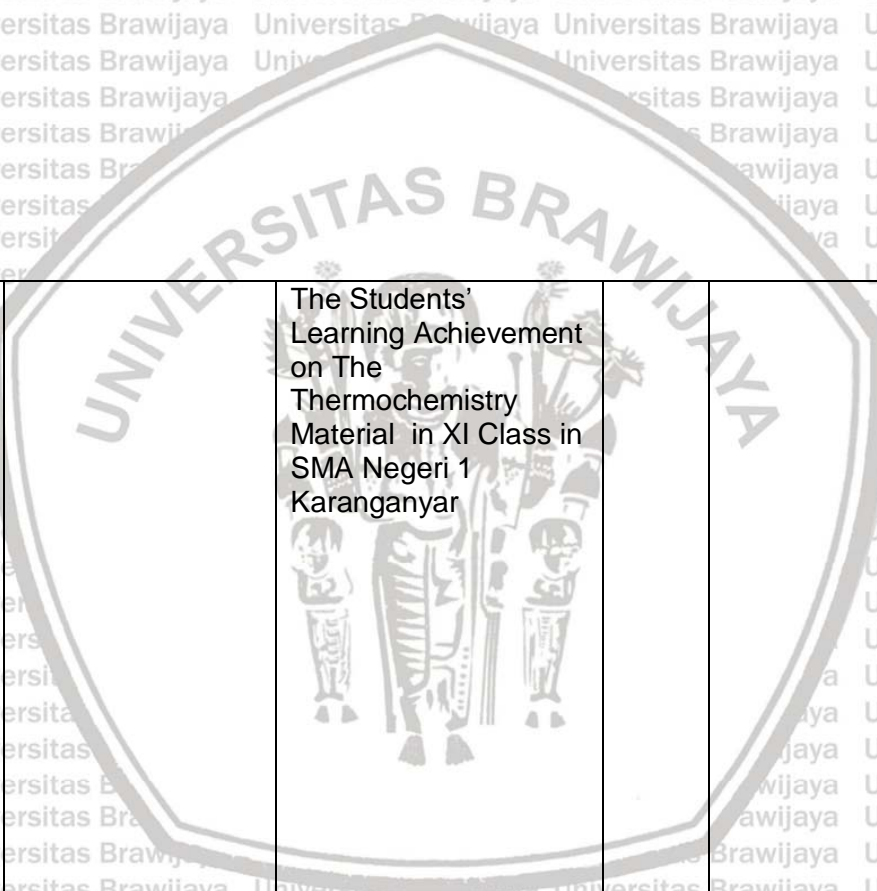
| No | Author | Title | Year | Source | Research Focus | Research Approach and Result | Comparing with This Dissertation |
|----|---------------------------------|---|------|--------------------|--|---|---|
| 7 | Febriasari, L. K & Supriatna, N | Enhance Environmental Literacy Through Problem Based Learning | 2017 | Journal of Physics | This research focuses to improve environmental literacy through Problem Basesd | The design of this research is classroom action research. The result showed | The objects of this research are elementary school students in Bandung and it |



| No | Author | Title | Year | Source | Research Focus | Research Approach and Result | Comparing with This Dissertation |
|----|--------|---|------|---|--|---|---|
| 8 | Goh, K | What Good Teachers Do to Promote Effective Student Learning in a Problem Based Learning Environment | 2014 | Australian Journal of educational & Development Psychology, Vol. 14 | This research focus on the attributes of effective teachers in a problem-based learning (PBL) classroom, specifically in a Polytechnic context in Singapore. | This research is qualitative study. The outcome of the study shows three themes: (1) questioning techniques of facilitators; (2) the timeliness of facilitators response; and(3) facilitators awareness influence the level of good and bad of teaching and learning in the PBL classroom | This research objects are the Polytechnic facilitators who used Problem based learning in their classroom, whereas the objects of this dissertation study are the senior high school students. The relevance of this study is it examines how critical thinking, collaborative and self directed learning are |

| No | Author | Title | Year | Source | Research Focus | Research Approach and Result | Comparing with This Dissertation |
|----|-------------------------|---|------|---|--|--|--|
| 9 | Iswandari, D. C., et al | Effect of Environmental Problem Based Learning on the Indonesian EFL Students' Environment related Vocabulary Mastery and Writing Ability | 2017 | Theory and Practice in Language Studies, Vol. 7 | This study concentrate on the effect of PBL on the environment related vocabulary mastery and writing ability of Indonesia EFL students. | This study is a quasi experimental design. The result of the study showed that the students improved their environment-related the mastery of vocabulary and their writing ability significantly after they were taught by using environmental PBL | The relevance of this study is this research used the same research method that is quasi experimental design and also used problem based learning as the learning method in English class. |
| 10 | Suhendar. | The Experimentation of Project Based Learning Based Eco-Campus Toward The Students' Problem Solving Skill and The Emotional | 2017 | Jurnal Penelitian dan Pembelajaran IPA (JPPI), Vol. 3 | This research focuses to increase the students' problem solving skill, and classroom emotional | This study is a quasi-experiment with two sample classes and using pre-test post-test control group design. | This research focuses on the Students' problem solving skill and the emotional environmental, whereas this |

| | | | | | | | |
|----|-----------------------|--|------|--|---|--|---|
| | | Environmental Climate | | | environmental climate using project based learning models on the environmental issues material | The result showed that problem solving skill and emotional environment classroom climate have improved both in the experimental classroom and in comparator classroom. | disertation focuses on the students' awareness |
| 11 | Susilowati, A., et al | The Application of Project-Based Learning Using Mind Maps to Improve Students' Environmental Attitudes Towards Waste Management in Junior High Schools | 2017 | International journal of Education, Vol. 9 | This research focus using mind map to establish the effectiveness of project-based learning method in science learning through waste management and its solutions as topics to improve students' environmental attitudes. | The results showed that the application of PjBL model through mind maps on waste theme and the waste management was able to improve students environmental attitudes and it is also effective in increasing students' environmental caring behaviour | This reserch focuses to show the effectiveness of PjBL method Through mind maps in science learning, whereas this disertation focuses on the implementation of PjBL through campaign. |



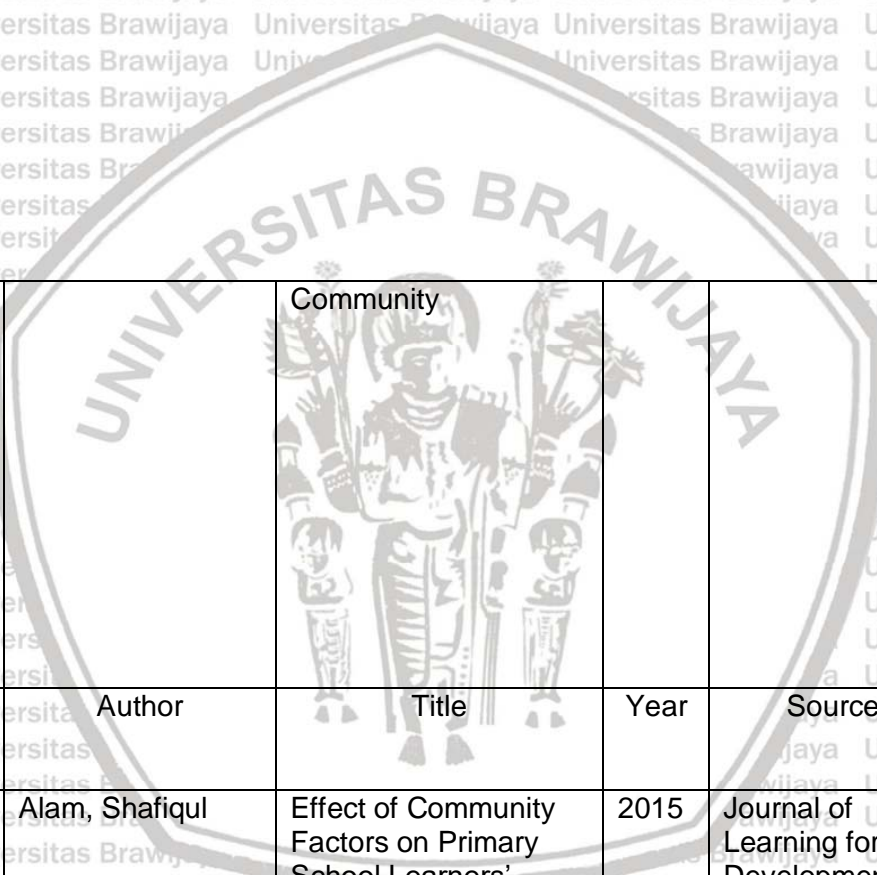
| | | | | | | | |
|----|---------------------------|--|------|---|---|--|---|
| | | The Students' Learning Achievement on The Thermochemistry Material in XI Class in SMA Negeri 1 Karanganyar | | | based learning and problem based learning on thermochemistry material in XI class students | Randomized Posttest Comparison Group.The result showed that there is insignificant relationship between project based and problem based learning on the students' learning achievement on the cognitive and attitude aspects, but it shows a significant relationship between project based learning on the students' skill competence and problem based learning. | achievement by using PjBL and PBL on thermochemistry materials in chemistry class, whereas this disertation aims to integrating PBL and PjBL methods to teach environmental awareness on the topic of pollution |
| 14 | Wachyu, M. H & Rukmini, D | The Effectiveness of Project Based Learning and Problem Based Learning For Teaching Biography Text Writing to Highly | 2015 | Journal of Language and Literature, Vol. 10 | The research focuses to show the effectiveness of using PjBL compared to PBL to teach writing | The research used experimental research and the design that used in this study is | This research focuses on teaching writing biography texts using project based and problem based |



| No | Author | Title | Year | Source | Research Focus | Research Approach and Result | Comparing with This Dissertation |
|----|------------------|---|------|--|---|---|---|
| 15 | Wiek, A., et al. | Integrating Problem and Project-based Learning Into Sustainability Programs. A Case study on The School of Sustainability at Arizona State University | 2014 | International Journal of Sustainability in Higher Education, Vol. 15 | This research concentrate on integrating PBL and PjBL in The School of Sustainability at Arizona State University with sustainability | The outcome of the research shows that PPBL success build the students' capacity to overcome and solve the sustainability | University's School of Sustanability in Arizona State has integrated a variety of PBL and PJBL in their graduate and undergraduate programs. Similar with this reserch, |

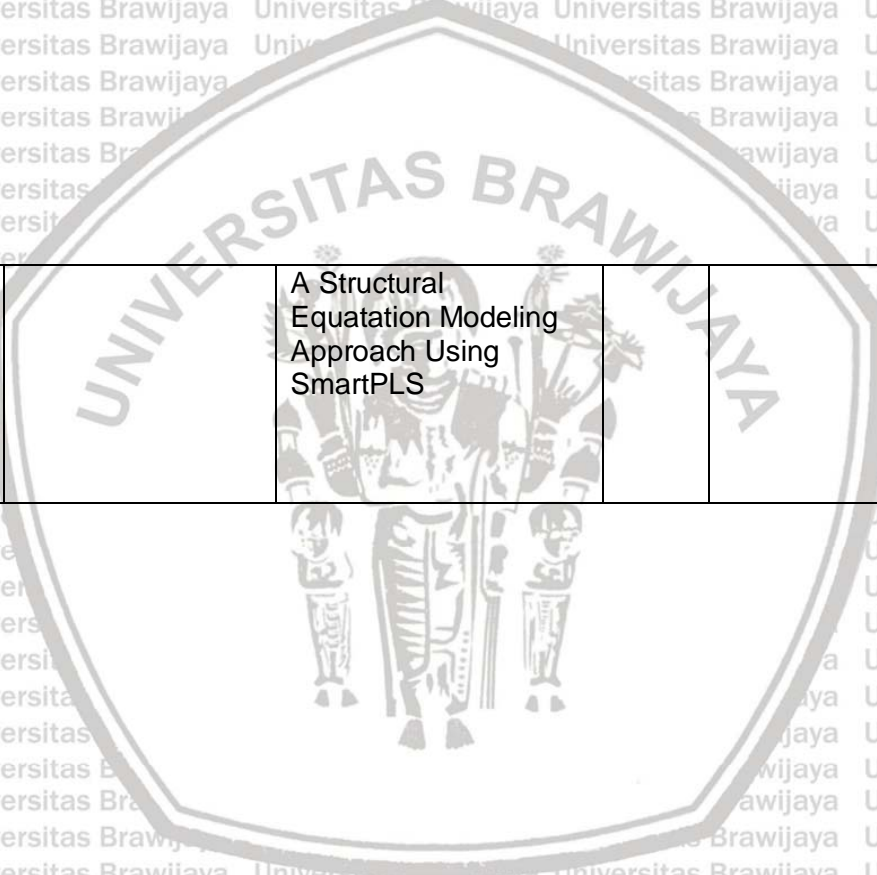
| No | Author | Title | Year | Source | Research Focus | Research Approach and Result | Comparing with This Dissertation |
|----|--------------------------|--|------|--|--|---|---|
| 15 | McGibbon, C & Belle.J. P | Integrating Environmental Sustainability Issues Into The Curriculum Through Problem-Based Learning and Project-Based Learning: Case Study at The University of Cape Town | 2015 | Current Opinion in environmental Sustainability, Vol. 16 | This research focuses to advance the discourse on how curriculum development can support the key competencies in sustainability and lead to real-world impact using PBL and PjBL models. | This research used Design Science Research (DSR) approach. The result showed that PPBL practice enables students to become more aware and empower through exposure to real world problems, such as Carbon Footprinting. | This research objects are undergraduate students in the University of Cape Town South Africa and focus on the footprinting, whereas this disertation focuses on the teaching environmental awareness on the topic of pollutions in senior high school students. |
| 17 | Larsen, J. A., et al | Motivating Students to Develop Satellites in Problem and Project-Based learning (PBL) | 2013 | iJEP, Vol. 3 | This research focus on the students percieve their motivation in | The results show in project management their motivation is | The relevance of this study is this research combined PBL and PjBL in |

| No | Author | Title | Year | Source | Research Focus | Research Approach and Result | Comparing with This Dissertation |
|----|------------------------------|---|------|--|---|--|--|
| 18 | Medallon, M. C & Gallardo, M | Environmental Awareness Campaign: The Change It Brings | 2014 | Asia Pacific Journal of Multidisciplinary Research, Vol. 2 | This research concentrate on the students' awareness and responsiveness in environmental issues such waste management, global warming and climate change. | The research used survey as research approach. The result of the study showed that after the environmental awareness campaign there was a significant increase in the level of students' knowledge | This research used seminar as a tool for the environmental awareness campaign, while this dissertation research will use students' presentation in elementary schools as a campaign. |
| 19 | Preston, Jane. P | Community Involvement in School: Social Relationship in a Bedroom | 2013 | Canadian Journal of Education. Vol. 36 | This research focus to explain how community involvement in | The research used survey as research approach. The | This research used qualitative method to describe how the involvement of |



| No | Author | Title | Year | Source | Research Focus | Research Approach and Result | Comparing with This Dissertation |
|----|----------------|---|------|---|---|---|--|
| 20 | Alam, Shafiqul | Effect of Community Factors on Primary School Learners' Achievement in Rural Bangladesh | 2015 | Journal of Learning for Development. Vol. 2 | This research focus on the identificaton of community factors that affect learners' achievement | The research used qualitative data were captured by semi-structured interview. The study's result shows that some basic characteristics of the community along with its support and cooperation with schools are helpful to reach | The relevance of this study is this research found out that community involvement plays a prominent part in the development of student education |

| No | Author | Title | Year | Source | Research Focus | Research Approach and Result | Comparing with This Dissertation |
|----|-------------------------------|---|------|--|--|---|---|
| 21 | Asvio, Arpinus, and Suharmon. | The Influence of Learning Motivation and Learning Environment on Undergraduate Students' Learning Achievement of Management of Islamic Education, Study Program of IAIN Batusangkar in 2016 | 2017 | Noble International Journal of Social Sciences Research (NIJSSR), Vol. 2 | This research focus on the effect of learning motivation and learning environment on the students' achievement | The research used descriptive quantitative research. The study's result shows that there were significant relationship between learning motivation and learning environment with students' learning achievement in IAINBatusangkar. | The relevance of this study is this research found out that intrinsic aspects (psychological) and extrinsic aspects (Family and school) (endogenous/ extragenous) factors affectng the process and learning out comes |
| 22 | Fah, L. Y & Sirisena, A | Relationships Between The Knowledge, Attitude, and Behaviour Dimensions of Environmental Literacy: | 2014 | Jurnal Pemikiran Pendidikan, Vol. 5 | This research focus on the relationship between environmental knowledge, | The research used quantitative research and it was a non-experimental research design. | This research used Structural Equation Modeling (SEM) approach using smartPLS asmultivariate |



| | | | | | |
|--|---|--|--|--|--|
| | <p>A Structural Equation Modeling Approach Using SmartPLS</p> | | <p>attitudes, and behaviours, and their contribution among the forth grade of secondary school students in Malaysia.</p> | <p>It also used Structural Equation Modeling (SEM) approach using smartPLS</p> | <p>statistical analysis technique that is used to analyze structural relationships</p> |
|--|---|--|--|--|--|

B. CONCEPTUAL FRAMEWORK

2.13. Theoretical Basis

The theories will be used to underpin this study are:

A) Environmental education

Environmental education is a method that enables people to explore environmental problems, have interaction in drawback determination, and take action to enhance the atmosphere. As associate degree outcome, people promote a comprehensive understanding of environmental problems and have the talents to form hip and accountable selections (EPA, 2017). Furthermore, EPA has ideas about the components of environmental education, those are (1) caring and easy reacting to the environment and its changes, (2) environmental knowledge and understanding and the challenges of environment, (3) concern for the environmental behaviour and motivation to improve and maintain the quality of environment, (4) ability to discover and resolve the challenges of environmental, and (5) activities participation that guide to the completion of environmental challenges (EPA, 2017).

B) Environmental Awareness

According to Collins English Dictionary (2010), environment means the 'external conditions or surroundings, esp. those in which people live or work' or 'external surroundings in which a plant or animal lives, which tend to influence its development and behaviour'. On the other hand, awareness

according to Merriam-Webster Dictionary (2017) is having or showing understanding, perception, or knowledge: conscious. Consequently, environmental awareness is an aware condition, having knowledge and conscious about the surrounding environment where people live and work, and attempted to influence the development and attitude of the community.

This study will describe environmental awareness as a combination of motivation, knowledge and skills (see figure 1). This model was developed in the project 'Strategic guidelines for improving public awareness and environmental education in the Baltic Sea area'. (Partanen-Hertell et al, 1999).

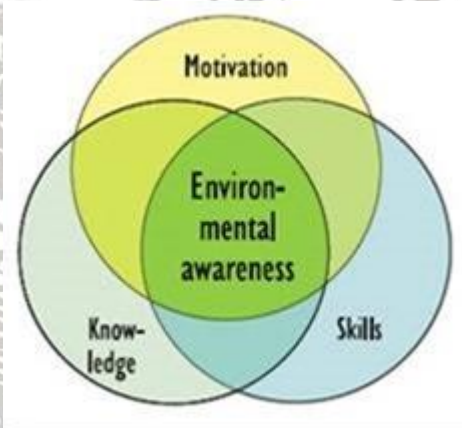


Figure 2.1. The three elements of environmental awareness (Partanen-Hertell et al. 1999).

Each element of environmental awareness comprises some aspects as follows:

1. Motivation, values and attitudes:

- 1) concern about environmental problems,
- 2) Understanding of one's own empowerment,
- 3) understanding of responsibility and

4) willingness to act.

2. Environmental knowledge including:

1) information about environmental problems,

2) knowledge of environmental problem causal relationships and

3) information about structural possibilities of environmental friendly activities.

3. Skills and ability to act:

1) different levels of waste, vehicles, residences, edification, involvement, political and organizational actions;

2) different spheres of life: home, work, leisure, hobbies; and

habits vs. deliberate action (Partanen-Hertell et al. 1999).

According to Harju-Autti (2013), Environmental awareness is a conscious state, possessing information concerning, and being responsive to the external surroundings within which individuals live and work, and that keep to affect the development and behavior of people. The upper degree of awareness in environmental permits acutely aware decisions to act in associate environmentally friendly manner. Furthermore, she stated that motivation is basically supported person's values and attitudes, as well as concern concerning environmental issues and appreciation of someone scognizance. Environmental information includes info concerning environmental issues and information of the causal relationships of environmental issues. Skills are personal talents to act in several levelsof waste, vehicles, housing, education, participation, political and organizational activities etc (Harju-Autti, 2013).

A motivation determine to improve the environment is based on values and attitudes. Value is a form of appreciation and conditions that benefit for humans as a determinant and reference in assessing and doing an action. Dietz et al. (2005) discuss and analyse the relationship between values and environmentally significant behaviour from many angles. They conclude that values influence individual decisions and that individual decisions are consequential in shaping individual, and ultimately group, behaviour with regard to the environment. Attitude is a person's perspective of a thing or behaves according to his perspective, or in other words a relatively stable and enduring predisposition to behave or react in a characteristic way.

Knowledge is a systematic study that is obtained through observation, research, and has been tested which leads to a determination with the nature or in the form of the principle of something being studied, investigated, etc. The knowledge a person has about his/her environment is central to the development of his/her environmental awareness. Understanding of the cause-effect relationships within our environment is especially important. However, knowledge about environmental problems is not sufficient to make people behave environmental friendly. In fact, underlying any change in an individual's behaviour is a decision based on a personal assessment.

The third major factor of environmental awareness is skills. A skill is a person's ability to operate a job more easily and precisely (Depdiknas, 2013). Even if someone was very motivated to improve the environment and was knowledgeable about environmental issues, she might not be able to behave environmental friendly. Skills and abilities to act in ways that improve the

environment are also needed. Learning suitable practical skills, like recycling, takes time and effort, both from individuals and societies.

C) Constructivism Paradigm

Constructivism is basically a theory based on observation and scientific study, it is about how people learn and understand. According to Elliott et al in McLeod (2019) Constructivism is learning that discusses people who actively build or create their own knowledge and thoughts that are determined by the experience of students. Furthermore Bada (2015) said that constructivism is a place for learning and learning, based on the premise as cognition (learning) is the result of mental construction. In other words, students learn by entering new information that they already know. To do this, we must ask questions, explore, and assess what we know. Based on Bloom taxonomy in Depdiknas (2013), there are 6 categories in the result of learning process:

1) Cognitive

a. Knowledge

This level emphasizes the ability to recall material that has been studied, such as knowledge of terms, special facts, conventions, trends and sequences, classification and categories, criteria and methodology. This level is the lowest degree but it is a prerequisite for the next level. At this level, students answer questions based on the memorization only.

Operational verbs that can be used in this level are: to quote, mention, explain, describe, numerate, identify, register, show, label, index, pair, name, mark, read, realize, memorize, imitate, record, repeat,

reproducing, reviewing, selecting, stating, studying, tabulating, coding, searching, and writing.

b. Comprehension

At this level, understanding is determined as the ability to understand certain material being studied. These capabilities are:

- Translation (the ability to change symbols from one form to another)
- Interpretation (ability to explain material)
- Extrapolation (the ability to expand meaning).

At this stage, students answer questions in their own words and by giving examples of both principles and concepts.

Operational verbs that can be used in this level are: estimating, explaining, categorizing, characterizing, detailing, associating, comparing, calculating, contrasting, changing, maintaining, describing, interweaving, distinguishing, discussing, exploring, exemplifying, exemplifying, explaining, modeling, expand, conclude, predict, summarize, and describe

c. Application

Application is determined as the ability to apply information in real situations, where the students are able to apply their understanding by using it in the real situation. In this level, the students are supposed to be able to apply the concepts and principles that they have in new situations that have never been given before.

Operational verbs that can be used in this level are: assigning, sorting, determining, applying, adjusting, calculating, modifying, classifying,

calculating, constructing, accustoming, preventing, using, assessing, training, exploring, expressing, adapting, investigating, operating, operating, questioning, conceptualizing, implementing, predicting, producing, processing, linking, compiling, simulating, solving, doing, and tabulating

d. Analysis

It can be said that analysis is the ability to break down a material into clearer components. This ability can be:

Element analysis (analysis of material parts)

Relationship analysis (relationship identification)

Analysis of organizing principles (organizational identification)

At this stage, students are asked to break down information into several sections to find assumptions, and to distinguish opinions and facts and find causal relationships.

Operational verbs that can be used in this level are: analyze, audit, solve, confirm, detect, diagnose, select, detail, nominate, diagram, correlate, rationalize, test, enlighten, explore, explore, conclude, find, review, maximize, maximize, order, edit, associate, select, measure, train and transfer.

e. Synthesis

Synthesis is determined as the ability to produce and combine elements to form a unique structure. This ability can be in the configuration of producing unique communications, plans or activities that are intact, and a set of abstract relationships.

At this level, students are required to produce their own hypotheses or theories by combining various sciences and knowledge.

Operational verbs that can be used in this level are: abstract, organize, animate, collect, categorize, code, combine, compose, compose, construct, cope, connect, create, create, correct, correct, design, plan, dictate, enhance, clarify, clarify, facilitate, form, formulate, generalize, combine, integrate, limit, repair, display, prepare, produce, summarize, and reconstruct.

f. Evaluation

Evaluation is determined as the ability to obtain benefits for certain things in accordance with clear criteria. This activity deals with the value of an idea, creation, method or method. At this stage, a person is guided to gain new knowledge, better understanding, new applications and unique new ways of analysis and synthesis.

According to Bloom there are at least 2 types of evaluation, namely:

Evaluation based on internal evidence

Evaluation based on external evidence

At this level, participants discuss information, than making decisions.

Operational verbs that can be used in this level are: compare, beat, judge, rotate, criticize, weigh, decide, discuss, predict, clarify, assign, support, climb, defend, detail, measure, summarize, prove, validate, test, support, choose, and project. (Bloom as cited in Kurikulum 2013).

2) Affective

The affective domain is the domain that deals with attitudes, values, feelings, emotions and the degree of acceptance or rejection of an object in teaching and learning activities. Kartwohl & Bloom in Depdiknas (2013) divided the affective domains into 5 categories, namely:

a. Receiving

This category is the lowest level of affective which includes passive acceptance of problems, situations, symptoms, values and beliefs.

Acceptance is a kind of sensitivity in receiving stimulation or external stimulation that comes to students. This can be exemplified by the attitude of students when listening to educators' explanations carefully where they are willing to accept the values taught to them and they have the willingness to join themselves or identify themselves with those values.

Operational verbs that can be used in this category are: choosing, questioning, following, giving, adhering, obeying, and interested.

b. Responding

This category deals with answers and the pleasure of responding or realizing something that is in accordance with the values held by the community. Or this matter can also be stated that responding is an attitude that indicates active participation to involve itself in certain phenomena and react to it in one way. This can be exemplified by submitting an assignment report on time.

Operational verbs that can be used in this category are: answer, help, propose, compromise, like, welcome, support, approve, display, report, vote, say, sort out, reject.

c. Valuing / Assessment

This category deals with providing value, appreciation and trust in a particular symptom or stimulus. Students are not only willing to accept the values taught but also have the ability to assess the phenomenon as good or bad. This can be exemplified by being honest in teaching and learning activities and being responsible for everything during the learning process.

Operational verbs that can be used in this category are: assuming, believing, completing, convincing, clarifying, initiating, inviting, combining, proposing, emphasizing, and contributing.

d. Organization / Manage

This category includes the conceptualization of values into a value system, as well as the stabilization and priority of values that have been owned. This can be exemplified by the ability to weigh the positive and negative consequences of a scientific progress on human life.

Operational verbs that can be used in this category are: adheres to, changes, organizes, classifies, combines, maintains, builds, forms opinions, integrates, manages, negotiates, and talks.

e. Characterization

This category deals with the integration of all the value systems that a person has that affect personal patterns and behavior. The value

internalization process ranks highest in the value hierarchy. This is exemplified by the willingness to change opinions if there is evidence that does not support his opinion.

Operational verbs that can be used in this category are: changing behavior, having good character, influencing, listening, qualifying, serving, showing, proving and solving.

3) The psychomotor

This domain includes the competence to do work by involving students' limbs as well as competencies related to physical (motoric) movements consisting of reflex movements, basic movement skills, perceptual abilities, accuracy, complex skills, as well as expressive and interperative.

Categories included in this domain are:

a. Imitate

This category of imitation is the ability to do something with an example that is observed even though the meaning or essence of that skill is not yet understood.

Operational verbs that can be used in this category are: activating, adjusting, combining, applying, organizing, gathering, weighing, minimizing, building, changing, cleaning, positioning, and constructing.

b. Manipulating

This category is the ability to take action and choose what is needed from what is taught.



Operational verbs that can be used in this category are: correcting, demonstrating, designing, sorting, training, refining, identifying, filling, placing, making, manipulating, repairing, and mixing.

c. Experience

This category is an appearance of action where the thing taught and used as an example has become a habit and the movements are displayed more convincingly.

Operational verbs that can be used in this category are: transfer, replace, rotate, send, move, push, pull, produce, mix, operate, package, and wrap.

d. Articulation

This category is a stage where a person can perform a more complex skill especially related to interpretive movements.

Operational verbs that can be used in this category are: to shift, sharpen, shape, match, use, start, drive, type, stick, sketch, loosen, and weigh

(Depdiknas,2013)

D) Factors Influencing the Learning Achievement

Every activity that we do has factors that influence it, whether motivate or demotivates factors. Learning achievement is one of the activity result, and it also influenced by some factors. According to Muhibbin Shah, (2008 as quoted in Pearson, 2012) states that learning achievement is the level of student success in learning subject matter at school expressed in the form of scores obtained from test results on certain subject matter. The factors that influence learning

achievement can be divided into two general groups, namely internal and external factors.

1 Internal Factor

Internal factors consist of two general groups. they are physiological factors and psychological factors.

a. Physiological factors

There are two kinds of physiological conditions. The first is a general physiological condition. This condition affects the learning process of students.

Students who have good health will have good learning capacities. While students who are ill or have bad health conditions, will have a weak physique, so that their sensory and motor nerves become weak. As a result, these students will find that it is difficult to learn because they become tired, dizzy, sleepy, and lack of concentration to study. The second is certain physiological conditions related to the function of the five senses in the learning process, especially vision and hearing, and also other physical disabilities will disrupt student concentration in the learning process.

b. Psychological factors

Asvio et al (2017) divides psychological factor into five types, they are as follows:

(1). Interest

Interest is a tendency that causes someone trying to find or try activities in certain fields. Activities that are of interest to a person, are paid attention to constantly accompanied by a sense of pleasure. And interest is also a

psychological factor found in everyone so that interest in something or certain activities can be owned by everyone. If someone is interested in something, interest will arise.

Lack of interest can result in students disliking existing subjects making it difficult to concentrate and difficult to understand the contents of the subject and ultimately affect the learning outcomes. Interest can be expressed through a statement that shows that students prefer one thing to another, it can also be manifested through participation in an activity. Students who have an interest in a particular object tend to pay greater attention to that object. So, from this understanding it can be understood that the occurrence of interest is due to the encouragement of feelings of pleasure and the attention to something.

(2). Intelligence

According to David Wechsler as cited in Plucker (2016), Intelligence is the ability or the whole capacity of individuals to act consciously, to think logically and be actively involved with their environment. Intelligence is people ability to think and act in order to master the environment effectively. Intelligence factor is related to IQ. Every people have different IQ level. If someone has IQ 110-140, he/she is categorized as smart people, and if someone has IQ over 140 he/she is categorized as genius. This category has potency to finish their study in under graduated. But, if people have IQ less than 90 are categorized as dullards and have many difficulties in learning.

This aspect has big impact for students learning achievement. If someone intelligence is low and he/she doesn't get help from teacher and parents, his/her effort in learning will get a bad result or event fail.

(3). Talent

Crow and Crow in Savitra (2017) also define talent as a quality that is owned by every person which is in a very diverse level with each other. Talent is the ability to learn. Talent is the potential possessed by someone as an inborn from birth. For example, someone who is talented in painting will do his painting faster than someone who is less talented. The innate potential of students to become talents associated with intellectual intelligence (IQ) of students. The level of intellectuality of ordinary talented students tends to be above average. But students with high intellect do not always show talented students. For example, artistic talent and sports both require strategy, tactics and logic related to intelligence. Thus, generally gifted students do have a level of intelligence above the average

(4). Motivation

Motivation means that everything that drives a person to do something (Purwanto, 1985) there is motivation that comes from ourselves and from outside. Motivation encourage someone to get good achievement and success. Motivation as internal factor has function to becomes a basic and directs learning process. Motivation can determine the way of the student to reach the goal, so learning success is as big as motivation. Someone who has big motivation will study hard, never give up, and always study to increase his/her achievement. In contrary, someone who has low motivation, he/she does not care with the lesson, easy to give up and always disturb learning process. Therefore, she/he gets many difficulties.

(5). Intelligence/ Cognitive abilities

According to Michelon (2006), cognitive abilities are brain-based skills we need to carry out any task from the simplest to the most complex. They have more to do with the mechanisms of how we learn, remember, problem-solve, and pay attention, rather than with any actual knowledge. In general intelligence is defined as the psycho-physical ability to react to stimuli or adapt to the environment through appropriate means. Intelligence is the most important psychological factor in student learning processes, because it determines the quality of student learning. Students who have a normal level of intelligence can succeed well in learning, if he learns well, meaning learning with an efficient learning method and the factors that influence his learning have a positive influence. Therefore, it needs guidance of learning from others, such as teachers, parents, and so forth. As an important psychological factor in achieving learning success, every knowledge and understanding of intelligence needs to be possessed by every professional teacher so that they can understand the level of intelligence.

2. The External Educational Factors

1) Parental Involvement

Grolnick and Slowiaczek (1994), defines parental involvement as parental obligations to children in a given domain. They describe three types of involvement in children's education: behavior, cognitive-intellectual, and personal. Parental behavior is their participation in activities at school (eg, attending parent-teacher conferences and school activities) and at home (eg, helping with homework, asking about school). Cognitive-intellectual involvement involves

bringing children closer to intellectually stimulating activities such as going to the library and talking about current events. The third category, personal involvement, is knowing and following what happens with children in school.

The family is the first environment that influence various aspects of child development, including social development. Conditions and ordinances of family life are a conducive environment for the socialization of children. In the family, they apply the norms, of family life, and they also manipulate the behavior and culture child. Educational process that aims to develop the child's personality is more determined by the family. Social pattern and norm in putting child towards the environment is usually set and directed by the family.

According to Gregory, he stated that parents in urban areas were often challenged by circumstances that did not exist, such as a difficult environment, and had to work for their families. Studies show that parental and community involvement is a key factor in determining student academic success. Apart from a few common misperceptions, many successful urban students come from homes who have high expectations for their children, have good communication, value literature, monitor the media influence of their children, maintain a good home environment, and have a system appreciation for the success of their children (Gregory, (2000) cited in Jones, 2012). In addition Coleman (1988, 1990), cited in Jones, 2012, stated that if parents hope and want their children to succeed, they must be fully involved and have a strong relationship with their children (Jones, 2012).

2) School Environment

According to the National Center for Supporting Learning Environments (2018), they state that the school environment is broadly characterized by facilities, classrooms, school-based health support, and disciplinary policies and practices. These are external factors that affect students. Furthermore, Konishi et al. (2007) cited in Jones, (2012) writes that when there is an environment of nurture and trust, schools will succeed. A positive school environment will create a pleasant learning environment, so students have room to develop themselves.

Successful schools have a vision to have the same understanding of goals, principles and expectations for everyone in the learning community.

3) Community Involvement

According to Preston (2013), a community is the existence of people who form groups and reside in certain places or regions, where people have the same characteristics, values, knowledge, and activities which are realized through things such as ethnicity, culture, language, religion, recreation, business / organization, closeness, and lifestyle. In addition, he defines community involvement as a school that focuses on students - community connections that directly or indirectly support students' physical, social, emotional, and intellectual needs (Preston, 2013). Meanwhile according to Epstein, (2011) and Gregoric, (2013) as cited in Preston, (2013), community resources that increase community involvement in schools including people, programs, businesses, activities, facilities, policies, finance, and norms local, beliefs, and attitudes - anything that can help improve student success. The research also highlights that school-community partnerships positively influence the overall health, attitudes, and

behavior of students (Patrikakou, Weissberg, Redding, & Walberg, 2005 as cited in Preston, 2013). Indicators of community involvement are community influence, community cohesion, social capital and the condition of the community and the voluntary sector (Humm et al., 2005).

2.14. Framework of Concept

The conceptual framework of theoretical relationship relating to Integration of the Students' Environmental Awareness and Productive Skills in Environmental Learning Model at *SMAN 1 Gambiran Banyuwangi*, which are expected to identify, explain, measure and analyze the theoretical research questions are as follows:

- 1) whether there is a significant effect of the students who are taught by using problem based learning on their environmental awareness and writing skills;
- 2) whether there is a significant effect of the students who are taught by using project based learning on their environmental awareness and speaking skills; and
- 3) develop environmental learning model which is appropriate to increase the students' environmental awareness.

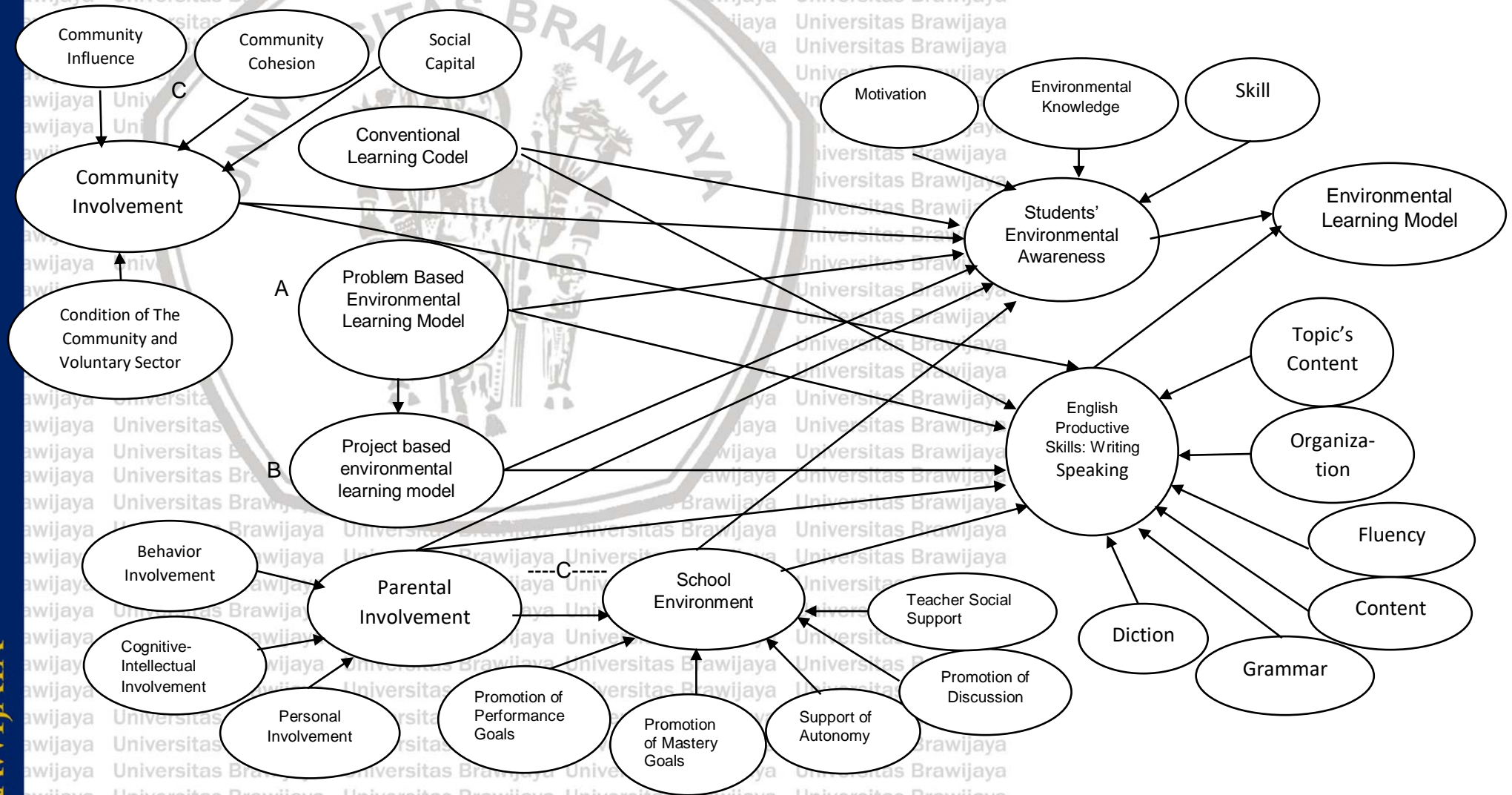


Figure 2.2 The research frameworks

Where: A and B are exogenous (independent) variables and C is moderator. This scheme will be explain brief and detail on page 104.

The concept of framework in this study is investigating the relationship between learning activities with the topic of environmental problems which use two models of learning: Problem Based Learning (PBL) and Project Based learning (PjBL) and students' environmental awareness. Each learning model also teaches productive skills, PBL teaches writing skill and PjBL develops students' speaking skill. Both exogenous variables that are learning models PBL and PjBL have indicators: cognitive, psychomotor and affective. While the endogenous variables that is students' environmental awareness has indicators: motivation, environmental knowledge and skills.

The relationship between exogenous variables and endogenous variable also influenced by moderator variables involving parents and school environment. The existence of moderator variables are to measure how much strength the relationship between exogenous variables and endogenous variable. Parental involvement variable has three indicators: behaviour involvement, cognitive-intellectual involvement and personal involvement. While the school environment variable has five indicators: promotion of performance goals, promotion of mastery goals, support of autonomy, promotion of discussion and teacher social support. Furthermore, the relationship between learning model variables with the students' environmental awareness variable and the moderator variable of parent involvement and school environment can be described with the research concept framework in Figure 2.3.

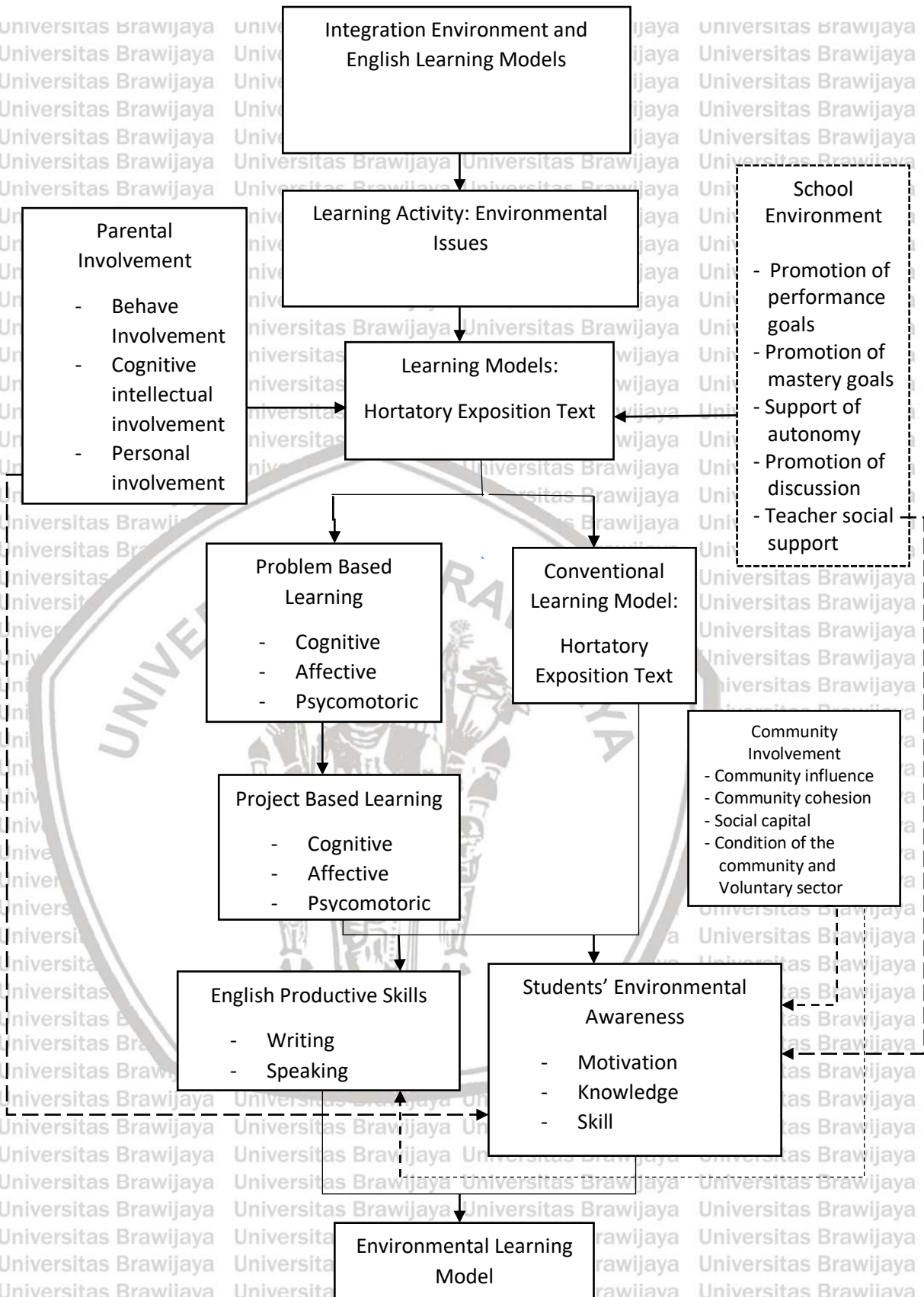


Figure 2.3. Research Concept Framework

Theoretical framework is the theoretical flow that will be discussed to identify and analyze the problems in this study. To make more clear about the theoretical basis that the researcher uses in this study, then the theoretical framework is arranged as in figure 3.2.

Based on the research framework, the hypotheses which are designed in this study are as follows:

- 1) $H_{1.1}$: there is an effect of problem based learning on the students' environmental awareness and writing skills.
- 2) $H_{1.2}$: there is an effect of project based learning on the students' environmental awareness and speaking skills.

2.15 Definition of The Research Variables

There are seven variables that need to be defined as they are used in this context of the study. The variables are as follows:

1. Environmental awareness is being aware of the natural environment and take action that is beneficial rather than damaging the earth (Sullivan, 2018).

- Motivation, values and attitudes:

- a. concern about environmental problems,
- b. understanding of one's own empowerment,
- c. understanding of responsibility and
- d. willingness to act.

- Environmental knowledge:

- a. information about environmental problems,
- b. knowledge of environmental problem causal relationships and

c. information about structural possibilities of environmental friendly activities.

- Skills and ability to act:

a. different levels of waste, vehicle, residences, edification, political actions, involvement, organizational actions;

b. different spheres of life: home, work, leisure, hobbies; and habits vs. deliberate action (Partanen-Hertell et al. 1999).

2. Problem-based learning is a method of direct learning, active case learning, which centered on systematic examination and the action of solving messy real-world problems. (Barrows, 1986).

3. Project-based learning is a learning model that refers on a constructivism approach, which includes the construction of knowledge with various perspectives, in social activities, and allows self-awareness to learn and know while depending on the learning context (Duffy & Cunningham, 1996 cited in Tamim & Grant, 2003).

4. Productive skills are also known as active skills, mean the information dispatch that a speaker generate in either oral or written format (Golcofva & Hubackova, 2014).

a. Writing is one of the productive skills of English that needs to be mastered by English learners because writing is a communication tool and it is believed to be an indicator of communication competence of the target language. Good writing skills represent the ability of students to communicate through English. Written language is used to communicate with others who are separated in time and space (Nunan, 1999).

Furthermore, Harmer (2004) states that writing is the only skill that allows

students to produce tangible products, where the product can be touched, read, and can still be useful for a long period of time.

- b. Speaking is an interactive process for arranging meaning related to the production and reception and processing of message (Brown, 1994; Burns & Joyce, 1997). Furthermore, speaking lessons can follow the stages of the pattern such as: preparation, presentation, practice, evaluation, and usual development. The teacher can use preparatory steps to set the speaking assignment context, such as with whom, when, where and why students will implement the assignment. To start awareness of the speaking skills to be targeted (ask for explanations, emphasize key words). In the presentation, the teacher can give students a preproduction model that is easier to understand and help them become observers of the language use.

Practice involves students in reproducing targeted structures, usually in a programmatic way. Whereas evaluation pays attention to the skills being tested and asks students to observe and assess their own progress. At last, the manifestation of the activity is to ask students to use strategies or skills in different contexts or authentic communicative situations, or to integrate the use of new skills or strategies with previously acquired skills (Carter & McCarthy, 1995).

5. Parental involvement is the obligation of parents to children in certain domains and Larocque, Kleiman, and Darling (2011) state that family involvement in general can be defined as a form of caring parents or caregivers in the education of their children, more specifically the involvement of people Parenting is a behavior of parents at home and

school intended to support the advancement of their children's education (El Nokali, Bachman, and Votruba-Drzal, 2010).

- Involvement of parental behavior reflects home and school-based engagement strategies, such as active communication between home and school, volunteering at school, and helping with homework (Hill & Tyson, 2009).

- Cognitive-intellectual parental involvement includes involvement at home and includes the role of parents in exposing their children to activities and experiences that stimulate education. (Hill & Tyson, 2009).

- Parental personal involvement reflects the attitudes and desires of parents towards school and education and conveys the importance of learning, by socializing about the values and benefits of education. (Hill & Tyson, 2009).

6. School environment means

- Promotion of performance goals
- Promotion of mastery goals
- Autonomy support
- Promotion of discussion

- Teacher social support (Wang & Helcombe, 2010).

7. Community Involvement

- Community influence
- Community Cohesion
- Social capital

- Condition of the community and voluntary sector

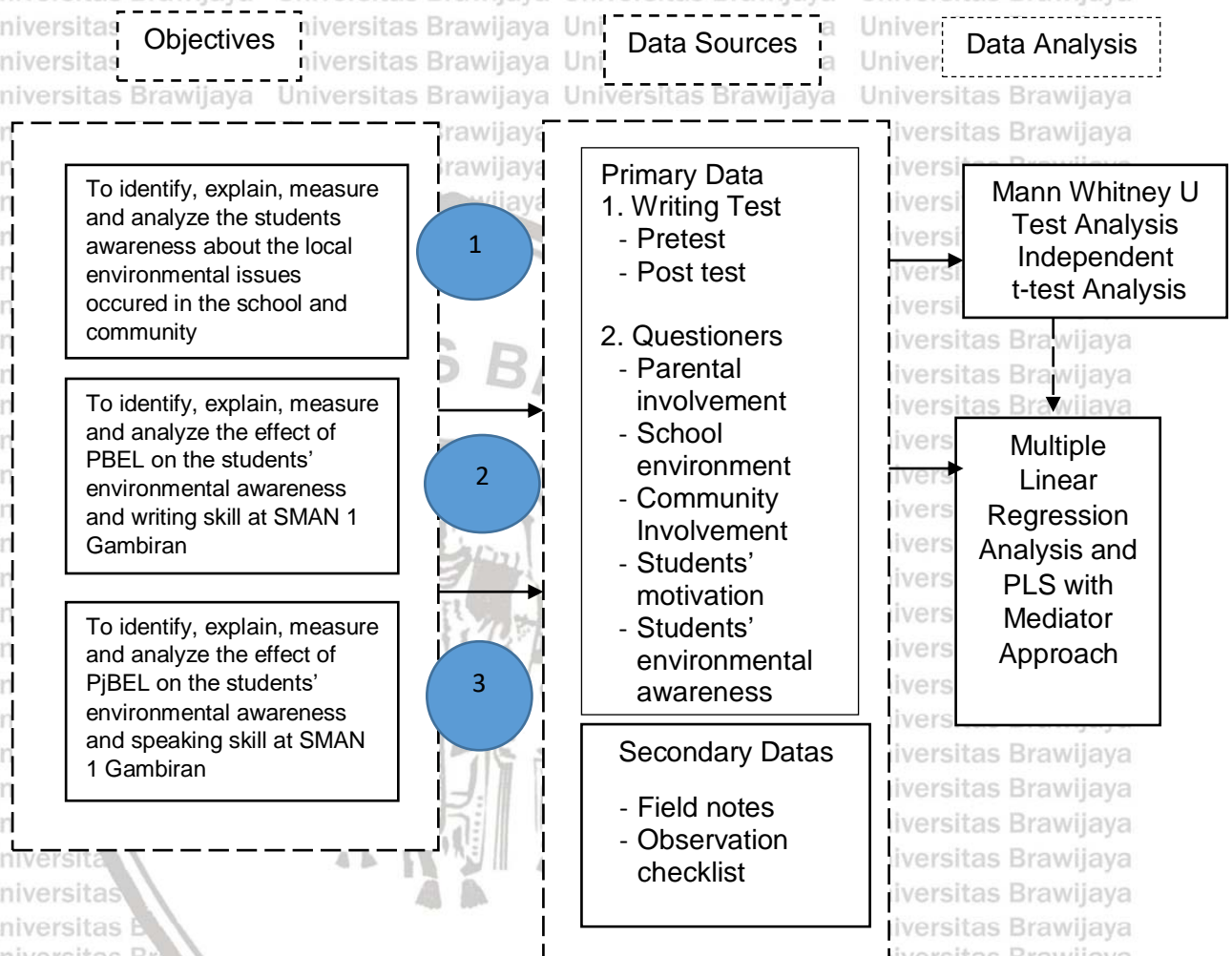


Figure 2.4. Data Analysis Framework

2.16. Analytical Framework.

Making of analytical framework is conducted to simplify the process of research discussion. The analyses which are used in the study process of Integration of the Students' Environmental Awareness and English Productive

Skills in Environmental Learning Model at *SMAN 1 Gambiran Banyuwangi* are 1) descriptive quantitative analysis; to analyze the effect of learning models PBL and PjBL on students' environmental awareness, and 2) PLS analysis with mediator approach to know the dominant factors affecting students' environmental awareness. The phase of the data analysis process is depicted as in Figure 2.4 above.

2.17. The Operational Framework of Research Implementation

The process of Integration of the Students' Environmental Awareness and English Productive Skills in Environmental Learning Model at *SMAN 1 Gambiran Banyuwangi* will be done systematically, ranging from data collection to the preparation of recommendations. The stage of this process is illustrated as in Figure 3.6 below:



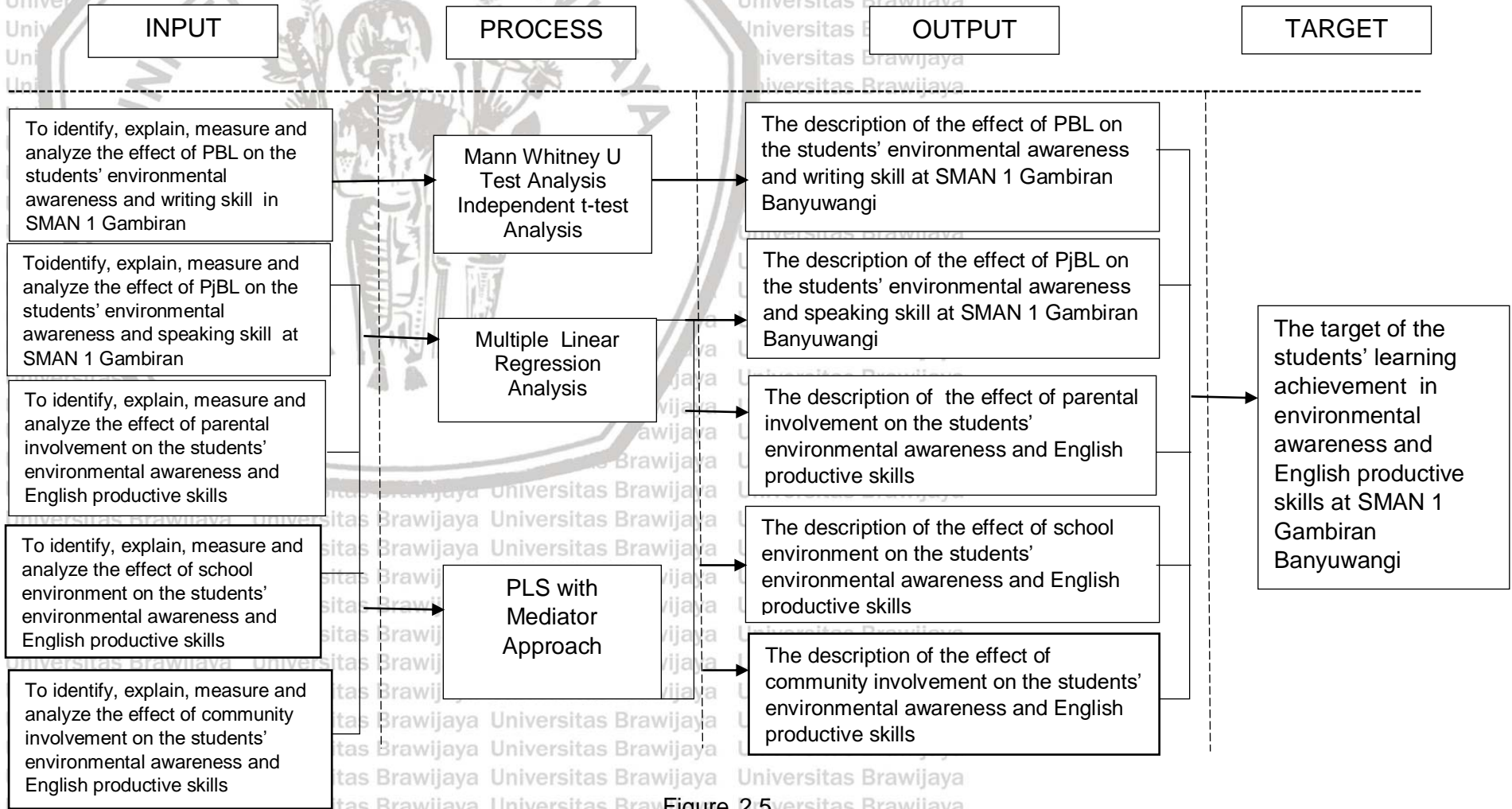


Figure 2.5. Operational Framework for The Implementation of Research

2.18. Research Novelty

Due to lack of literatures to support the environmental education in the most high school curriculums, therefore students do not able to achieve the skills to understand their environment. Besides a lack of survey on awareness, knowledge and attitude about environment (Yaghaubi, 2003 cited in Aminrad et al, 2013). Moreover from several previous studies (Maulidya, et al, 2013; Cruz & Tatengco, 2017; Gulcova & Hubackova, 2014; Wiek, et al, 2014), it appears that researches only concern on the learning and teaching process and the environmental aspects. While, Integration of the Students' Environmental Awareness and English Productive Skills in Environmental Learning Model study showed the diverse results depending on the aspects of the study and the research locations. Moreover, the comprehensive study in Indonesia which include environmental learning models, pollution, behaviour, parental involvement, community involvement, school environment, environmental awareness, and productive skills on high school students in the villages in Indonesia is lacking. So, the study's results are expected to be a new model of environmental learning in English subjects.

2.19. The Originality of Research

The originality of the study presents similarities and differences in the field of research with previous research. This is to avoid repeating the study of the same things. Thus it will be known what things distinguish and what are the similarities with previous research. The table below will describe the research originality.

| No | Author, Year and Title | Similarities | Differences | Originality of Research |
|----|---|---|--|---|
| 1 | Iswandari, D. C., et al. 2017. Effect of Environmental Problem – based Learning on the Indonesian EFL Students' Environment-related Vocabulary Mastery and Writing Ability | The focus of the research is similar, using text exposition hortatory in introducing the environment and writing skills learning. This research also used quasi experimental design analysis. | Through PBL this study only focuses on environmental vocabulary in students' writing | Developing environmental awareness of class XI students through environmental vocabulary in writing hortatory exposition. |
| 2 | Mukra, R& Nasution, Y. 2016. Difference of Students' Learning Achievement by Using Project Based Learning and Problem Based Learning Model on Topic of Pollution and Environment Conservation | This study used PBL and PjBL to develop students' environmental awareness. This study was experimental study. | This study is to explain the differences in student learning outcomes using PBL and PjBL learning models in the Biology class | Using PBL and PjBL to develop students' environmental awareness. |
| 3 | Wachyu, M. I & Rukmini, D. 2015. The effectiveness of Project Based Learning and Problem Based Learning For Teaching Biography Text Writing to Highly and Lowly Motivated Students | This study used PBL and PjBL to increase students' writing ability in high school. This study is quasi experimental research | This study is to determine the differences in students learning outcomes using PBL and PjBL learning models in writing Biography text. | Using PBL and PJBL to develop students' writing skills in writing Biography text. |

CHAPTER III

RESEARCH METHOD

3.1. Location of Research

The location of the study is SMA Negeri 1 Gambiran in Banyuwangi. It is located at Jl. Sriwijaya No. 11, Wringinaging village, Gambiran subdistrict, Banyuwangi regency. This school has twenty five classes, two science laboratories, three IT classes, one library, one local traditional music orchestra (Banyuwangi's gamelan orchestra) studio, two basketball courts, three volleyball courts and one musholla (Islamic Prayer Room). This school is not an Adiwiyata school, this school has branding as a mainstay school in volleyball in Banyuwangi regency and also in East Java Province. So, that more school policies are focused on developing and looking for talented volleyball athletes. The excel students (volleyball athletes) from various districts in East of Java study here.

3.2. Design of Research

This study was aimed at identifying the effect of learning models: problem based learning and project based learning in experimental group, as compared to the control group utilizing the conventional teaching tehniqe on the students' achievement on environmental awareness. According to Ary, et al. (2002), correlational research seeks to examine the strength and direction of relationship among two or more variables. This study used Quasi experimental design, since the purpose of this study was to examine how effective PBL and PjBL learning models in the experimental class compared to conventional methods in the control class. From the results of the research data on the writing and speaking

tests there were abnormal outliers data so that the data were abnormally distributed, therefore this study used the Mann Whitney test.

This study also used quantitative approach with multiple linear regression and Structural Equation Modeling (SEM), mediation approach and spatial analysis. Since this research consists of many variables and expected inter variables are interconnected with each other and have a multilevel model, this study will use SEM method. However, because of the small number of population (respondent), this research used the PLS method for data analysis. Partial Least Square (PLS) is a powerful analytical method because it is not based on many assumptions. Data does not have to be normally distributed in a multivariate manner, both reflective and formative indicators on a nominal, ordinal scale, intervals and even ratios can be used in the same model, besides that the minimum sample needed does not have to be large (Schuberth et. al., 2018).

Furthermore, descriptive quantitative analysis was utilized to explain the students' environmental awareness in SMAN 1 Gambiran. Moreover, Mediation approach in Partial Least Square (PLS) analysis was used to evaluate the dominant factors which influence the students' environmental awareness and formulate the students' environmental awareness model. Since, the samples are less than 100 students, and they are only 68. According to Hair, et al., (2010), they stated that PLS can produce result even with a very small sample even less than the number of variables.

3.3. Population, Sample and Determination

Population is the whole object of the research, it includes all members of a defined class of people, events, or objects. The population of this study is the

eleventh grade students in Math and Science program of SMAN 1 Gambiran, Banyuwangi in first semester in the academic year 2018/2019. The researcher selects this school and Math and Science program for some reasons as follows:

- 1) SMAN 1 Gambiran is one of the school that need attention due primarily to the achievement of volleyball and the lack of concern for the environment.
- 2) The appropriate genres for teaching environmental awareness are hortatory exposition and analytical exposition text, and both are taught in class XI.
- 3) This study utilized Problem based learning and project based learning models. On the application of problem-based learning model, students were assigned to look for pollution problems (water, land or air) in their village. The problem of pollution is closer to math and science program, since it deals with biology and chemistry subjects. On the application of project based learning, students were assigned to do a campaign in X and XII grades classes. The campaign' topic was reducing plastic wastes in school.

The population of the study is 173 students, it is presented in the following table.

Table 3.1 The Population of The Study

| Class | Number of Students |
|-----------|--------------------|
| XI MIPA 1 | 36 |
| XI MIPA 2 | 34 |
| XI MIPA 3 | 35 |
| XI MIPA 4 | 34 |
| XI MIPA 5 | 34 |
| Total | 173 |

In the research, simple random sampling was carried out since every set of individuals has an equal chance to be in the selected sample. It was carried out by doing lottery. The lottery was carried out towards the five class of the population. Hence, basically, each of the group had the same possibility to be the sample of the research.

However, in establishing the subject into two groups, each was selected at random to be experimental group (X.1) class X MIPA 1 and XI MIPA 2 and another was a control group (X.2) class XI MIPA 3 and XI MIPA 4. The design of this study is illustrated in Table 3.2

Table 3.2 Nonrandomized Control Group, Pretest-Posttest Design

| GROUP | PRETEST | INDEPENDENT VARIABLES | POSTTEST |
|-------|---------|-----------------------|----------|
| E | Y1 | X1 | Y2 |
| C | Y1 | - | Y2 |

Where:

E = the experimental group

C = the control group

Y1 = the observation of the pretest

Y2 = the observation of the post test

X1 = the treatment

Table 3.2 shows that each group was measured at the same time with the equivalent materials before and after the treatment was applied. They took the pretest to see their homogeneity before the treatment and post test after it. With the analysis of the data of the posttest scores, it revealed whether the independent variable really had the impact on the dependent variable.

At the beginning of the experimentation, the subjects in both the control and experimental groups were observed using a writing test. The test, the called pretest, was intended to examine the initial mastery of the subjects' writing achievement prior the treatment. Next, the experimental group was exposed to the PBL and PjBl, while the control group experienced of the conventional teaching method. Finally, after the experimentation, any change of the subjects' characteristics in both groups were observed or measured by means of the writing test which functioned as a post-test.

3.4. Variable, Data, Instrument and Source of Data

The data sources in this study are first, the subjects of the study, the second year students in SMAN 1 Gambiran, Banyuwangi and the selected students are also as the respondents of this study. Second, the documents, in the form of pretest and posttest, questionnaires for the students, observation checklist and field notes.

In the terms of the datas, there were two kinds of data collected in this study namely primary data and secondary data. The main data was used to arrange the corellation of the study which are collected from the students' writing test and questioner.

Table 3.3 Variables, Indicators and Data Sources.

| No | Aspects | Factors Affecting The Process and Learning Outcomes | | | | |
|----|-------------|---|--|--|--|--|
| 1 | Factors | Endogenous | Exogenous | | | |
| 2 | Variables | Psychological | Learning Models: - Problem Based Learning - Project Based Learning - Conventional | Parental Involvement | School Environment | Comunity Involvement |
| 3 | Indicators | - Interest - Intelligence - Talent - Motivation - Cognitive Ability | - Cognitive - Affective - Psycomotoric | - Behave Involvement - Cognitive Intellectual Involvement - Personal Involvement | - Promotion of performance goals - Promotion of mastery goals - Support of autonomy - Promotion of discussion - Teacher social support | - Community influence - Community cohesion - Social capital - Condition of the community and Voluntary sector |
| 4 | Data Types | Primary | Primary | Primary | Primary | Primary |
| 5 | Data Source | Respondents | - Pretest/Posttest - Observation - Checklist - Field Notes | Respondents | Respondents | Respondents |

3.5 Method of Data Collection

The four kinds of instruments were used to take the data; test as the primary data and questionnaires, observation checklist and field notes as secondary data. The primary data as the main source was used to decide the effectiveness of the study while secondary data was used to support the success of the study. Table 4.4 shows the function of each instrument.

Table 3.4 Research Instruments and Variables to Measure

| No | Instruments | Variables to Measure |
|----|-----------------------|--|
| 1 | Pre-test | Students environmental awareness, writing and speaking before treatment |
| 2 | Post-test | Students environmental awareness, writing and speaking after treatment |
| 3 | Questionnaires | - Students' motivation, PBL, PjBL, parental involvement, school environment and community involvement related to environmental awareness - The Students' attitude Towards PBL and PjBL. |
| 4 | Observation checklist | Students' activeness during the treatment |
| 5 | Field notes | Classroom conditions that cannot be measured by other instruments |

3.5.1 Writing Tests

In this study, the pretests were used to check the similarity level of the two groups and the posttests were used to measure the progress of the study after

the treatments. The posttests were achievement test which were used to learn how much of a course the learners have actually learned.

3.5.1.1 Developing and Constructing the Test

As mentioned previously, this study was conducted to investigate the effectiveness of scaffolds and conferencing, as compared to the conventional method, in helping the students to write hortatory exposition text. The scaffolds and conferencing were effective if the students' writing score improved. For this reason, two tests of writing were developed, hortatory exposition writing test as pre-tests and one hortatory exposition writing test as the post-tests.

In developing the tests, the researcher took several steps: 1) developing test content specification of the test, 2) writing the test, 3) experts validation, 4) trying out the test, 5) analyzing the try out test and 6) assembling the final form. The following discussion presents how each of the steps was conducted during the instrument development process.

3.5.1.1.1 Developing Test Content Specification of the Test

Test content specification or blueprint deals with identifying the syllabus, determining the object of the test, kind of test, the topic of the test, time allocation, and scoring. Identifying the syllabus was important to do to ensure the content validity of the test. The test should correspond to the objective of the course. Fulcher and Davidson (2007) assure that the test should measure accurately what is intended to measure. To be consistent with the concept of content validity, the writing test (writing prompt) should fit the knowledge which is intended to measure. Thus, to meet the content validation procedure, the researcher went through this step before determining the objective of the test.

Another type of validity that should be taken into an account when constructing a test is construct validity. Construct validity refers to whether the test matches with the theory behind it (Brown, 1996). More clearly, in order to have a high degree of construct validity a test has to be clear of what task a test taker has to perform. For example, a test of writing has to ask the test taker to write.

The syllabus of SMAN 1 Gambiran, Banyuwangi for the eleventh graders in the first semester reads that basic competence of writing is the students are able to express meaning accurately, fluently and appropriately, in real life context in the form of hortatory exposition texts.

3.5.1.1.2 Writing the Test

After developing the blue print of the text, the next step to do was writing the tests by preparing writing direction. Since the test developed was a test of writing that used to measure the students' achievement.

a. Preparing the Writing Test

Since the objective of the tests is to test the ability of the students in expressing relevant ideas (content), well-organized manner, and using acceptable English (appropriate vocabulary, correct grammar, and mechanics) in writing, in the test the students were required to write hortatory exposition essays based on the topic given. They had then to organize their writing in a good content and organization, using appropriate and acceptable English (grammar, vocabulary, and mechanics) to convey their ideas. The test items developed were in the form of writing prompt that enabled the students to write essays in which they had to perform their skills in writing hortatory exposition text.

In order to arrive at the characteristics of good writing test, the test in this study was developed based on some considerations to help students write at their best performance. First, the test should be developed based on the right level of difficulty. The failure to match the level difficulty specified by learning outcomes resulted on lower validity. Another point to be considered in the development of test was the clarity of the task. A test should provide clear instructions or directions that it is free from ambiguity and lead to the same interpretation. Ambiguous statements in the test items or in the test directions contribute to misinterpretations and confusions.

In addition, it was also important to consider the allocated time to complete the task. The time which is too long lead the students to cheat or make noise that disturb others. Contrastively, a test time which is too short blocks the students to show their true performance. The two conditions imply on the reliability of the scores resulted in the test. Finally, the test layout should not be neglected in the process of test task development. The test should be readable for the test takers. A good layout of the test including the clear typing, the correct spelling, and the right punctuation helps students to understand the test easier.

As the result, they did not waste their time only to figure out what the test tells about.

By considering all the points above and the objective of the study to develop students' environmental awareness, the researcher decided for pre test of hortatory exposition text, the writing test was in the form of picture. While for the post test, since the students have been thought about air, water and land pollution, the post test was in the topic of pollution.

b. Preparing the directions

Brief and clear direction is very important in a test. Direction gave the students information on what to do and what not to do in a test. In developing a test of writing, the direction is usually in the form of writing instruction. The instruction usually covers: time allotment, discourse type of the composition to produce, how to write the composition, how the test will be scored and the length of the composition. In preparing the test instruction, the researcher carefully considered the time allotment, scoring procedure, and the length of the texts as this information would influence students' strategy in doing the test in order that they would be able to perform well and get good scores.

3.5.1.2 Teacher, Observer and Validator

The researcher here is an English teacher who treats PBL and PjBL in experimental classes to develop students' environmental awareness and to improve students' productive skills.

Observer is an English teacher at SMAN 1 Gambiran who observed teaching and learning process during the research.

To get the validity evidence, after the process of writing the test finished, the researcher asked an English teacher who has been teaching English for eighteen years in the school where the study is conducted and also an instructor for English Teachers on senior high school and vocational school in Banyuwangi.

She also has been a lecturer of the English Department in a private university in Banyuwangi who teaches writing course to validate the test. To do this, the researcher gave them the test with enclosed test specification and the feedback

sheet. They were asked to give feedback and comment on the quality of the test by referring to the feedback sheet delivered to them.

3.5.1.3 Validating the Test

Validity is another important feature of a good test. In developing and constructing a test to assess the students' skills and knowledge, a crucial consideration should be made so that the test can get a valid result. Validity is defined as the extent to which an instrument measured what it claimed to measure (Ary et al, 2006). In other words, in measuring the subjects' skills or knowledge the test must measure appropriately the intended skills or knowledge so that the result of the test will be a convincing measurement that reflects the subjects' correct, right, or appropriate performance. Because validity of the result of the assessment is something abstract, it can merely be predicted through providing validity evidence (Latief, 2010).

To get the validity evidence, after the process of writing the test finished, the researcher asked an English teacher who has been teaching English for eighteen years in the school where the study is conducted and also an instructor for English Teachers on senior high school and vocational school in Banyuwangi. She also has been a lecturer of the English Department in a private university in Banyuwangi who teaches writing course to validate the test. To do this, the researcher gave them the test with enclosed test specification and the feedback sheet. They were asked to give feedback and comment on the quality of the test by referring to the feedback sheet delivered to them (see appendix 4).

3.5.1.4 Revision

The researcher came to revision the writing test after she got the feedback and comments from the experts. She also discussed with them. Based on their feedback, comment, and discussion, the test was revised. The revision given by the experts were more to the number of words that students should write.

While for the level of difficulty, ability to address with regard syllabus and clarity of the task, all of the two experts gave a positive feedback. Afterwards, the writing test was then constructed.

3.5.1.5 Writing Scoring Method

In this study, the researcher focused on the components of the ESL composition: content, organization, vocabulary, grammar and mechanics. In scoring the result of the test, this study used scoring rubrics. The scoring rubrics were developed based on the need in scoring hortatory exposition writing. The consideration of using analytic scoring adapted from Hartfiel et al. (1985) for writing test was to provide simple and clear criteria of each aspect. The adaptations made on Hartfiel et al.'s (1985) scoring rubric were in some aspects.

The weight and score aspects were adapted to be simpler to make the raters easier in scoring the students' writing. The next adaptation was in the descriptor aspect. In each scoring rubric for the organization aspect, the descriptors were adapted to follow the generic structures of hortatory exposition texts. This adaptation was made to give the raters clear criteria in scoring the organization of the students' writing. The scoring rubrics used in this study were presented in

Table 4.5

Table 3.5 Scoring Rubric of Hortatory Exposition Text Adapted from Hartfiel et al. (1985)

| WRITING ASPECT | WEIGHT | SCORE | LEVEL | CATEGORY | DESCRIPTOR |
|----------------|--------|-------|-------|-----------|---|
| CONTENT | 30 | 30-27 | 4 | Very Good | All ideas in the sentences are relevant to the topic, the sentences contain a lot of supporting details to the main idea |
| | | 26-22 | 3 | Good | Most of the ideas in the sentences are relevant to the topic, the sentences contain some supporting details to the main idea |
| | | 21-17 | 2 | Fair | Some ideas are relevant to the topic, the sentences contain few supporting details to the main idea |
| | | 16-13 | 1 | Poor | Limited number of ideas are relevant to the topic, the sentences contain very limited supporting details related to the main ideas |
| ORGANIZATION | 30 | 30-27 | 4 | Very Good | The composition contains complete generic structures of hortatory exposition text (a thesis, three kinds of argument, and recommendation), and all ideas in the sentences are put correctly based on the generic structure. |
| | | 26-22 | 3 | Good | The composition contains complete generic structures of hortatory exposition text (a thesis, three kinds of argument, and recommendation) but not all ideas in the sentences are put correctly based on the generic structure |
| | | 21-17 | 2 | Fair | The composition contains less generic structures of hortatory exposition text (thesis, two kinds of |

| | | | | | |
|------------|----|-------|---|-----------|--|
| | | | | | argument, and recommendation), all ideas in the sentences are put correctly based on the generic structure |
| | | 16-13 | 1 | Poor | The composition contains incomplete generic structure of hortatory exposition text (either thesis, one argument or recommendation), ideas are put correctly based on the generic structure |
| VOCABULARY | 10 | 10-9 | 4 | Very Good | Wide range of vocabulary and appropriate dictions, the intended meaning is fully understandable |
| | | 8-6 | 3 | Good | Enough range of vocabulary and occasional inappropriate dictions, the intended meaning is understandable enough |
| | | 5-3 | 2 | Fair | Limited range of vocabulary and frequent inappropriate dictions, the intended meaning is hardly understood |
| | | 2-1 | 1 | Poor | Very limited range of vocabulary, dominated by inappropriate dictions, the intended meaning cannot be understood at all. |
| GRAMMAR | 20 | 20-18 | 4 | Very Good | Few grammatical errors in agreement, tense, and pronoun |
| | | 17-14 | 3 | Good | Several grammatical errors in agreement, tense, and pronoun |
| | | 13-10 | 2 | Fair | Frequents grammatical errors in agreement, tense, and pronoun |
| | | 9-7 | 1 | Poor | Dominated by grammatical errors and agreement, tense and pronoun |

| | | | | | |
|-----------|----|------|---|-----------|--|
| MECHANICS | 10 | 10-9 | 4 | Very Good | Few errors in punctuation, capitalization, and spelling |
| | | 8-6 | 3 | Good | Several errors in punctuation, capitalization, and spelling |
| | | 5-3 | 2 | Fair | Frequent errors in punctuation, capitalization, and spelling |
| | | 2-1 | 1 | Poor | Dominated by errors in punctuation, capitalization, and spelling |

In order to get highly reliable scores on the students' writing, the interrater reliability was employed. The students' writing were scored by two different raters. The first rater is an English teacher in the school where the study is conducted. He has been teaching English for 18 years in senior high school. The second rater is a vocational school teacher in Banyuwangi. She is an instructor for English Teachers on senior high school and vocational school in Banyuwangi. She also has been a lecturer of the English Department in a private university in Banyuwangi. With their sufficient experiences of teaching English in high school and university level, both of the raters found no difficulty in assessing students' writing.

3.5.1.6 Writing Pre-Test

At the beginning of the experimentation, the subjects in both the control and experimental group were observed using a writing test. The test is called pretest, it was intended to examine the initial mastery of the subjects' writing achievement prior the treatment. Students were assigned to write a hortatory essay based on the picture given in approximately 150-200 words, they should

pay attention to the content, organization, vocabulary, grammar and mechanics of their writing and did it in 80 minutes. The writing pretest as in the following table.

Table 3.6 The Writing Pre-Test

| | |
|----------------|---------------------------------------|
| Writing Test | : Writing a Hortatory Exposition Text |
| Date | : |
| Grade | : XI |
| Time Allotment | : 80 minutes |

Directions:

1. Write a hortatory exposition essay based on the pictures bellow, in approximately 150 – 200 words
2. Pay attention to the content, organization, vocabulary, grammar and mechanics of your writing.
3. Do it in 80 minutes



3.5.1.7 Writing Post-test

The objective of the writing test is to test the ability of the students in expressing relevant ideas about environmental issues (air, water, or land pollutions) and well – organized manner using in writing. In the test the students are required to write hortatory exposition essays based on the topic: air, water

or land pollution in approximately 150-200 words, they should pay attention to the content, organization, vocabulary, grammar and mechanics of their writing and did it in 80 minutes. The writing post test as in the following table.

Table 3.7 The Post-Test

| | |
|---|---------------------------------------|
| Writing Test | : Writing a Hortatory Exposition Text |
| Date | : |
| School | : SMAN 1 Gambiran |
| Grade | : XI |
| Time Allotment | : 80 minutes |
| Directions: | |
| 1. Write a hortatory exposition essay. Choose one of the topics below: | |
| - Air pollution | |
| - Water pollution | |
| - Land pollution, | |
| 2. Write in approximately 150 – 200 words | |
| 3. Pay attention to the content, organization, vocabulary, grammar and mechanics of your writing. | |
| 4. Do it in 80 minutes | |

3.5.2 Speaking Test

Speaking is an interactive process of constructing meaning that involves producing and receiving and processing information (Brown, 1994; Burns & Joyce, 1997). A speaking or oral test is defined as a test in which a person is encouraged to speak, and then assessed on the basis of that speech. It can be used alone or combined with tests of other skills (Underhill (1997) as cited in Drossou, 2018). In the 2013 curriculum, speaking has three general intentions: to inform and report, to entertain, and to persuade. Since, the subject matter in this study is hortatory exposition text, then the goal is to teach the students to be able to persuade the other students to keep the environment. In this study, speaking tests will be conducted only once, when students arrange environmental campaigns in other classes, the theme is a simple way to reduce plastic waste

and they should pay attention to the content, fluency, grammar and diction of their presentation. They did it in 10 minutes.

Table 3.8 The Speaking Test

| | |
|----------------|---|
| Speaking Test | : Campaign |
| Date | : |
| Grade | : XI |
| Time allotment | : 10 minutes for a group |
| Directions: | |
| | 1. Conduct a campaign in other class. |
| | 2. The theme is simple way to reduce plastic waste. |
| | 3. Pay attention to the content, fluency, grammar and diction of your presentation. |
| | 4. Do it in 10 minutes. |

3.5.2.1 Speaking Scoring Method

The general purpose of speaking in English lesson is to enable the students to communicate orally and to communicate information efficiently. In scoring of the result of the test, this study uses scoring rubric, the scoring rubric is developed based on the need in scoring hortatory exposition speaking in the 2013 curriculum. In this study, the researcher decides is focus on the fluency, content, grammar and diction components according to the assessment of speaking on the 2013 curriculum.

Table 3.9 The 2013 Curriculum Speaking Performance Assessment Rubric

| CRITERIA | SCORE SCALE | INDICATOR |
|----------|-------------|---|
| Fluency | 21-25 | Has complete fluency in language |
| | 16-20 | Speaks fluently with only rare repetition or self-correction; |
| | 11-15 | Fluency is disturbed due to the language problems |
| | 6-10 | Often hesitated and stoped due to language limitations |

| | | |
|---------|-------|---|
| | 1-5 | Speak breaks off and stops so the presentation is not possible |
| Content | 21-25 | The explanation is appropriate and relevant. |
| | 16-20 | Relevant explanation even there is a little mistake |
| | 11-15 | The explanation is quite relevant. |
| | 6-10 | The explanations are hard to understand |
| | 1-5 | Inappropriate and irrelevant explanation |
| Grammar | 21-25 | There is no or a little grammatical error |
| | 16-20 | Sometimes makes grammatical errors but it does not affect the meaning |
| | 11-15 | Often makes grammatical errors that affect meaning |
| | 6-10 | Many grammatical errors that hamper meaning and often rearrange sentences |
| | 1-5 | Many Grammatical errors that they are hard to understand |
| Diction | 21-25 | Using vocabulary appropriately |
| | 16-20 | Sometimes use inappropriate vocabulary |
| | 11-15 | Often use inappropriate vocabulary |
| | 6-10 | Use wrong and limited vocabulary that so difficult to understand |
| | 1-5 | Vocabulary is very limited and difficult to understand |

In scoring, each component is weighted according to its approximate importance for oral communication: fluency (25) points, content (25) points, grammar (25) points and diction (25) points.

3.5.3 Questionnaire

There were two questionnaires for the students, which were used in this research. This study implemented a questionnaire as one of the data collection instrument. They included closed-ended questions covering various aspects of

the environmental issues which the students found in their village, teaching and learning process in PBL and PjBL, the parents involvement in their learning achievement, school environment, community involvement and the students on learning English and environmental awareness and the students attitude towards the method. Since the focus of the study was the developing students' environmental awareness and productive skills, this questionnaire was only to check students' attitude towards this procedure. This questionnaire was adapted from Rifqi's (2012) study. While, questionnaire about motivation to learn English based on Adhiartha (2013) researched, while questionnaire about parents involvement based on Grolnick, et al (1997) researched, school environment questionnaire based on Wang & Helcombe (2010) researched and community involvement questionnaire based on Humm, et al (2005). Furthermore, questionnaire about environmental awareness based on Harju-Autti (2013) researched. The instrument develops in this study consists of five point Likert type response scale levels and agree and disagree response section.

Table 3.10 Questionnaire List

| Questionnaire List | | | | | |
|--------------------|-----------------------------|--------------------------------|--|-----------------|-------|
| No | Research Variable | Indicator | Sub Indicator | Question Number | Total |
| | Motivation to learn English | Experiance of learning English | 1. Do you watch TV or video that contains English? 2. Do you listen to the radio that contains English? 3. Do you listen to English songs 4. Do you read English books or Magazines? 5. Do you ever speak English with your relatives or friend? 6. Does your mother/father | 1 - 8 | |

| | | | <p>teach you English?</p> <p>7. Do you ever speak English with your parents?</p> <p>8. Do you study English?</p> | | |
|----|------------------------|-----------------------------|--|-----------------|-------|
| | | The importance of English | <p>1. English can help my career in the future.</p> <p>2. It's a pleasure to study English?</p> <p>3. English can help me meet foreigners & learn about foreign countries</p> <p>4. My parents can speak English</p> <p>5. My parents encourage me to learn it</p> <p>6. English is an important school subject.</p> | 9 - 14 | |
| | | Liking for learning English | <p>1. English is enjoyable to learn.</p> <p>2. English is important as an international language.</p> <p>3. English broadens one's outlook.</p> <p>4. It's important to gain a mastery of English.</p> <p>5. English helps one to meet foreigners.</p> <p>6. English is useful for one's career.</p> <p>7. English is necessary for travel.</p> <p>8. The teacher is nice.</p> | 15 - 22 | |
| No | Research Variable | Indicator | Sub Indicator | Question Number | Total |
| 1 | Problem Based Learning | Linguistic Related Items | <p>1. Problem based learning (PBL) learning improves my writing skills</p> <p>2. Problem based learning (PBL) improves my English vocabulary</p> | 23-24 | |
| | | Environmental Related Items | <p>1. Problem based learning (PBL) teaches me to care about environmental problems around me.</p> <p>2. Problem based learning (PBL) increases my awareness to love the</p> | 25-27 | |

| | | | | | |
|----|------------------------|------------------------------------|--|-----------------|-------|
| | | | environment. 3. Problem based learning (PBL) teaches me not to litter. | | |
| | Project Based Learning | Linguistic Related Items | 1. Project based learning (PjBL) / campaign improves my speaking skills 2. Project based learning (PjBL) / campaign increases my confidence | 28-29 | |
| | | Environmental Related Items | 1. Project based learning (PjBL) / campaign increases my awareness to protect the environment 2. Project based learning (PjBL) / campaign teaches me to reduce the use of plastics. | 30-31 | |
| No | Research Variable | Indicator | Sub Indicator | Question Number | Total |
| 2 | Parental Involvement | Behaviour Involvement | 1. Does your parent believe that school is preparing you for future? 2. How often does your parent attend the school event? (take student's semester report) 3. How often do your parent talk with the teacher before or after school? 4. Does your parent attend PTO meeting? 5. Does your parent send thing to class? (books, etc) | 32-36 | |
| | | Cognitive Intellectual Involvement | 1. Did your parent read to you when you were a child? 2. Did your parent take you to the book store? 3. Did your parent help you in home work? 4. Does your parent talk about current events? | 37-40 | |
| | | Personal Involvement | 1. My mother knows what I am doing at school 2. My mother wants to know about my school | 41-43 | |

| | | | | |
|---|--------------------|--------------------------------|--|-------|
| | | | day. 3. My mother knows the name of my classmates. | |
| 3 | School Environment | Promotion of performance goals | 1. How true is it that teachers pay too much attention to grades and not enough attention to helping students learn? 2. How true is it that teachers treat students who get good grades better than other students? 3. How true is it that teachers only care about the smart kids? 4. How true is that students are encouraged to compete against each other for grades? | 44-47 |
| | | Promotion of mastery goals | 1. How true is it that everyone can get good grades if they do their very best? 2. How true is it that everyone is challenged to do their very best? 3. How true is that trying hard counts a lot? | 48-50 |
| | | Support of autonomy | 1. How often do students get to decide where they sit? 2. How often are students allowed to choose their partners for group work? 3. How often do students get to participate in making school rules and policy? | 51-53 |
| | | Promotion of discussion | 1. How often do students get to discuss their work in class? 2. How often are students' ideas and suggestions used during classroom discussions? 3. How often is there a lot of classroom discussion about what you are learning? | 54-56 |

| No | Research Variable | Indicator | Sub Indicator | Question Number | Total |
|----|-------------------------|-------------------------|--|-----------------|-------|
| | | Teacher social support | <ol style="list-style-type: none"> 1. How often can you depend on teachers to help you out when you have a personal or social problem at school? 2. How often do you talk to teachers about how things are going in your life? 3. How often do your teachers really understand how you feel? | 57-59 | |
| 4 | Environmental Awareness | Motivation | <ol style="list-style-type: none"> 1. Instead of riding mottor cycle, you walk or ride a bicycle to the grocery store or anywhere else. 2. Do you turn off the water tap? 3. Do you turn off the lights after coming out of the bathroom? 4. Do you bring your own bottle to school? 5. Do you watch TV programs with environmental message? 6. Do you throw the garbages in proper place? 7. Does your parent encourage you to care for the environment? | 60-66 | |
| | | Environmental Knowledge | <ol style="list-style-type: none"> 1. How do you feel about the water quality in your local river? 2. How do you feel about the level of pollution or waste produced by nearby farms and industry? 3. How do you feel about the misuse of chemical such as fertilizers and pesticides? 4. How do you feel about the water quality in your local well? 5. how do you feel about | 67-72 | |

| | | | | |
|---|-----------------------|---------------------|--|-------|
| | | | <p>the population of animals such as fish, birds and mamals?</p> <p>6. How good is the environmental state of Banyuwangi?</p> | |
| | | Skill | <p>1. Do you participate in outdoor experiences such as camping and fishing?</p> <p>2. Do you recycle many household items, such as paper, plastic bottles, milk jugs, batteries, steel containers, glass and much more?</p> <p>3. Have you ever cleaned toilets and household gear, on your own without being told to do so?</p> <p>4. Have you ever planted and cared for trees and flowers on your own without being told to do so?</p> | 73-76 |
| 5 | Community Involvement | Community influence | <p>1. Do you agree or disagree that your parent can influence decisions that affect your local area?</p> <p>2. Do you agree or disagree that your neighbours can influence decisions that affect your local area?</p> | 77-78 |
| | | Community cohesion | <p>1. Do you agree or disagree that this local area (within 15/20 minutes walking distance) is a place where people from different backgrounds can get on well together?</p> | 79 |
| | | Social capital | <p>1. In the last 12 months have you friends or your neighbours done any of things unpaid for you? (transporting you to school, hospital, etc)</p> <p>2. In the last 12 months have you friends or your neighbours given advice to you?</p> | 80-81 |

| | | | |
|--|---|--|-------|
| | Condition of the community and Voluntary sector | <p>1. In the last twelve months, do you join to any groups, clubs or organisations?</p> <p>2. What are your group's or organisation's main fields of activities? (Ex: Education, sport, religion, health, environment, etc)</p> <p>3. Do you agree that your group, club or organisation can influence the decision-making in school meeting?</p> <p>4. How many people gave unpaid help to your club/organisation in the past year?</p> | 82-85 |
|--|---|--|-------|

Table 3.11 Questionnaire of Students' Attitude to PBL and PjBL

| No | Topic of the Questions | Responses |
|----|---|-----------|
| 1 | The students' general impression on problem based learning and project based learning | |
| 2 | Good things from hortatory scaffolds and campaign | |
| 3 | Benefits of learning writing and speaking by means of PBL and PjBL | |
| 4 | Weaknesses of PBL and PjBL | |
| 5 | The purpose of using PBL in learning writing and PjBL in learning speaking | |
| 6 | The students' experience in learning productive skills and environmental awareness using PBL and PjBL | |

3.5.4 Observation Checklists

Generally, the observation checklists was used to gathering data about the teacher and the student's activities during the teaching and learning process.

There is only an observation form employed in the research. It was used to collect data about the students' performance in applying the problem based

learning and project based learning. The observation form was shown to the collaborator before he came to the class and did the observation. He observed:

1) the students attention toward the presenting materials, 2) the students interact actively in the process by questioning and answering, 3) the students actively involved in the activities set by the teacher, individually or in group and 4) the students collect the work required by the teacher. The scores based on the students' activities: the scores 1 if < 40 % of the students do, score 2 if 40 % up to 59 % of the students do, score 3 if 60 % up to 74 % of the students do, score 4 if 75 % up to 84 % the students do, and score 5 if 85 % up to 100% the students do.

3.5.5 Field Notes

The field notes aims to give any information that could not be reached by observation checklist and questionare. The good points and things to consider notes on every meeting will be presented. Factors which are suspected to effect the condition of teaching and learning process during the experiment are displayed. The form of field notes was given to the observer during the experiment.

3.6 Method of Data Analysis

As it has been described earlier, that the objectives of the study are to identify, explain, measure and analyze the effect of problem based learning on the students' environmental awareness and writing skills and the effect of project based learning on the students' environmental awareness and speaking skills.

Thus to know whether the students have matched with the objective of the study, the target of students' learning achievement is presented in the following table.

Table 3.12 The Target of Students' Learning Achievement

| No | Aspect | Target |
|----|---|--------|
| 1 | The students writing score reach above 75 in a 0-100 scale. | 70 % |
| 2 | The students speaking score reach above 75 in a 0-100 scale | 70 % |
| 3 | The students use drinking bottles brought from home | 50 % |
| 4 | The students already throw garbage in the proper places. | 50 % |

This study utilizes two data analysis methods, t-test with Mann Whitney U test and SEM with PLS. T-test and Mann Whitney U test were used to present the result of writing and speaking pretest and post test scores and Partial Least Square (PLS) to analyze the questionnaire data. PLS is designed to overcome the limitations of the Structural Equation Modeling (SEM) method. In SEM method, it requires large data, no missing values, must be normally distributed, and should not have multicollinearity, while PLS uses a distribution free approach, where the data can be distributed. In addition, PLS can also be used on small samples. Since the sample in this study is small (68 students), the researcher uses PLS design. PLS was used to measure motivation, environmental knowledge and skills of the students environmental awareness, parental involvement, community involvement and school environment using questioner as one of the instruments in this study.

The questionnaire in this study used Likert scale. According to Ary, et al (2002), likert scale is a measurement scale consisting of a series of statements followed by five response categories, typically ranging from "strongly agree" to "strongly disagree". The questioner in this study used five alternative answers in

a set of statements, which has a positive meaningful range up to a negative meaning about the topic with a predetermined answer scores between 1 and 5.

Table 3.13 Likert Scale Ranking

| Choice of Answers | Numeric Values | Response Category |
|-------------------|----------------|-------------------|
| A | 5 | Strongly Agree |
| B | 4 | Agree |
| C | 3 | Undecided |
| D | 2 | Disagree |
| E | 1 | Strongly Disagree |

Source: Ary, et al (2002).

Furthermore, the research instrument is tested the validity and reliability as follows:

3.6.1 Validity Test

Validity is another important feature of a good test. In developing and constructing a test and questionnaire to assess the students' awareness, skill and knowledge, a crucial consideration should be made so that the test can get a valid result. Validity is the extent to which a measure actually taps the underlying concept that is purposes to measure (Ary, et al, 2002). In other words, in measuring the subjects' skill or knowledge of learning based competence the test must measure appropriately the skill or knowledge so that the result of the test will be a convincing measurement that reflect the subjects' appropriate performance. While, to measure the subjects' motivation, attitude, and action, the parental involvement and school environment as the external factors which related to the subjects' environmental awareness, also to measure the internal

factor that is students' psychological factor are a crucial consideration should be made too, so that the questionnaire can also get a valid result. Validity tests are used to examine the instruments, so that the instruments can deliver the results that appropriate with its purposes.

The validity of the data will be tested by PLS model convergent validity and discriminant validity. According to Alarcon & Sanchez (2015), "the convergent validity of the measurement model can be assessed by the Average Variance Extracted (AVE) and Composite Reliability (CR). AVE measures the level of variance captured by a construct versus the level due to measurement error, values above 0.7 are considered very good, whereas, the level of 0.5 is acceptable. CR is a less biased estimate of reliability than Chonbachs Alpha, the acceptable value of CR is 0.7 and above".

$$AVE = \frac{\sum \lambda_i^2}{\sum \lambda_i^2 + \sum_i \text{var}(\varepsilon_i)}$$

Where

AVE = Average Variance Extracted

Σ = correlation covariance matrix

λ_i = factor loadings

3.6.2 Realibility Test

Realibility is the extent to which a measure yields consistent results and the extent to which scores are free of random error. Reliability is an index

indicating the extent to which instruments are credible and reliable. To test reliability in PLS uses composite reliability. The formula as follows:

$$CR = \frac{\sum_{i=1}^n \lambda_i^2}{\sum_{i=1}^n \lambda_i^2 + \sum_{i=1}^n \delta_i}$$

Where:

K_j = the number of indicators of construct ξ_j .

λ_{jk} = factor loadings

θ_{jk} = the error variance of the k th indicator ($k = 1, \dots, K_j$) of construct ξ_j

Instrument can be reliable if it has reliability composite coefficient of 0.7 or more.

3.7 Data Analysis Procedure.

This study examines the effect of learning models variables to the students' environment awareness variables. To test the effect, it is used descriptive analysis technique and inferential analysis namely Partial Least Square (PLS) Analysis with Mediation Approach.

3.7.1 Descriptive Statistical Analysis

The objectives of this study are to examine the characteristic of each variables which are studied. The format of analysis depends on the types of datas. Numerical data and categorical data. Numerical data can be divided into two types: discrete and continuous. Discrete data represent items that can be counted; they take on possible values that can be listed out. The list of possible

values may be fixed (also called finite); or it may go from 0, 1, 2, on to infinity (making it countably infinite). Continuous data represent measurements; their possible values cannot be counted and can only be described using intervals on the real number line. While, categorical data represent characteristics such as a person's gender, marital status, hometown, or the types of movies they like. Categorical data can take on numerical values (such as "1" indicating male and "2" indicating female), but those numbers do not have mathematical meaning.

On the instrument which is used in this study, the answers are obtained by scores. The scores based on the Likert scale, the response categories, typically ranging from "strongly agree" to "strongly disagree". The questioner in this study uses five alternative answers in a set of statements, which has a positive meaningful range up to a negative meaning about the topic with a predetermined answer scores between 1 and 5. The interpretation is: strongly agree is given score 5, agree is given score 4, quite agree is given score 3, disagree is given score 2, and strongly disagree is given score 1.

3.7.2 Regression Analysis

Regression analysis in this study is to examine whether problem based learning, project based learning, parents involvement and school environment give effect on the students' environmental awareness in SMAN 1 Gambiran, Banyuwangi.

To know whether there were significant relationship between independent variables and dependent variable that is students' environmental awareness (Y), this study used multiple linear regression analysis model. Multiple Linear Regression is the most common form of linear regression analysis. As a

predictive analysis, the multiple linear regression is used to explain the relationship between one continuous dependent variable and two or more independent variables. This analysis wants to find the relationship between cognitive (X1), attitude (X2) and action (X3). The formula which is used as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

Where:

β_0 = regression constant

$\beta_1 - \beta_3$ = regression coefficient

e = error

The hypothesis is a simple proposition that can be proved or disproved through various scientific techniques and establishes the relationship between independent and some dependent variable. It is capable of being tested and verified to ascertain its validity, by an unbiased examination. Testing of a hypothesis attempts to make clear, whether or not the supposition is valid. There are some tests in regression coefficient, they are F-test, t-test and Coefficient of Determination (R^2). The F statistical test basically shows whether all the independent variables included in the model have a mutual influence on the dependent variable.

T test is used to test the significance of the partial influence of the independent variable to the dependent variable. This test provides to test the significance of the constants of each independent variables to the dependent variable. This test is done by comparing t-count and t table with significance level $t < 0,05$ (5%) and on the level of free degree $df = n - k - 1$. If t count $>$ t table then the

partial independent variables significantly influence the independent variable, vice versa.

Coefficient of determination is used to measure the percentage of variation of dependent variable which is described by all independent variables.

Coefficient of determination lies between 0 and 1 ($0 < R^2 < 1$), where the higher of R^2 value of a regression or it is closer to 1, then the regression results will be better. This means that the independent variables provide almost all the information needed to predict the dependent variable.

3.7.3 Inferential Analysis: PLS Mediation Approach

The purpose of the second study in this study is the dominant factors that affect students' environmental awareness, and it requires a structured analysis tool for its completion. Environmental awareness consists of motivation, knowledge and skill. Motivation is largely based on student's values and attitudes, including concern about environmental problems and understanding of one's responsibilities. Environmental knowledge includes knowing about environmental problems and the cause-effect relationships of environmental problems. Skills are student abilities to act in different levels: waste, participation, campaign or socialisation. For that required, it needs the hypotheses that adjust the students' environmental awareness.

In static terminology, there are three types of variables that are included in this study, those are:

1. Independent variable: a variable that is antecedent to the dependent variable; also called the experimental or treatment variable.

2. Dependent variable: a variable that is a consequence of or dependent on an antecedent (independent) variable; also called the outcome or effect variable.
3. Moderator variable: a variable that affects the strength of the relation between the predictor and criterion variable. Moderators specify when a relation will hold. It can be qualitative (e.g., sex, race, class...) or quantitative (e.g., dosage or level of reward) (Tsang, 2015).

The relationships between independent, moderator, and dependent variables are described in the following figure.

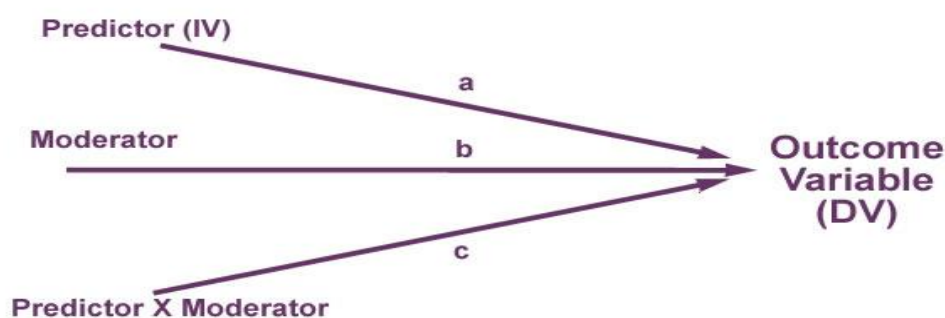


Figure 3.1 The relationship between independent, moderator, and dependent variables (Glass & Singer's cited in Baron & Kenny, 1986).

Based on the figure above, the hypotheses which are designed in this study as follows:

H_{1.1} there is an effect of problem based learning on the students' environmental awareness and writing skills.

H_{1.2} there is an effect of project based learning on the students' environmental awareness and speaking skills.

Hypotheses 1 and 2 are tested by t test and directly Partial Least Square.

Based on the study problems, hypothesis and research design, the data collecting in this study will be analyzed by quantitative method, Structural Equation Modeling (SEM) technique with Partial Least Square (PLS) approach. PLS is a statistical method that produces some relation to principal components regression, PLS is also an analytical technique used to test the hypothesis between variables. It has a linear regression model by designing the predicted variables and the observable variables to a new space. PLS can also at the same time analyze the constructs formed with reflexive and formative indicators.

There are 2 (two) basic evaluations in PLS, namely model evaluation of outer model measurement results and evaluation of structural model (inner model). Outer model of Partial Least Square is to know the validity and reliability of indicators that measure latent variables. Criteria validity test in a study refers to the amount of outer loading each indicator of the latent variable. While, inner model or structural model testing is done to see the relationship between construct, significance value and R-square of research model.

The testing steps of the PLS-based empirical research model with SmartPLS software are as follows:

1. Model Specifications

The relationship of path analysis between variables consists of:

- a. Outer model, that is the specification of the relationship between latent variables with the indicator. It is also called outer relation or measurement model. It defines the characteristics of the construct with its manifest variables. The reflexive indicator model can be written as follows:

$$X = \Lambda x \xi + \epsilon x$$

$$Y = \Lambda y \eta + \epsilon y$$

Where x and y are indicators for exogenous and endogenous latent variables. While Λx and Λy are loading matrices which describe such simple regression coefficients that connect latent variables with their indicators. Residuals measured by ϵx and ϵy can be interpreted as measuring errors or noise.

The equation of formative indicator model can be written as follows:

$$\xi = \Pi x X_i + \delta x$$

$$\eta = \Pi y Y_i + \delta y$$

Where ξ , η , X and Y are equal to the previous equation. Πx and Πy are like multiple regression coefficients of the late variable toward the indicator, while δx and δy are the residuals of the regression.

- b. Inner model, that is the specification of the relationship between latent variables (structural model) which is called the inner relation, describing the relationship between latent variables based on the substantive theories of research. Without losing the general nature, it is assumed that the latent variables and the manifest indicators or variables on the zero means scale and the variance unit are equal to one, so the location parameters (constants parameters) can be removed from model. The equation model can be written as follows:

$$\eta = \beta \eta + \Gamma \xi + \zeta$$

Where η represents the endogenous variable vector (dependent), ξ is the vector of the exogenous latent variable and ζ is the residual vector (unexplained variance). Since PLS is designed for recursive models, then the relationships between latent variables hold that any latent variable is dependent η or often called casual chain system of latent variables. They can specified as follows:

$$\eta_j = \sum_i \beta_{ji} \eta_i + \sum_i \gamma_{jb} \xi_b + \zeta_j$$

Where γ_{jb} (in the form of a matrix denoted by Γ) is the path coefficient that links endogenous latent variables (η) with exogenous (ξ). While the β_{ji} (in the form of the matrices denoted β) is the path coefficient that connects endogenous latent variables (η) with endogenous (η); for index range i and b . The parameter ζ_j is a variable inner residual.

In the PLS model, the inner model is expressed in the system equation as follows:

$$\eta_1 = \gamma_1 \xi_1 + \gamma_2 \xi_2 + \zeta_1$$

$$\eta_2 = \beta_1 \eta_1 + \gamma_4 \xi_2 + \zeta_1$$

2. Model Evaluation

The structural model or inner model is evaluated by looking at the percentage of variance. It is described by looking at R^2 for latent dependent constructs using the Stone-Geisser Q Square test size and also looking at the magnitude of its structural path coefficients. The stability of this estimate is evaluated using the t-statistic test obtained through the bootstrapping procedure.

Goodness of Fit Model is measured using R-square dependent latent variable with the same interpretation as regression. Q-Square predictive relevance for structural models, it measures how well the observed values generated by the model and its parameter estimates. The Q-square value > 0 , indicates the model has predictive relevance; otherwise if the value of Q-square ≤ 0 , indicates the model lacks predictive relevance. Q-square calculation is done by the formula as follows:

$$Q^2 = 1 - (1 - R_1^2)(1 - R_2^2) \dots (1 - R_p^2)$$

where $R_1^2, R_2^2 \dots R_p^2$ is the R-square of the endogenous variable in the equation model.

3. Hypothesis Testing

Hypothesis testing (Y and p) is done by Bootstrap resampling method developed by Geisser & Stone. The test statistic used in this research is t-statistic or t test. Therefore, the assumption of free distributed data does not require normal distribution assumptions and does not require large samples.

4. Moderator Analysis Using Partial Least Square (PLS)

Moderation describes a situation in which the relationship between two constructs is not constant but depends on the values of a third variable, referred to as a moderator variable. The moderator variable (or construct) changes the strength or even the direction of a relationship between two constructs in the model. Moderating relationships are hypothesized a priori by the researcher and specifically tested. The testing of the moderating relationship depends on whether the researcher hypothesizes whether one specific model relationship or whether all model relationships depend on the scores of the moderator.

One method for analyzing moderation variables is moderation regression.

Regression analysis of moderation is a regression analysis involving moderating variables in building the relationship model. In the regression analysis of moderation, all assumptions of regression analysis apply, meaning that assumptions in the regression analysis of moderation are the same as assumptions in the regression analysis. Moderation variables can be known from the influence of two-way interaction between predictor variables and moderation variables in predicting dependent variables.

If X_1 be the predictor variable, X_2 as the moderating variable ($X_2 = M$) with the dependent variable (Y) then in the regression model, the two variables X_1 and $X_2 = M$ are called the main effects and in the moderation regression model, the main effect will be added the interaction effect between X_1 and $X_2 = M$ ($X_1 * X_2 = X_1 * M$). The effect of this interaction that distinguishes whether the variable $X_2 = M$ as a moderation variable or not. The relationship equation model in moderation regression analysis is as follows:

$$\hat{Y}_i = b_0 + b_1 X_{1i} + b_2 M_i + b_3 X_{1i} * M_i$$

In the form of figure, the relationship is as follow:

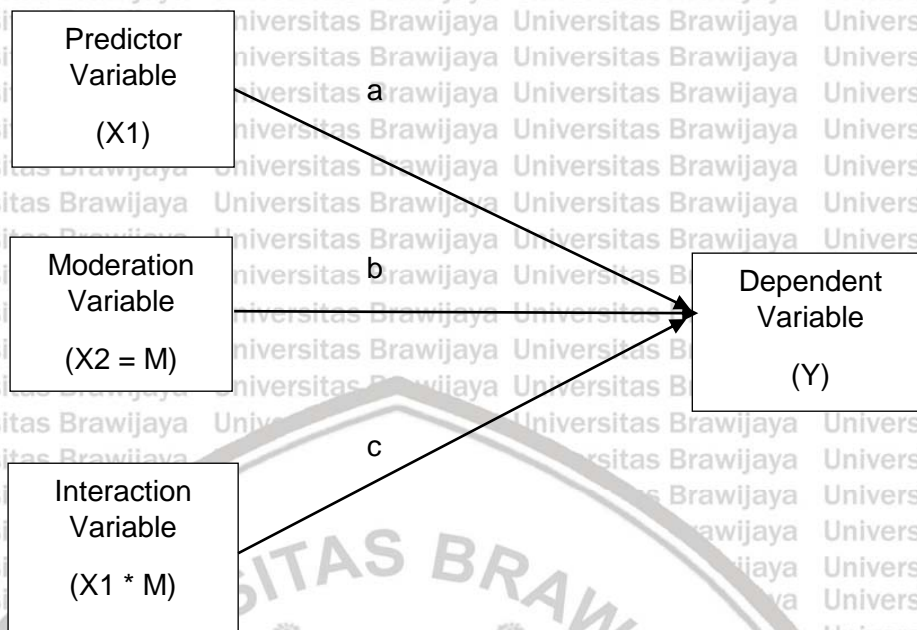


Figure 3.2 Model Analysis of Moderation Variables

As in the figure, if the path c is significant, it can be said that the variable M moderates the influence between X1 to Y.

3.8 Research Schedule

The study will be conducted in the first semester of 2018/2019 academic year. For the consideration of this study, the experiment is conducted within a period of two months or 8 meetings. The research schedule is presented in table

3.9

Table 3.14 Research Timetable

| No | Activities | 2018 | | 2019 | | 2020 | |
|----|------------------------|------|------|------|------|------|------|
| | | Even | Odd | Even | Odd | Even | Odd |
| | | Semt | Semt | Semt | Semt | Semt | Semt |
| 1 | Stages of Preparation | | | | | | |
| | a. Title submission | | | | | | |
| | b. Proposal submission | | | | | | |
| | c. Research permits | | | | | | |

| | | | | | | |
|---|------------------------------|--|--|--|--|--|
| 2 | Implementation stage | | | | | |
| | a. Data collecting | | | | | |
| | b. Data analysis | | | | | |
| 3 | Stages of report preparation | | | | | |
| 4 | Seminars | | | | | |
| 5 | Final Exam of Dissertation | | | | | |



CHAPTER IV

RESEARCH FINDINGS

This chapter elaborates research findings and verification of the hypotheses of the research. It presents result of the posttest score and the analysis using t-test and the hypothesis testing after analysis the questionnaires and posttest score as the main findings. Besides, it also explains the result of minor findings, the screening result of the students' Mathematic and science scores in the second semester where the students were in the X grade and learning motivation with the students' English language skills

4.1 Major Findings

This chapter discusses the analysis of data obtained from the primary research data. Secondary data is data obtained by researchers from library sources or reports. Secondary data in this study were obtained from semester 2 report cards students of class XI MIPA 1 and XI MIPA 4. A sample of 68 students consisted of 36 students in class XI MIPA 1 and 32 students in class XI MIPA 4. This research was scrinning which was conducted to determine the relationship between the value of science and learning motivation with the results of learning English.

The major data as the main souch of the decision whether or not the procedure applied was effective are the posttest scores that were calculated by means of statistical procedure. When the mean scores of the experimental classes

research are considered higher than the control classes after the statistical calculation, then the result of the reseach is successful.

4.1.1 The Result of Posttest of The Experimental and Control Group

After giving a different treatment to both groups, posttest was administered to get the data of students writing and speaking abilities. The treatment given to the experimental group was teaching writing using scaffold and speaking using campaign, while to the control group was teaching writing and speaking by using the conventional method.

The posttest of the experimental and control groups were conducted on the same day and date, it was conducted on October 30, 2018 for the writing test and November 13, 2018 for speaking test. The test was given at 06.45 a.m – 08.15 a.m and 12.00 – 13.30 p.m for experimental groups and at 08.15 – 09.45 a.m and 10.00 – 11.30 a.m for control groups. The test followed the schedule of the each class. The result of the pretest and posttest of both the experimental and the control groups can be seen in table 4.1 and 4.2

Tabel 4.1 The Summary of Pretest

| Data Groups | X _{Min} | X _{Max} | Average | SD | n |
|----------------------|------------------|------------------|---------|------|----|
| Control Pretest | 36 | 73.5 | 53.61 | 8.58 | 66 |
| Experimental Pretest | 38 | 84 | 55.97 | 8.43 | 68 |

From the table above, it can be seen that the Pretest Control data group obtained a minimum score 36 and a maximum score 73.5, where the average score was 53.61 with a standard deviation (SD) = 8.58, whereas in the data group Pretest Experiments obtained a minimum score 38 and a maximum score 84, where the average score 55.97 with standard deviation (SD) = 8.43.

Based on the Average Comparison Chart above, it shows that at the time before being given treatment (Pretest), the two groups of data have relatively not much different mean values.

Table 4.2 The Summary of Posttest

| Data Groups | X _{Min} | X _{Max} | Average | SD | n |
|-----------------------|------------------|------------------|---------|------|----|
| Control Posttest | 46 | 85 | 74.53 | 7.17 | 66 |
| Experimental Posttest | 65 | 90 | 79.87 | 4.14 | 68 |

From the table above, it can be seen that the Posttest in Control groups, the minimum score is 46 and the maximum score was 85, where the average score was 74.53 with the standard deviation (SD) = 7.17, while in the Posttest Experiment groups, the data obtained a minimum score is 65 and a maximum score was 90, where the average score was 79.87 with a standard deviation (SD) = 4.14.

Based on the Average Comparison Chart above, it shows that after the students were being given the treatment (Posttest), the two groups' datas have many different mean score, where the posttest of the Experimental classes scores are higher than the Posttest Control Classes scores.

4.1.2 Normality Test

Table 4.3 The Normality Test Results of Experiment Class and Control Class Pretest Scores

| Class | p-value | Alpha | Conclusion |
|------------------|---------|-------|------------------------------|
| Experiment Class | 0,072 | 0,05 | Data is normally distributed |
| Control Class | 0,200 | 0,05 | Data is normally distributed |

From the table above, it can be seen that at a significant level $\alpha = 0.05$ and a

sample size of 8, a p-value of 0.072 for the Experimental Class and 0.200 for the Control Class was obtained. It turns out that the p-value for the two groups of data is greater than alpha. This shows that the data on the pretest class and control class pretest scores are normally distributed.

Table 4.4 The Normality Test Results of Experiment Class and Control Class Posttest Scores

| Kelas | p-value | Alpha | Conclusion |
|------------------|---------|-------|----------------------------------|
| Experiment Class | 0,082 | 0,05 | Data is normally distributed |
| Control Class | 0,000 | 0,05 | Data is not normally distributed |

From the table above, it can be seen that at a significant level $\alpha = 0.05$ and the sample sizes were 8, a p-value was 0.082 for the Experimental Class and 0,000 for the Control Class. It turns out that the p-value of one group of data was smaller than alpha, that is in the Posttest Control class. This shows that the control class posttest score data was not normally distributed.

Based on all the results of the abnormality data testing, it is known that there are violations of the assumptions of parametric statistical testing. Therefore, an alternative test was used, namely the Mann-Whitney test. Thus, the comparative test which was then used was the non-parametric statistical testing method namely Mann-Whitney. The test used the SPSS version 13.0 program application and the output results are as follows:

Table 4.5
Mann-Whitney U- Statistical Hypothesis Test

| Test | Group Comparison | Total Ranking | Mann-Whitney | P-value | Explanation |
|----------|------------------|---------------|--------------|---------|-----------------|
| Pretest | Experiment Class | 4992,5 | 1841,5 | 0,073 | Non Significant |
| | Control Class | 4052,5 | | | |
| Posttest | Experiment Class | 5905 | 929 | 0,000 | Significant |
| | Control Class | 3140 | | | |

Statistical Hypothesis:

H_0 : Both data groups tend to be the same (non significantly different)

H_1 : Both groups of data tend not to be the same (significantly different)

α : 5%

Test criteria:

Reject H_0 if $p\text{-value} < \alpha$

Accept H_0 if $p\text{-value} > \alpha$

The Pretest data testing of the Experimental Class group got a total ranking 4992.5 and the Pretest datas in the Control Class group got a total ranking 4052.5.

So that the Mann-Whitney U-Test value was 1841.5 with $p\text{-value}$ 0.073. Due to the value of $p\text{-value} > \alpha$ ($0.073 > 0.050$), the statistical hypothesis stated to accept H_0 , means that there is non significant difference between the groups of the Experimental Class data and the Control Class data group in the Pretest test.

The Posttest data testing of the Experimental Class group got a total ranking number 5905 and the Posttest datas in the Control Class group got a total ranking number 3140. So that, the Mann-Whitney U-Test value was 929 with a $p\text{-value}$ 0,000. Due to the $p\text{-value} < \alpha$ ($0,000 < 0,050$), the statistical hypothesis stated to

reject H_0 . Therefore, the one that applies was H_1 , means that there is a significant difference between the Experimental Class data group and the Control Class data group in the Post test.

4.1.3 Measurement Model (Outer model / Measurement Model)

Measurement model is a model with the results of calculations based on calculations using the PLS program. The purpose of the measurement model is to describe which indicators have the dominant influence as a direct measure of the latent variable. This evaluation is done by looking at the value of the loading factor (outer loading) on each indicator. If the T Statistics value is more than 1.96 then it can be said that the indicator is valid, while to find out which indicator is the most dominant one can be seen through the ranking value on each factor weight, Rank 1 is the most dominant indicator.

Table 4.6
Evaluation Summary of Measurement Models (Type B / Formative)

| Latent Variable | Observed Variable | Weight Factor | | | Independence | | |
|-----------------------------|-------------------|-----------------|----------|---------------|------------------------|-------------------|--------------|
| | | Weight Estimate | Rank | t Statistics | Conclusion | Multicollinearity | Conclusion |
| Problem Based Learning (X1) | X11 | 0,606 | 1 | 7,011 | Significant | 2,372 | Valid |
| | X12 | 0,460 | 2 | 5,099 | Significant | 2,162 | Valid |
| Project Based Learning (X2) | X21 | 0,337 | 2 | 2,413 | Significant | 2,192 | Valid |
| | X22 | 0,699 | 1 | 5,151 | Signifikan | 1,884 | Valid |
| Parental Involvement (X3) | X31 | 0,232 | 2 | 1,173 | Not Significant | 2,901 | Valid |
| | X32 | 0,226 | 3 | 1,432 | Not Significant | 2,486 | Valid |
| | X33 | 0,664 | 1 | 5,868 | Significant | 2,525 | Valid |
| School Environment (X4) | X41 | 0,043 | 4 | 0,562 | Not Significant | 1,661 | Valid |
| | X42 | 0,820 | 1 | 10,573 | Significant | 1,846 | Valid |
| | X43 | 0,075 | 3 | 1,078 | Not | 1,541 | Valid |

| | | | | | Significant | | |
|--------------------------------|-----|--------------|----------|--------------|-----------------|--------------|-------|
| | X44 | 0,188 | 2 | 2,304 | Significant | 2,721 | Valid |
| | X45 | 0,008 | 5 | 0,113 | Not Significant | 1,926 | Valid |
| | X51 | 0,694 | 1 | 5,181 | Significant | 2,082 | Valid |
| Community Involvement (X5) | X52 | -0,084 | 4 | 0,694 | Not Significant | 1,946 | Valid |
| | X53 | 0,047 | 3 | 0,548 | Not Significant | 1,812 | Valid |
| | X54 | 0,475 | 2 | 4,695 | Signifikan | 2,284 | Valid |
| | Y12 | 0,197 | 2 | 1,103 | Not Significant | 1,883 | Valid |
| English Productive Skills (Y1) | Y13 | 0,811 | 1 | 5,514 | Significant | 2,142 | Valid |
| | Y14 | 0,166 | 3 | 1,462 | Not Significant | 2,377 | Valid |
| | Y15 | 0,019 | 4 | 0,187 | Not Significant | 3,235 | Valid |
| | Y16 | -0,168 | 5 | 1,729 | Not Significant | 2,914 | Valid |
| | Y21 | 0,435 | 1 | 4,399 | Significant | 2,463 | Valid |
| Environmental Awareness (Y2) | Y22 | 0,385 | 2 | 4,134 | Significant | 3,424 | Valid |
| | Y23 | 0,373 | 3 | 2,919 | Significant | 3,241 | Valid |

Based on the table above, it can be seen that all values of VIF (Multicollinearity) < 10 (Valid). While the results of t Statistics are significant and not significant. Thus, in general, the results of local optimization (outer model) are stated as good and feasible for further analysis. In detail, in order to find out the most dominant indicators in contributing to latent constructs are explained as follows.

1. The best indicator in forming the Problem Based Learning (X1) variable is X11 (Linguistic Related Items) with the highest weight of 0.606. therefore, if the decision maker wants to increase the value of Problem Based Learning (X1), the statistic recommendation is to prioritize the increase in value on the X11 (Linguistic Related Items) indicator.

2. The best indicator in forming the Project Based Learning (X2) variable is X22 (Environmental Related Items) with the highest weight of 0.699, so that if the decision maker wants to increase the value of Project Based Learning (X2), the statistical recommendation is to prioritize the increase in value on indicator X22 (Environmental Related Items).

3. The best indicator in forming the Parental Involvement variable (X3) is X33 (Personal Involvement) with the highest weight of 0.664. therefore, if the decision maker wants to increase the value of Parental Involvement (X3), the statistic recommendation is to prioritize the increase in value on the X33 indicator (Personal Involvement).

4. The best indicator in forming the School Environment (X4) variable is X42 (Promotion of mastery goals) with the highest weight of 0.820, so that if the decision maker wants to increase the value of School Environment (X4), the statistic recommendation is to prioritize the increase in value in indicator X42 (Promotion of mastery goals).

5. The best indicator in forming the Community Involvement (X5) variable is X51 (Community influence) with the highest weight of 0.694, so that if the decision maker wants to increase the Community Involvement value (X5) then the statistic recommendation is to prioritize the increase in value on the X51 indicator (Community influence).

6. The best indicator in forming the English Productive Skills (Y1) variable is Y13 (Vocabulary) with the highest weight of 0.811, so that if the decision makers

want to increase the English Productive Skills (Y1) value, the statistic recommendation is to prioritize the increase in the indicator value Y13 (Vocabulary).

7. The best indicator in forming the Environmental Awareness (Y2) variable is Y21 (Environmental Knowledge) with the highest weight of 0.435, so that if the decision maker wants to increase the value of Environmental Awareness (Y2), the statistic recommendation is to prioritize the increase in value on indicator Y21 (Environmental Knowledge).

4.1.4 Evaluation of Structural Models (Fit Model Test)

After the model which was estimated meeting the convergent validity and discriminant validity criteria, then the structural model (inner model) was tested. Assessing the inner model is to see the relationship between latent constructs by looking at the results of estimation of path parameter coefficients and their level of significance (Ghozali, 2008).

Table 4.7 Coefficient of Determination

| | R Square |
|--------------------------------|----------|
| Community Involvement (X5) | |
| ELM (Z) | 0,910720 |
| English Productive Skills (Y1) | 0,811900 |
| Environmental Awareness (Y2) | 0,723927 |
| Parental Involvement (X3) | |
| Problem Based Learning (X1) | 0,706679 |
| Project Based Learning (X2) | 0,774946 |
| School Environment (X4) | 0,359655 |

Goodness of fit model testing is done by using the total determination coefficient, where the test results can explain how much the path model formed is

able to represent the observed data. The total coefficient of determination ranges from 0.0 to 100.0%, where the higher the total coefficient of determination, the higher the path model is able to represent the observed data. The results of the calculation of the total determination coefficient are as follows.

$$R^2 \text{ Total} = 1 - (1 - R_1^2) \times (1 - R_2^2) \times (1 - R_3^2) \times (1 - R_4^2) \times (1 - R_5^2)$$

$$R^2 \text{ Total} = 1 - (1 - 0.706) \times (1 - 0.773) \times (1 - 0.362) \times (1 - 0.786) \times (1 - 0.726)$$

$$0.998 \text{ (99.8\%)}$$

The Total Determination Coefficient obtained from the structural model is 0.998 which means that 99.8% of the data that is owned can be explained by the formed path model and the remaining 0.2% is explained by other factors outside the research. In detail the results of standard measurements of the inner model testing criteria based on the total of determination coefficients are as follows.

Table 4.8 The Strength Level of Structural Models (Global Optimization)

| No | R-Square Criteria Standart | | R-Square Total | Explanation |
|----|----------------------------|---------------|----------------|-------------|
| | Interval | Kategori | | |
| 1 | 0,000 - 0,299 | Very Week | 0,998 | Strong |
| 2 | 0,300 - 0,499 | Week | | |
| 3 | 0,500 - 0,699 | Moderat | | |
| 4 | 0,700 - 1,000 | Strong | | |

The table above is global optimization information that tests how strong the confirmation of the theory is based on the constructed model. It is known that the total determination coefficient is 0.998, where the value is in the range of 0.700 - 1,000. Based on the standard R-Square testing criteria, the constructed model is relatively strong to confirm the theory. So that the use of the path construction is

declared appropriate and feasible to test the hypothesis.

4.1.5 Descriptive Analysis of Each Variable

Descriptive analysis technique aimed to explain the entire data collected by describing, classifying, and classifying into tables which are then given an explanation based on the most dominant indicators and the weakest indicators. The research data was obtained by researchers from respondents' answers to a number of questions, namely respondents' answers to the questions in the questionnaire that supported the research.

In this section we present the frequency distribution of the scores of each variable item and the mean of each variable item. To describe the mean value of each item, indicators and variables in this study used criteria with class intervals obtained from the calculation results:

$$\text{Interval Class} = \frac{(\text{The highest answer score value} - \text{The lowest answer score value})}{\text{number of classes / categories}}$$

The respondent's answer score in this study refers to a 5-point scale of the Likert scale (Sugiyono, 2015), so the highest value of the respondent's answer is 5 and the lowest answer value is 1. The number of classes / categories used in preparing the criteria is adjusted to the scale used that is 5 classes, so the class interval is $(5-1) : 5 = 0.8$. While the basic interpretation of the average value used in this study proposes the interpretation of scores according to Sudjana (2013). Thus the criteria for describing the mean values that have been obtained for each item, indicator, and variable can be described in table 5.9 as follows:

Table 4.9
The Basic Interpretation of Indicator Scores in Research Variables

| No | Value / Score | Interpretation |
|----|---------------|---------------------|
| 1 | 1- 1,8 | Very low / Bad |
| 2 | > 1,8 - 2,6 | Low / Not good |
| 3 | > 2,6 - 3,4 | Moderate / Fair |
| 4 | > 3,4 - 4,2 | High/ Good |
| 5 | > 4,2 - 5,0 | Exelent / Very Good |

4.1.5.1 Overview of Motivation To Learn English

The variable motivation to learn english is measured using 22 indicators.

Each answer has a value of 1-5, then the answer score is accumulated which is then used to categorize the variables based on the respondents' average answers. The following is presented frequency distribution of respondents' responses to variables motivation to learn english.

Table 4.10 **Distribution of Respondents' Responses on Motivation to Learn English Variables**

| No | Question Item | Alternative Answers | | | | | Mean | Category | |
|--|-----------------|---------------------|------|------|------|------|------|----------|----------|
| | | SA | A | N | DA | SDA | | | |
| 1. Experiance of learning English | | | | | | | | | |
| 1 | Question Item 1 | f | 1 | 12 | 34 | 21 | 0 | 2.90 | Moderate |
| | | % | 1.5 | 17.6 | 50.0 | 30.9 | 0.0 | | |
| 2 | Question Item 2 | f | 0 | 0 | 8 | 24 | 36 | 1.59 | Very Low |
| | | % | 0.0 | 0.0 | 11.8 | 35.3 | 52.9 | | |
| 3 | Question Item 3 | f | 9 | 40 | 18 | 1 | 0 | 3.84 | High |
| | | % | 13.2 | 58.8 | 26.5 | 1.5 | 0.0 | | |
| 4 | Question Item 4 | f | 0 | 2 | 24 | 32 | 10 | 2.26 | Low |
| | | % | 0.0 | 2.9 | 35.3 | 47.1 | 14.7 | | |
| 5 | Question Item 5 | f | 0 | 0 | 17 | 32 | 19 | 1.97 | Low |
| | | % | 0.0 | 0.0 | 25.0 | 47.1 | 27.9 | | |

| | | | | | | | | | |
|----------------|-----------------|---|-----|-----|------|------|------|-------------|------------|
| 6 | Question Item 6 | f | 1 | 4 | 6 | 28 | 29 | 1.82 | Low |
| | | % | 1.5 | 5.9 | 8.8 | 41.2 | 42.6 | | |
| 7 | Question Item 7 | f | 0 | 0 | 10 | 18 | 40 | 1.56 | Very Low |
| | | % | 0.0 | 0.0 | 14.7 | 26.5 | 58.8 | | |
| 8 | Question Item 8 | f | 2 | 0 | 6 | 12 | 48 | 1.47 | Very Low |
| | | % | 2.9 | 0.0 | 8.8 | 17.6 | 70.6 | | |
| Average | | | | | | | | 2.18 | Low |

2. The importance of English

| | | | | | | | | | |
|----------------|------------------|---|------|------|------|------|------|-------------|-------------|
| 9 | Question Item 9 | f | 41 | 27 | 0 | 0 | 0 | 4.60 | Very High |
| | | % | 60.3 | 39.7 | 0.0 | 0.0 | 0.0 | | |
| 10 | Question Item 10 | f | 16 | 45 | 7 | 0 | 0 | 4.13 | High |
| | | % | 23.5 | 66.2 | 10.3 | 0.0 | 0.0 | | |
| 11 | Question Item 11 | f | 33 | 31 | 4 | 0 | 0 | 4.43 | Very High |
| | | % | 48.5 | 45.6 | 5.9 | 0.0 | 0.0 | | |
| 12 | Question Item 12 | f | 2 | 5 | 26 | 25 | 10 | 2.47 | Low |
| | | % | 2.9 | 7.4 | 38.2 | 36.8 | 14.7 | | |
| 13 | Question Item 13 | f | 18 | 35 | 12 | 3 | 0 | 4.00 | High |
| | | % | 26.5 | 51.5 | 17.6 | 4.4 | 0.0 | | |
| 14 | Question Item 14 | f | 27 | 36 | 3 | 1 | 1 | 4.28 | Very High |
| | | % | 39.7 | 52.9 | 4.4 | 1.5 | 1.5 | | |
| Average | | | | | | | | 3.99 | High |

3. Liking for learning English

| | | | | | | | | | |
|----|------------------|---|------|------|------|-----|-----|------|-----------|
| 15 | Question Item 15 | f | 8 | 44 | 15 | 1 | 0 | 3.87 | High |
| | | % | 11.8 | 64.7 | 22.1 | 1.5 | 0.0 | | |
| 16 | Question Item 16 | f | 45 | 21 | 1 | 1 | 0 | 4.62 | Very High |
| | | % | 66.2 | 30.9 | 1.5 | 1.5 | 0.0 | | |
| 17 | Question Item 17 | f | 28 | 37 | 3 | 0 | 0 | 4.37 | Very High |
| | | % | 41.2 | 54.4 | 4.4 | 0.0 | 0.0 | | |
| 18 | Question Item 18 | f | 33 | 34 | 1 | 0 | 0 | 4.47 | Very High |
| | | % | 48.5 | 50.0 | 1.5 | 0.0 | 0.0 | | |
| 19 | Question Item 19 | f | 29 | 33 | 6 | 0 | 0 | 4.34 | Very High |
| | | % | 42.6 | 48.5 | 8.8 | 0.0 | 0.0 | | |
| 20 | Question Item 20 | f | 37 | 28 | 3 | 0 | 0 | 4.50 | Very High |
| | | % | 54.4 | 41.2 | 4.4 | 0.0 | 0.0 | | |
| 21 | Question Item 21 | f | 19 | 39 | 9 | 1 | 0 | 4.12 | High |
| | | % | 27.9 | 57.4 | 13.2 | 1.5 | 0.0 | | |
| 22 | Question Item 22 | f | 23 | 40 | 5 | 0 | 0 | 4.26 | Very High |
| | | % | 33.8 | 58.8 | 7.4 | 0.0 | 0.0 | | |

| | | |
|--|-------------|------------------|
| Average | 4.32 | Very High |
| The Average of Respondents' Answers on <i>Motivation to learn English (M)</i> Variables | 3.49 | High |

Source: results of data processing, 2019

The table above is the respondent's response regarding the motivation to learn English variable. Where the question that has the highest average is found in question number 9, which the average is 4.60 and it includes the very high category, where the majority of respondents as many as 41 students or 60.3% answered strongly agree. While the question that has the lowest average is in question number 8, with the average is 1.47 and it includes the very low category, where the majority of respondents as many as 48 students or 70.6% answered strongly disagree.

The results showed that the cumulative average (Mean) of all answers in the motivation to learn English variable was 3.49. So that, it can be concluded that in general, motivation to learn english variable is included in the high category.

4.1.5.2 Overview of Problem Based Learning (X1)

The problem based learning variable is measured using 5 indicators. Each answer has a value of 1-5, then the answer score is accumulated which is then used to categorize the variables based on the respondents' average answers. The following is presented the frequency distribution of respondents' responses to the problem based learning variable.

Table 4.11
Distribution of Respondents' Responses on Problem Based Learning Variable

| No | Question Item | | Alternative Responses | | | | | Mean | Category |
|--|------------------|---|-----------------------|------|-----|-----|-------------|------------------|-----------|
| | | | SA | A | N | DA | SDA | | |
| 1. Linguistic Related Items | | | | | | | | | |
| 23 | Question Item 23 | f | 37 | 21 | 5 | 2 | 3 | 4.28 | Very High |
| | | % | 54.4 | 30.9 | 7.4 | 2.9 | 4.4 | | |
| 24 | Question Item 24 | f | 43 | 16 | 3 | 3 | 3 | 4.37 | Very High |
| | | % | 63.2 | 23.5 | 4.4 | 4.4 | 4.4 | | |
| Average | | | | | | | 4.32 | Very High | |
| 2. Environmental Related Items | | | | | | | | | |
| 25 | Question Item 25 | f | 36 | 23 | 3 | 4 | 2 | 4.28 | Very High |
| | | % | 52.9 | 33.8 | 4.4 | 5.9 | 2.9 | | |
| 26 | Question Item 26 | f | 43 | 15 | 5 | 3 | 2 | 4.38 | Very High |
| | | % | 63.2 | 22.1 | 7.4 | 4.4 | 2.9 | | |
| 27 | Question Item 27 | f | 48 | 12 | 1 | 2 | 5 | 4.41 | Very High |
| | | % | 70.6 | 17.6 | 1.5 | 2.9 | 7.4 | | |
| Average | | | | | | | 4.36 | Very High | |
| The Average of Respondents' Answers on Problem Based Learning Variable (X1) | | | | | | | 4.34 | Very High | |

Source: results of data processing, 2019

The table above is the respondent's response regarding the problem based learning variable. Where the questions that has the highest average is in question number 27, which the average is 4.41 and it is included in the very high category, where the majority of respondents are 48 people or 70.6% answering strongly agree.

While the questions that have the lowest average are in questions number 23 and 25, with the average is 4.28 and it included in the very high category, where the majority of respondents were 37 students (54.4%) and 36 (52.9%) students answered strongly agree.

The results showed that the cumulative average (Mean) of all answers in the problem based learning variable was 4.34. So it can be concluded that in general, the problem based learning variables was in the very high category.

4.1.5.3 Overview of Project Based Learning Variable (X2)

The project based learning variable was measured using 4 indicators. Each answer had a value of 1-5, then the answer score was accumulated which was then used to categorize the variables based on the respondents' average answers. The following is presented the distribution frequency of respondents' responses to the Project Based Learning variable.

Table 4.12 The Distribution Frequency of Respondents' Responses to The Project Based Learning Variable.

| No | Question Item | | Alternative Questions | | | | | Mean | Category |
|---|------------------|---|-----------------------|------|-----|-----|-------------|------------------|-----------|
| | | | SA | A | N | DA | SDA | | |
| 1. Linguistic Related Items | | | | | | | | | |
| 28 | Question Item 28 | f | 38 | 22 | 3 | 3 | 2 | 4.34 | Very High |
| | | % | 55.9 | 32.4 | 4.4 | 4.4 | 2.9 | | |
| 29 | Question Item 29 | f | 41 | 18 | 3 | 4 | 2 | 4.35 | Very High |
| | | % | 60.3 | 26.5 | 4.4 | 5.9 | 2.9 | | |
| Average | | | | | | | 4.35 | Very High | |
| 2. Environmental Related Items | | | | | | | | | |
| 30 | Question Item 30 | f | 46 | 13 | 4 | 4 | 1 | 4.46 | Very High |
| | | % | 67.6 | 19.1 | 5.9 | 5.9 | 1.5 | | |
| 31 | Question Item 31 | f | 55 | 4 | 4 | 5 | 0 | 4.60 | Very High |
| | | % | 80.9 | 5.9 | 5.9 | 7.4 | 0.0 | | |
| Average | | | | | | | 4.53 | Very High | |
| The Average of Respondents Answers on Project Based Learning Variable (X2) | | | | | | | 4.44 | Very High | |

Source: results of data processing, 2019

The table above is the respondent's response regarding the project based learning variable. Where the questions that has the highest average is found in question number 31, which the average is 4.60 and it is included in the very high category, where the majority of respondents were 55 students or 80.9% answered strongly agree. Whereas the questions that had the lowest average was in question number 28, with the average was 4.34 and it included in the very high category, where the majority of respondents as many as 38 (55.9%) answered strongly agree.

The results showed that the cumulative average (Mean) of all answers in the project based learning variable was 4.44. So, it can be concluded that in general the project based learning variables was in the very high category.

4.1.5.4 Overview of Parental Involvement variable (X3)

Parental involvement variables was measured using 12 indicators. Each answer had a value of 1-5. The answers' scores were accumulated, then it was used to categorize the variables based on the respondents' average answers. The following is presented the frequency distribution of respondents' responses to the parental involvement variable.

Table 4.13
Distribution of Respondents' Responses on Parent Involvement Variable

| No | Question Item | Alternative Answers | | | | | Mean | Category | |
|--------------------------------|------------------|---------------------|------|------|------|-----|------|----------|-----------|
| | | SA | A | N | DA | SDA | | | |
| 1. Behavior Involvement | | | | | | | | | |
| 32 | Question Item 32 | f | 33 | 24 | 5 | 4 | 2 | 4.21 | Very High |
| | | % | 48.5 | 35.3 | 7.4 | 5.9 | 2.9 | | |
| 33 | Question Item 33 | f | 34 | 18 | 7 | 5 | 4 | 4.07 | High |
| | | % | 50.0 | 26.5 | 10.3 | 7.4 | 5.9 | | |
| 34 | Question Item 34 | f | 7 | 8 | 30 | 16 | 7 | 2.88 | Moderate |

| | | | | | | | | | |
|--|-------------------|---|------|------|------|------|------|-------------|-----------------|
| | | % | 10.3 | 11.8 | 44.1 | 23.5 | 10.3 | | |
| 35 | Question Item 35 | f | 29 | 18 | 13 | 0 | 8 | 3.88 | High |
| | | % | 42.6 | 26.5 | 19.1 | 0.0 | 11.8 | | |
| 36 | Question Item 36 | f | 6 | 2 | 11 | 18 | 31 | 2.03 | Low |
| | | % | 8.8 | 2.9 | 16.2 | 26.5 | 45.6 | | |
| Average | | | | | | | | 3.41 | High |
| 2. Cognitive Intellectual Involvement | | | | | | | | | |
| 37 | Question Item 37 | f | 5 | 17 | 15 | 17 | 14 | 2.74 | Moderate |
| | | % | 7.4 | 25.0 | 22.1 | 25.0 | 20.6 | | |
| 38 | Question Item 38 | f | 9 | 19 | 25 | 10 | 5 | 3.25 | Moderate |
| | | % | 13.2 | 27.9 | 36.8 | 14.7 | 7.4 | | |
| 39 | Question Item 39 | f | 6 | 10 | 27 | 17 | 8 | 2.84 | Moderate |
| | | % | 8.8 | 14.7 | 39.7 | 25.0 | 11.8 | | |
| 40 | Question Item 40 | f | 12 | 26 | 19 | 7 | 4 | 3.51 | High |
| | | % | 17.6 | 38.2 | 27.9 | 10.3 | 5.9 | | |
| Average | | | | | | | | 3.08 | Moderate |
| 3. Personal Involvement | | | | | | | | | |
| 41 | Question Item 41 | f | 14 | 14 | 26 | 10 | 4 | 3.35 | Moderate |
| | | % | 20.6 | 20.6 | 38.2 | 14.7 | 5.9 | | |
| 42 | Question Item 42 | f | 22 | 12 | 23 | 7 | 4 | 3.60 | High |
| | | % | 32.4 | 17.6 | 33.8 | 10.3 | 5.9 | | |
| 43 | 4 Question Item 3 | f | 13 | 13 | 27 | 11 | 4 | 3.29 | Moderate |
| | | % | 19.1 | 19.1 | 39.7 | 16.2 | 5.9 | | |
| Average | | | | | | | | 3.42 | High |
| The Average of Respondents' Answers on Parental Involvement Variable (X3) | | | | | | | | 3.31 | Moderate |

Source: the results of data processing, 2019

The table above is the respondent's response regarding the parental involvement variable. Where the questions that had the highest average was found in the question number 32, which the average was 4.21 and it included in the very high category, where the majority of respondents as many as 33 students or 48.5% answered strongly agree. While questions that had the lowest average was in the

question number 36, with the average was 2.03 and it included in the low category, where the majority of respondents as many as 31 students or 55.9% answered strongly disagree.

The results of the study showed that the cumulative average (Mean) of all answers in the parental involvement variable was 3.31. So that it can be concluded that in general, the parental involvement variable is included in the medium category.

To find out the distribution of answers from 68 students about the work of parents in relation to English learning outcome can be seen through the cross tabulation below.

Table 4.14
Parents' Job x English Learning Outcomes

| Cross Tabulation | | | English Learning Outcomes | | Total | |
|------------------|--|---|---------------------------|--------|---------|---------|
| | | | Low | High | | |
| Parents' Job | Farmer | f | 6 | 8 | 14 | |
| | | % | 42,9% | 57,1% | 100,0 % | |
| | Farmer Worker | f | 1 | 3 | 4 | |
| | | % | 25,0% | 75,0% | 100,0 % | |
| | Private Sector Worker/ Entrepreneurial | f | 18 | 22 | 40 | |
| | | % | 45,0% | 55,0% | 100,0 % | |
| | Teacher | f | 0 | 2 | 2 | |
| | | % | 0,0% | 100,0% | 100,0 % | |
| | Civil Servant | f | 3 | 5 | 8 | |
| | | % | 37,5% | 62,5% | 100,0 % | |
| | Total | | f | 28 | 40 | 68 |
| | | | % | 41,2% | 58,8% | 100,0 % |

The table above illustrates the relationship between Parents' Job and English Learning Outcomes. Of the 14 students whose their parents' job are the Farmer, the majority as many as 8 students (57.1%) tended to be stated in the High category when associated with English Learning Outcomes. Of the 4 students iwhose their parents' job are farmer worker, the majority of 3 students (75%) tended to be stated in the High category when associated with English Learning Outcomes. Of the 40 people in the private sector worker/entreprenuerial, the majority of 22 students (55%) tended to be stated in the High category when associated with English Learning Outcomes. Of the 2 people whose their parents' job are teacher, the majority of 2 students (100%) tended to be stated in the High category when associated with English Learning Outcomes. Of the 8 students whose their parents' job are civil servant, the majority of 5 students (62.5%) tended to be stated in the High category when associated with English Learning Outcomes.

4.1.5.5 Overview of School Environment Variable (X4)

The school environment variable was measured using 16 indicators. Each answer had a value of 1-5, then the answer score was accumulated which was then used to categorize the variables based on the average of respondents' answers. The following is presented the frequency distribution of respondents' responses to the school environment variable.

Table 4.15
The Frequency Distribution of Respondents' Responses on School Environment Variable

| No | Item Pertanyaan | Alternative Answers | | | | | Mean | Category |
|--|-----------------|---------------------|---|---|----|-----|------|----------|
| | | SA | A | N | DA | SDA | | |
| 1. Promotion of performance goals | | | | | | | | |

| | | | | | | | | | |
|--------------------------------------|------------------|---|------|------|------|------|------|-------------|------------------|
| 44 | Question Item 44 | f | 10 | 26 | 15 | 11 | 6 | 3.34 | Moderate |
| | | % | 14.7 | 38.2 | 22.1 | 16.2 | 8.8 | | |
| 45 | Question Item 45 | f | 13 | 22 | 12 | 11 | 10 | 3.25 | Moderate |
| | | % | 19.1 | 32.4 | 17.6 | 16.2 | 14.7 | | |
| 46 | Question Item 46 | f | 7 | 18 | 20 | 15 | 8 | 3.01 | Moderate |
| | | % | 10.3 | 26.5 | 29.4 | 22.1 | 11.8 | | |
| 47 | Question Item 47 | f | 22 | 30 | 9 | 4 | 3 | 3.94 | High |
| | | % | 32.4 | 44.1 | 13.2 | 5.9 | 4.4 | | |
| Average | | | | | | | | 3.39 | Moderate |
| 2. Promotion of mastery goals | | | | | | | | | |
| 48 | Question Item 48 | f | 44 | 15 | 4 | 4 | 1 | 4.43 | Very High |
| | | % | 64.7 | 22.1 | 5.9 | 5.9 | 1.5 | | |
| 49 | Question Item 49 | f | 27 | 28 | 7 | 6 | 0 | 4.12 | High |
| | | % | 39.7 | 41.2 | 10.3 | 8.8 | 0.0 | | |
| 50 | Question Item 50 | f | 46 | 12 | 6 | 2 | 2 | 4.44 | Very High |
| | | % | 67.6 | 17.6 | 8.8 | 2.9 | 2.9 | | |
| Average | | | | | | | | 4.33 | Very High |
| 3. Support of autonomy | | | | | | | | | |
| 51 | Question Item 51 | f | 10 | 21 | 18 | 18 | 1 | 3.31 | Moderate |
| | | % | 14.7 | 30.9 | 26.5 | 26.5 | 1.5 | | |
| 52 | Question Item 52 | f | 3 | 15 | 28 | 16 | 6 | 2.90 | Moderate |
| | | % | 4.4 | 22.1 | 41.2 | 23.5 | 8.8 | | |
| 53 | Question Item 53 | f | 4 | 12 | 17 | 18 | 17 | 2.53 | Low |
| | | % | 5.9 | 17.6 | 25.0 | 26.5 | 25.0 | | |
| Average | | | | | | | | 2.91 | Moderate |
| 4. Promotion of discussion | | | | | | | | | |
| 54 | Question Item 54 | f | 10 | 37 | 15 | 4 | 2 | 3.72 | High |
| | | % | 14.7 | 54.4 | 22.1 | 5.9 | 2.9 | | |
| 55 | Question Item 55 | f | 9 | 25 | 22 | 9 | 3 | 3.41 | High |
| | | % | 13.2 | 36.8 | 32.4 | 13.2 | 4.4 | | |
| 56 | Question Item 56 | f | 4 | 32 | 24 | 4 | 4 | 3.41 | High |
| | | % | 5.9 | 47.1 | 35.3 | 5.9 | 5.9 | | |
| Average | | | | | | | | 3.51 | High |
| 5. Teacher social support | | | | | | | | | |
| 57 | Question Item 57 | f | 2 | 12 | 23 | 18 | 13 | 2.59 | Low |
| | | % | 2.9 | 17.6 | 33.8 | 26.5 | 19.1 | | |
| 58 | Question Item 58 | f | 2 | 7 | 14 | 23 | 22 | 2.18 | Low |
| | | % | 2.9 | 10.3 | 20.6 | 33.8 | 32.4 | | |



| | | | | | | | | | |
|--|------------------|---|-----|-----|------|------|------|-------------|-----------------|
| 59 | Question Item 59 | f | 4 | 5 | 14 | 29 | 16 | 2.29 | Low |
| | | % | 5.9 | 7.4 | 20.6 | 42.6 | 23.5 | | |
| Average | | | | | | | | 2.35 | Low |
| The Average of Respondents' Answers on School Environment Variable (X4) | | | | | | | | 3.30 | Moderate |

Source: the results of data processing, 2019

The table above was the respondent's response regarding the school environment variable. Where questions that had the highest mean were found in question number 50, which average was 4.44 and it was included in the very high category, where the majority of respondents as many as 46 students or 67.6% answered strongly agree. While the questions that had the lowest average was found in question number 58, with the average was 2.18 and it was included in the low category, where the majority of respondents were 23 students or 33.8% answered disagreeing.

The results showed that the average accumulation (Mean) of all answers in the school environment variable was 3.30. So that it can be concluded that in general the school environment variable is included in the medium category.

4.1.5.6 Overview of Community Involvement Variable (X5)

Community involvement variables was measured using 9 indicators. Each answer had a value of 1-5, then the answer score was accumulated. Then it was used to categorize the variables based on the respondents' average answers. The following is presented the frequency distribution of respondents' responses to the community involvement variable.

Table 4.16
The Frequency Distribution of Respondents' Responses to Community Involvement Variable

| No | Question Item | f | Alternative Answers | | | | | Mean | Category |
|---|------------------|---|---------------------|------|------|------|-------------|-----------------|----------|
| | | | SA | A | N | DA | SDA | | |
| 1. Community influence | | | | | | | | | |
| 77 | Question Item 77 | f | 22 | 32 | 8 | 2 | 4 | 3.97 | High |
| | | % | 32.4 | 47.1 | 11.8 | 2.9 | 5.9 | | |
| 78 | Question Item 78 | f | 7 | 34 | 20 | 5 | 2 | 3.57 | High |
| | | % | 10.3 | 50.0 | 29.4 | 7.4 | 2.9 | | |
| Average | | | | | | | 3.77 | High | |
| 2. Community cohesion | | | | | | | | | |
| 79 | Question Item 79 | f | 13 | 23 | 25 | 5 | 2 | 3.59 | High |
| | | % | 19.1 | 33.8 | 36.8 | 7.4 | 2.9 | | |
| Average | | | | | | | 3.59 | High | |
| 3. Social capital | | | | | | | | | |
| 80 | Question Item 80 | f | 10 | 15 | 24 | 16 | 3 | 3.19 | Moderate |
| | | % | 14.7 | 22.1 | 35.3 | 23.5 | 4.4 | | |
| 81 | Question Item 81 | f | 6 | 23 | 24 | 9 | 6 | 3.21 | Moderate |
| | | % | 8.8 | 33.8 | 35.3 | 13.2 | 8.8 | | |
| Average | | | | | | | 3.20 | Moderate | |
| 4. Condition of the community and Voluntary sector | | | | | | | | | |
| 82 | Question Item 82 | f | 19 | 30 | 12 | 4 | 3 | 3.85 | High |
| | | % | 27.9 | 44.1 | 17.6 | 5.9 | 4.4 | | |
| 83 | Question Item 83 | f | 21 | 29 | 13 | 3 | 2 | 3.94 | High |
| | | % | 30.9 | 42.6 | 19.1 | 4.4 | 2.9 | | |
| 84 | Question Item 84 | f | 10 | 30 | 21 | 5 | 2 | 3.60 | High |
| | | % | 14.7 | 44.1 | 30.9 | 7.4 | 2.9 | | |
| 85 | Question Item 85 | f | 3 | 17 | 26 | 15 | 7 | 2.91 | Moderate |
| | | % | 4.4 | 25.0 | 38.2 | 22.1 | 10.3 | | |
| Average | | | | | | | 3.58 | High | |
| The Average of Respondents 'Answers on Community Involvement Variable (X5) | | | | | | | 3.52 | High | |

Source: the results of data processing, 2019

The table above is the respondent's response regarding the variable community involvement. The questions that had the highest mean was found in

question number 77, which the average was 3.97 and it included in the high category, where the majority of respondents were 32 students or 47.1% answered agree. While the questions that had the lowest average was in question number 85, with the average was 2.91 and it was included in the medium category, where the majority of respondents were 26 students or 38.2% answered neutral.

The results of the study indicate that the cumulative average (Mean) of all answers in the community involvement variable was 3.52. So that, it can be concluded that in general the variables of community involvement is included in the high category.

4.1.5.7 Overview of Environmental Awareness (Y2)

The environmental awareness variable was measured using 17 indicators. Each answer had a value of 1-5, then the answer score was accumulated. It was used to categorize the variables based on the average of respondents' answers. The following is presented the frequency distribution of respondents' responses to environmental awareness variables.

Table 4.17
The Distribution of Respondent' Responses on *Environmental Awareness Variable*

| No | Question Item | Alternative Answers | | | | | Mean | Category | |
|----------------------|------------------|---------------------|------|------|------|-----|------|----------|-----------|
| | | SA | A | N | DA | SDA | | | |
| 1. Motivation | | | | | | | | | |
| 60 | Question Item 60 | f | 21 | 20 | 21 | 3 | 3 | 3.78 | High |
| | | % | 30.9 | 29.4 | 30.9 | 4.4 | 4.4 | | |
| 61 | Question Item 61 | f | 44 | 12 | 5 | 3 | 4 | 4.31 | Very High |
| | | % | 64.7 | 17.6 | 7.4 | 4.4 | 5.9 | | |
| 62 | Question Item 62 | f | 39 | 15 | 9 | 5 | 0 | 4.29 | Very High |
| | | % | 57.4 | 22.1 | 13.2 | 7.4 | 0.0 | | |

| | | | | | | | | | |
|---|------------------|---|------|------|------|------|------|-------------|-----------------|
| 63 | Question Item 63 | f | 26 | 10 | 16 | 12 | 4 | 3.62 | High |
| | | % | 38.2 | 14.7 | 23.5 | 17.6 | 5.9 | | |
| 64 | Question Item 64 | f | 7 | 17 | 29 | 15 | 0 | 3.24 | Moderate |
| | | % | 10.3 | 25.0 | 42.6 | 22.1 | 0.0 | | |
| 65 | Question Item 65 | f | 24 | 29 | 10 | 5 | 0 | 4.06 | High |
| | | % | 35.3 | 42.6 | 14.7 | 7.4 | 0.0 | | |
| 66 | Question Item 66 | f | 35 | 20 | 8 | 3 | 2 | 4.22 | Very High |
| | | % | 51.5 | 29.4 | 11.8 | 4.4 | 2.9 | | |
| Average | | | | | | | | 3.93 | High |
| 2. Environmental Knowledge | | | | | | | | | |
| 67 | Question Item 67 | f | 8 | 24 | 24 | 8 | 4 | 3.35 | Moderate |
| | | % | 11.8 | 35.3 | 35.3 | 11.8 | 5.9 | | |
| 68 | Question Item 68 | f | 8 | 9 | 31 | 13 | 7 | 2.97 | Moderate |
| | | % | 11.8 | 13.2 | 45.6 | 19.1 | 10.3 | | |
| 69 | Question Item 69 | f | 16 | 27 | 11 | 12 | 2 | 3.63 | High |
| | | % | 23.5 | 39.7 | 16.2 | 17.6 | 2.9 | | |
| 70 | Question Item 70 | f | 25 | 27 | 9 | 6 | 1 | 4.01 | High |
| | | % | 36.8 | 39.7 | 13.2 | 8.8 | 1.5 | | |
| 71 | Question Item 71 | f | 7 | 12 | 25 | 19 | 5 | 2.96 | Moderate |
| | | % | 10.3 | 17.6 | 36.8 | 27.9 | 7.4 | | |
| 72 | Question Item 72 | f | 11 | 23 | 26 | 4 | 4 | 3.49 | High |
| | | % | 16.2 | 33.8 | 38.2 | 5.9 | 5.9 | | |
| Average | | | | | | | | 3.40 | High |
| 3. Skill | | | | | | | | | |
| 73 | Question Item 73 | f | 12 | 20 | 23 | 10 | 3 | 3.41 | High |
| | | % | 17.6 | 29.4 | 33.8 | 14.7 | 4.4 | | |
| 74 | Question Item 74 | f | 3 | 10 | 32 | 16 | 7 | 2.79 | Moderate |
| | | % | 4.4 | 14.7 | 47.1 | 23.5 | 10.3 | | |
| 75 | Question Item 75 | f | 11 | 27 | 20 | 6 | 4 | 3.51 | High |
| | | % | 16.2 | 39.7 | 29.4 | 8.8 | 5.9 | | |
| 76 | Question Item 76 | f | 11 | 18 | 26 | 10 | 3 | 3.35 | Moderate |
| | | % | 16.2 | 26.5 | 38.2 | 14.7 | 4.4 | | |
| Average | | | | | | | | 3.27 | Moderate |
| The Average of Respondents' Responses on Environmental Awareness Variable (Y2) | | | | | | | | 3.53 | High |

Source: the result of data processing, 2019

The table above was the respondents' responses regarding environmental

awareness variables. Where the questions that had the highest mean was found in question number 61, the average was 4.31 and it was included in the very high category, where the majority of respondents as many as 44 students or 64.7% answered strongly agree. While the questions that had the lowest average was in question number 74, the average was 2.79 and it was included in the moderate category, where the majority of respondents were 32 students or 47.1% answered disagree.

The results showed that the cumulative average (Mean) of all answers in the environmental awareness variable was 3.53. So, it can be concluded that in general, the environmental awareness variable is included in the high category.

4.1.5.8 Overview of English Productive Skills (Writing skill) Variables

The English productive skills variable (writing skill) was measured using 5 indicators; content, organization, vocabulary, grammar, and mechanics. The following is presented the frequency distribution of respondents' responses on the English productive skills variable.

Table 4.18
Frequency Distribution of Respondents in Content Indicators

| Indicator | Category | Frequency | Percentage |
|-----------|----------|-----------|------------|
| Content | Decrease | 2 | 2.9 |
| | Stable | 5 | 7.4 |
| | Low | 4 | 5.9 |
| | Average | 23 | 33.8 |
| | High | 34 | 50.0 |
| Total | | 68 | 100.0 |

Source: the result of data processing, 2019

Based on the table above, it can be seen the overview of the number of students writing based on content indicators, the majority as many as 34 students or (50.0%), were the students with a high category, and the least was 2 students with a decrease category or (2.9%). Since the frequency distribution of content indicator in average and high category were high, it indicates the use of scaffold and problem based learning was effective to promote students' writing skill.

Table 4.19
Frequency Distribution of Respondents in Organization Indicators

| Indicator | Category | Frequency | Percentage |
|--------------|----------|-----------|------------|
| Organization | Decrease | 3 | 4.4 |
| | Stable | 4 | 5.9 |
| | Low | 1 | 1.5 |
| | Average | 13 | 19.1 |
| | High | 47 | 69.1 |
| Total | | 68 | 100.0 |

Source: the result of data processing, 2019

Based on the table above, it can be seen the description of the number of students based on organization indicators, the majority as many as 47 or (69.1%), were the students with high categories, and the least was 1 student with a low category or (1.5%). Since the frequency distribution of organization indicator in average and high category were high, it indicates the use of scaffold and problem based learning was effective to promote students' writing skill.

Table 4.20
Frequency Distribution of Respondents in Vocabulary Indicators

| Indicator | Category | Frequency | Percentage |
|------------|----------|-----------|------------|
| Vocabulary | Decrease | 9 | 13.2 |
| | Stable | 3 | 4.4 |

| | | |
|--------------|-----------|--------------|
| Low | 13 | 19.1 |
| Average | 24 | 35.3 |
| High | 19 | 27.9 |
| Total | 68 | 100.0 |

Source: the result of data processing, 2019

Based on the table above, it can be seen the description of the number of students based on the vocabulary indicator, the majority as many as 24 students or (35.3%) were the students with the average category and the least was 3 students with a stable category or (4.4%). Since the frequency distribution of vocabulary indicator in average and high category were moderate, it indicates the use of scaffold and problem based learning was effective to promote students' writing skill.

Table 4.21
Frequency Distribution of Respondents in Grammar Indicator

| Indicator | Category | Frequency | Percentage |
|--------------|----------|-----------|--------------|
| Grammar | Decrease | 7 | 10.3 |
| | Stable | 3 | 4.4 |
| | Low | 10 | 14.7 |
| | Average | 23 | 33.8 |
| | High | 25 | 36.8 |
| Total | | 68 | 100.0 |

Source: the result of data processing, 2019

Based on the table above, it can be seen the description of the number of students based on grammar indicators. The majorities as many as 25 (36.8%) were the students with high categories and the least was 3 students with a stable category or (4.4%). Since the frequency distribution of grammar indicator in average and high category were high, it indicates the use of scaffold and problem based learning was effective to promote students' writing skill.

Table 4.22
Frequency Distribution of Respondents in *Mechanics* Indicator

| Indicator | Category | Frequency | Percentage |
|-----------|----------|-----------|------------|
| Mechanics | Decrease | 10 | 14.7 |
| | Stable | 1 | 1.5 |
| | Low | 19 | 27.9 |
| | Average | 16 | 23.5 |
| | High | 22 | 32.4 |
| Total | | 68 | 100.0 |

Source: the result of data processing, 2019

Based on the table above, it can be seen the description of the number of students based on mechanics indicators, the majorities as many as 22 students or (32.4%) were students with high categories and the least was 1 student with stable categories or (1.5%). Since the frequency distribution of mechanics indicator in average and high category were moderate, it indicates the use of scaffold and problem based learning was effective to promote students' writing skill.

Below is an example of student writing before and after getting treatment.

Before treatment.

Trash

Everyday, trash many seeing in the river.

Trash is a noun which no useful.

There two kinds of trash: trash organik and anorganik.

Trash organik from food, vegetable, and leaves.

Tras organik from plastics. Many trash from plastics throw in the river and can

resulting flood. Why flood occur? Flood occur because there hoarding from trash in the river and can make water in the river overflow. Trash from plastics resulting a problem for range and problem for range and to problem healed. For people which have plastic trash hope no throw in the river, because the river can pollution, flood and negativ impac for healed.

After treatment

Water Pollution

The problem in several villages in Indonesia is water pollution. It can happen because there are a lot of people who throw garbage in the river. The impact is water pollution, bad smelly, and many mosquitoes. The problem can be explained in follows:

First, water pollution occur because lack of awareness from residents to dispose of garbage in its place. So that many people still throw garbage in the river.

Consequently the river becomes cloudy. If the rainy season, trash will be carried by the flow of water which then goes to the sea.

Second, another problem besides is bad smelly. Bad smelly can occur because there are a lot of people who throw garbage in the river. Because most people around the river dispose of plastic trash, and in plastic containing ammonia which can cause odor as not all. Foul odors can also damage the respiratory system and weakned immune system.

The last, the worst impact is the presence of dengue fever mosquitoes. Mosquitoes are small insect, but they are very dangerous for human health if we are exposed to bites by mosquitos. Because mosquitoes like to live in a damp and dirty place like in a river that has a lot of garbage.

Of all the problems such as water pollution, foul odors, and dengue mosquitoes make some people uncomfortable. So, let us all be aware of the danger of throwing garbage in the river. It would be nice if the waste was used like making plastic crafts. Besides getting money, the environment was also more comfortable in high. And we can also be heroes of the earth.

4.1.5.9 Overview of English Productive Skills (Speaking skill) Variables

Table 4.23
Frequency Distribution of Respondents in *Fluency* Indicator

| Indicator | Category | Frequency | Percentage |
|-----------|----------|-----------|------------|
| Fluency | Decrease | 1 | 1% |
| | Stable | 9 | 13% |
| | Low | 1 | 1% |
| | Average | 1 | 1% |
| | High | 56 | 82% |
| Total | | 68 | 100.0 |

Source: the result of data processing, 2019

Based on the table above, it can be seen the description of the number of students based on the Fluency indicator, the majority as many as 56 or (82%), were students with high categories, and the least was each 1 student with the Average,

Low and Decrease categories or (1.5%) . Since the frequency distribution of fluency indicator in high category was high, it indicates the use of campaign and project based learning was effective to promote students' speaking skill.

Table 4.24
Frequency Distribution of Respondents in Content Indicator

| Indicator | Category | Frequency | Percentage |
|-----------|----------|-----------|------------|
| Content | Decrease | 11 | 16% |
| | Stable | 4 | 6% |
| | Low | 11 | 16% |
| | Average | 20 | 29% |
| | High | 22 | 32% |
| Total | | 68 | 100.0 |

Source: the result of data processing, 2019

Based on the table above, it can be seen the picture of the number of students based on the Content indicator, the majority as many as 22 or (32%) were students with high categories, and the least were 4 students with a stable category or (6%). Since the frequency distribution of content indicator in average and high category was moderate, it indicates the use of campaign and project based learning was effective to promote students' speaking skill.

Table 4.25
Frequency Distribution of Respondents in Grammar Indicator

| Indicator | Category | Frequency | Percentage |
|------------------|----------|-----------|------------|
| Speaking Grammar | Decrease | 2 | 3% |
| | Stable | 0 | 0% |
| | Low | 0 | 0% |
| | Average | 6 | 9% |
| | High | 60 | 88% |

| | | |
|-------|----|-------|
| Total | 68 | 100.0 |
|-------|----|-------|

Source: the result of data processing, 2019

Based on the table above, it can be seen the picture of the number of students based on Speaking Grammar indicators, the majority as many as 60 or (88%) were students with high categories, and the least was 2 students with Decrease categories or (3 %). Since the frequency distribution of speaking grammar indicator in high category was high, it indicates the use of campaign and project based learning was effective to promote students' speaking skill.

Table 4.26
Frequency Distribution of Respondents in *Diction* Indicator

| Indicator | Category | Frequency | Percentage |
|-----------|----------|-----------|------------|
| Diction | Decrease | 1 | 1% |
| | Stable | 1 | 1% |
| | Low | 0 | 0% |
| | Average | 7 | 10% |
| | High | 59 | 87% |
| Total | | 68 | 100.0 |

Source: the result of data processing, 2019

Based on the table above, it can be seen the description of the number of students based on Diction indicators, the majority as many as 59 or (87%) were students with high categories, and the least was 1 student with stable and Decrease categories or (1%). Since the frequency distribution of diction indicator in high category was high, it indicates the use of campaign and project based learning was effective to promote students' speaking skill.

4.1.5.10 Overview of Environmental Learning Models (Z)

Table 4.27
Frequency Distribution of Environmental Learning Models

| Variable | Category | Frequency | Percentage |
|-------------------------------|----------|-----------|------------|
| Environmental Learning Models | Decrease | 0 | 0.0 |
| | Stable | 0 | 0.0 |
| | Low | 1 | 1.5 |
| | Average | 36 | 52.9 |
| | High | 31 | 45.6 |
| Total | | 68 | 100.0 |

Source: the result of data processing, 2019

Based on the table above, it can be seen the description of the number of students based on environmental learning models, the majority of 36 or (52.9%) were the students with an average category, and the least was 1 student with a low category or (1.5%) . Since the frequency distribution of environmental learning models indicator in high category was high, it indicates the use of campaign and project based learning was effective to promote students' Environmental Learning Models.

4.1.6 Comparison Test (Quasi Experimental Design)

4.1.6.1 Paired Test in Writing Test

Paired t-test was used in this study to complete the data, where the t-test measures each indicator in the writing variable.

Table 4.28 The Summary of t-Test Between Experimental Class and Control in The Writing Test

| Variabel | Writing Group | N | Average | Average Differences | T-value | P-Value (Sig.) | Explanation |
|-------------------|------------------|----|---------|---------------------|---------|----------------|-----------------------------|
| Content | Experiment Class | 68 | 8,00 | 1,456 | 3,112 | 0,002 | Significantly Different |
| | Control Class | 68 | 6,54 | | | | |
| Organization | Experiment Class | 68 | 9,35 | 2,176 | 5,077 | 0,000 | Significantly Different |
| | Control Class | 68 | 7,18 | | | | |
| Vocabulary | Experiment Class | 68 | 2,07 | 0,426 | 1,253 | 0,213 | Not Significantly Different |
| | Control Class | 68 | 1,65 | | | | |
| Writing Grammar | Experiment Class | 68 | 3,56 | -0,029 | -0,066 | 0,947 | Not Significantly Different |
| | Control Class | 68 | 3,59 | | | | |
| Mechanics | Experiment Class | 68 | 1,31 | -0,044 | -0,143 | 0,887 | Not Significantly Different |
| | Control Class | 68 | 1,35 | | | | |
| Writing (Overall) | Experiment Class | 68 | 4,86 | 0,797 | 2,689 | 0,008 | Significantly Different |
| | Control Class | 68 | 4,06 | | | | |

Based on the table above, it can be seen that in the Content variable it is known that the average value of the Experiment Class was 8 and the average value of the Control Class is 6.54 with an average difference of 1,456. The comparison of values before and after produces t count value 3.112 with significance (p value) 0.002. Due to the significance value ($0.002 < 0.05$), the statistical hypothesis states that the differences in the two groups of data are stated to be significantly different. It means the content's average score of the students' writing in the experimental group was significantly higher than the content's average score of the students' writing in control group.

Based on the above table it can be seen that in the Organization variable it is

known that the average value of Experiment Class was 9.35 and the average value of the Control Class was 7.18 with an average difference of 2.176. The comparison of before and after values produces t count value 5,077 with significance (p-value) 0,000. Due to the significance value ($0,000 < 0,05$), the statistical hypothesis states that the differences between the two groups of data were stated to be significantly different. It means the organization's average score of the students' writing in the experimental group was significantly higher than the organization's average score of the students' writing in control group.

Based on the table above, it can be seen that the Vocabulary variable shows that the average value of Experiment Class was 2.07 and the average value of Control Class was 1.65 with an average difference of 0.426. The comparison of before and after values produces t count value 1.253 with a significance (p-value) 0.213. Due to the significance value ($0.213 > 0.05$), the statistical hypothesis states that the differences in the two groups of data were stated to be not significantly different. It means the vocabulary's average score of the students' writing in the experimental group was not significantly higher than the vocabulary's average score of the students' writing in control group.

Based on the above table it can be seen that the Grammar Writing variable shows that the average value of the Experiment Class was 1.31 and the Control Class average value was 1.35 with an average difference of -0.029. The comparison of before and after values produces a value of t count of -0.066 with significance (p-value) of 0.947. Due to the significance value ($0.947 > 0.05$), the statistical hypothesis states that the differences in the two groups of data were stated to be not

significantly different. It means the grammar's average score of the students' writing in the experimental group was not significantly higher than the grammar's average score of the students' writing in control group.

Based on the above table it can be seen that the Mechanic Writing variable shows that the average value of the Experiment Class was 3.56 and the Control Class average value was 3.59 with an average difference of -0.044. The comparison of before and after values produces a value of t count of -0.143 with significance (p-value) of 0.887. Due to the significance value ($0.887 > 0.05$), the statistical hypothesis states that the differences in the two groups of data were stated to be not significantly different. It means the mechanic's average score of the students' writing in the experimental group was not significantly higher than the mechanic's average score of the students' writing in control group.

4.1.6.2 Paired Test in Speaking Test

Paired t-test was used in this study to complete the data, where the t-test measures each indicator in the speaking variable.

Table 4.29. The Summary of t Test Between Experimental Class and Control on The Speaking Test

| Variabel | Speaking Group | N | Average | Average Differences | T-Value | P-Value (Sig.) | Explanation |
|------------------|------------------|----|---------|---------------------|---------|----------------|-------------------------|
| Fluency | Experiment Class | 68 | 2,96 | 1,971 | 5,909 | 0,000 | Signifikantly Different |
| | Control Class | 66 | 0,98 | | | | |
| Content | Experiment Class | 68 | 3,50 | 3,348 | 6,802 | 0,000 | Signifikantly Different |
| | Control Class | 66 | 0,15 | | | | |
| Speaking Grammar | Experiment Class | 68 | 15,40 | 14,049 | 34,638 | 0,000 | Signifikantly Different |

| | | | | | | | |
|--------------------|------------------|----|------|-------|--------|-------|-------------------------|
| | Control Class | 66 | 1,35 | | | | |
| Diction | Experiment Class | 68 | 8,49 | 2,485 | 5,817 | 0,000 | Signifikantly Different |
| | Control Class | 66 | 6,00 | | | | |
| Speaking (Overall) | Experiment Class | 68 | 7,58 | 4,585 | 14,735 | 0,000 | Signifikantly Different |
| | Control Class | 66 | 3,00 | | | | |

Based on the above table it can be seen that in the Fluency variable it is known that the average value of the Experiment Class was 2.96 and the average value of the Control Class was 0.98 with an average difference of 1.971. The comparison of Before and After values produces t count value 5.909 with a significance (p-value) 0.000. Due to the significance value ($0,000 < 0,05$), the statistical hypothesis states that the differences between the two groups of data were stated to be significantly different. It means the fluency's average score of the students' speaking in the experimental group was significantly higher than the fluency's average score of the students' speaking in the control group.

Based on the table above, it can be seen that in the Content variable it is known that the average value of the Experiment Class was 3.5 and the average value of the Control Class was 0.15 with an average difference of 3.348. The comparison of Before and After values produces a t count value 6.802 with a significance (p-value) 0.000. Due to the significance value ($0,000 < 0,05$), the statistical hypothesis states that the differences between the two groups of data were stated to be significantly different. It means the content's average score of the students' speaking in the experimental group was significantly higher than the content's average score of the students' speaking in the control group.

Based on the table above it can be seen that the Speaking Grammar variable shows that the average value of Experiment Class was 15.4 and the average value of Control Class was 1.35 with an average difference of 14.049. The comparison of Before and After values produces a t count value equal to 34,638 with a significance (p-value) 0,000. Due to the significance value ($0,000 < 0,05$), the statistical hypothesis states that the differences between the two groups of data were stated to be significantly different. It means the grammar's average score of the students' speaking in the experimental group was significantly higher than the grammar's average score of the students' speaking in the control group.

Based on the above table it is known that in the Diction variable it can be seen that the average value of the Experiment Class was 8.49 and the average value of the Control Class was 6 with an average difference of 2.485. The comparison of before and after values produces a t count value 5,817 with a significance (p-value) 0,000. Due to the significance value ($0,000 < 0,05$), the statistical hypothesis stated that the differences between the two groups of data were stated to be significantly different. It means the diction's average score of the students' speaking in the experimental group was significantly higher than the diction's average score of the students' speaking in the control group.

Based on the table above, it can be seen that in the Speaking variable (Overall) it is known that the average value of the Experiment Class was 7.58 and the Control Class average value was 3 with an average difference of 4.585. The comparison of before and after values produces a t count value 14,735 with a significance (p-value) 0,000. Due to the significance value ($0,000 < 0,05$), the

statistical hypothesis stated that the differences between the two groups of data were stated to be significantly different. It means the average score of the students' speaking in the experimental group was significantly higher than the average score of the students' speaking in the control group.

4.1.7 The Estimation Results and Hypothesis Testing

Table 4.30 The Estimation Results and Hypothesis Testing (Direct Effects)

| The Influence Between Latent Variables | Path Coefficient | CR | Conclusion |
|---|------------------|-------|-----------------|
| Community Involvement (X5) -> English Productive Skills (Y1) | 0,056 | 0,590 | Not Significant |
| Community Involvement (X5) -> Environmental Awareness (Y2) | 0,295 | 2,580 | Significant |
| English Productive Skills (Y1) -> ELM (Z) | 0,513 | 9,517 | Significant |
| Environmental Awareness (Y2) -> ELM (Z) | 0,526 | 9,431 | Significant |
| Parental Involvement (X3) -> English Productive Skills (Y1) | 0,050 | 0,707 | Not Significant |
| Parental Involvement (X3) -> Environmental Awareness (Y2) | 0,234 | 2,313 | Significant |
| Parental Involvement (X3) -> Problem Based Learning (X1) | 0,030 | 0,618 | Not Significant |
| Parental Involvement (X3) -> Project Based Learning (X2) | -0,077 | 1,343 | Not Significant |
| Parental Involvement (X3) -> School Environment (X4) | 0,600 | 6,572 | Significant |
| Problem Based Learning (X1) -> English Productive Skills (Y1) | 0,410 | 2,779 | Significant |
| Problem Based Learning (X1) -> Environmental Awareness (Y2) | 0,291 | 2,698 | Significant |
| Problem Based Learning (X1) -> Project Based Learning (X2) | 0,581 | 6,143 | Significant |
| Project Based Learning (X2) -> English Productive Skills (Y1) | 0,381 | 3,036 | Significant |

| | | | |
|---|--------|--------|-----------------|
| Project Based Learning (X2) -> Environmental Awareness (Y2) | -0,162 | 1,594 | Not Significant |
| School Environment (X4) -> English Productive Skills (Y1) | 0,078 | 0,883 | Not Significant |
| School Environment (X4) -> Environmental Awareness (Y2) | 0,290 | 2,107 | Significant |
| School Environment (X4) -> Problem Based Learning (X1) | 0,822 | 17,108 | Significant |
| School Environment (X4) -> Project Based Learning (X2) | 0,379 | 3,851 | Significant |

4.1.7.1 The Results and Hypothesis Testing of Problem Based Learning (X1)

It is known that Problem Based Learning (X1) variables have a positive influence on English Productive Skills (Y1). It means that the higher Problem Based Learning (X1) will consequently raise the English Productive Skills (Y1) variable, where the path coefficient obtained is 0.410 with CR amounting to 2.779. Because the CR value is greater than the critical value ($2.779 > 1.96$), the statistical hypothesis states that H_0 is rejected, meaning that the Problem Based Learning (X1) variable has a significant influence on the English Productive Skills (Y1) variable. It indicates the use of problem based learning in learning activity was effective to promote students' English productive skills.

It is known that the Problem Based Learning (X1) variable has a positive influence on Environmental Awareness (Y2). It indicates that the higher Problem Based Learning (X1) will consequently raise the Environmental Awareness (Y2) variable, where the Path coefficient obtained is 0.291 with a CR value of 2.698. Because the CR value is smaller than the critical value ($2.698 < 1.96$), the statistical hypothesis states that H_0 is rejected, meaning that the Problem Based Learning (X1)

variable has a significant influence on the variable Environmental. It indicates the use of problem based learning in learning activity was effective to promote students' environmental awareness.

It is known that the Problem Based Learning (X1) variable has a positive influence on Project Based Learning (X2). It means that the higher Problem Based Learning (X1) will consequently raise the Project Based Learning (X2) variable, where the path coefficient obtained is 0.581 with a CR value amounting to 6.143. Because the CR value is greater than the critical value ($6.143 > 1.96$), the statistical hypothesis states that H_0 is rejected, meaning that the Problem Based Learning variable (X1) has a significant effect on the Project Based Learning (X2) variable. It indicates the use of problem based learning in learning activity was effective to promote project based learning.

4.1.7.2 The Results and Hypothesis Testing of Project Based Learning (X2)

It is known that the Project Based Learning (X2) variable has a positive influence on English Productive Skills (Y1). It indicates that the higher Project Based Learning (X2) will consequently raise the English Productive Skills (Y1) variable, where the path coefficient obtained is 0.381 with the CR value amounting to 3.036. Because the CR value is smaller than the critical value ($3.036 < 1.96$), the statistical hypothesis states that H_0 is rejected, meaning that the Project Based Learning (X2) variable has a significant effect on the English Productive Skills (Y1) variable. It indicates the use of project based learning in learning activity was effective to promote students' English productive skills.

It is known that the Project Based Learning (X2) variable has a negative influence on Environmental Awareness (Y2). It means that the higher Project Based Learning (X2) will consequently reduce the variable Environmental Awareness (Y2), where the path coefficient obtained is -0.162 with a CR value of 1,594. Since the CR value is smaller than the critical value ($1.322 < 1.96$), the statistical hypothesis states that H_0 is accepted, meaning that the Project Based Learning (X2) variable has an insignificant influence on the variable Environmental Awareness (Y2). It indicates the use of project based learning in learning activity was not effective to promote students' environmental awareness.

4.1.7.3 The Results and Hypothesis Testing of Parental Involvement (X3)

Parental Involvement variable (X3) is known having a positive influence on English Productive Skills (Y1). It means that the higher Parental Involvement (X3) will cause the raising of the English Productive Skills (Y1) variable, where the path coefficient obtained is 0.050 with a CR value of 0.707 . Because the CR value is smaller than the critical value ($0.707 < 1.96$), the statistical hypothesis states that H_0 is accepted, meaning that the Parental Involvement variable (X3) has a non-significant effect on the English Productive Skills (Y1) variable. It indicates parental involvement does not give effect to the students' English productive skills.

Parental Involvement variable (X3) is known having a positive influence on Environmental Awareness (Y2). It indicates that the higher Parental Involvement (X3) will consequently increase the variable Environmental Awareness (Y2), where the path coefficient obtained is 0.234 with a CR value of 2.313. Because the CR value is higher than the critical value ($2.313 > 1.96$), the statistical hypothesis states

that H_0 is rejected. It means that the Parental Involvement (X3) variable has a significant influence on the Environmental Awareness (Y2) variable. It indicates parental involvement gives effect to the students' environmental awareness.

Parental Involvement variable (X3) is known having a positive influence on Problem Based Learning (X1). It indicates that the higher Parental Involvement (X3) will consequently raise the Problem Based Learning variable (X1), where the path coefficient obtained is 0.030 with a CR value of 0.618. Because the CR value is smaller than the critical value ($0.618 < 1.96$), the statistical hypothesis states that H_0 is accepted, meaning that the Parental Involvement variable (X3) has a non-significant effect on the Problem Based Learning (X1) variable. It indicates parental involvement does not give effect to the Problem Based Learning.

It is known that the Parental Involvement (X3) variable has a negative influence on Project Based Learning (X2). It indicates that the higher Parental Involvement (X3) will consequently reduce the Project Based Learning (X2) variable, where the path coefficient obtained is -0.077 with a CR value of 1.343. Because the CR value is smaller than the critical value ($1.343 < 1.96$), the statistical hypothesis states that H_0 is accepted, meaning that the Parental Involvement variable (X3) has a non-significant effect on the Project Based Learning (X2) variable. It indicates parental involvement does not give effect to the Project Based Learning.

Parental Involvement variable (X3) is known having a positive influence on School Environment (X4). It means that the higher Parental Involvement (X3) will increase the result in School Environment variable (X4), where the path coefficient obtained is 0.600 with a CR value of 6.572. Because the CR value is greater than

critical value ($6.572 > 1.96$), the statistical hypothesis states that H_0 is rejected, meaning that the Parental Involvement variable (X_3) has a significant effect on the School Environment variable (X_4). It indicates parental involvement gives effect to the school environment.

4.1.7.4 The Results and Hypothesis Testing of The School Environment (X_4)

The School Environment variable (X_4) has a positive influence on English Productive Skills (Y_1). It means that the higher the School Environment (X_4), the lower the English Productive Skills (Y_1) variable, where the path coefficient obtained is $-0,015$ with a CR value of 0.165 . Because the CR value is smaller than the critical value ($0.165 < 1.96$), the statistical hypothesis states that H_0 is accepted, meaning that the School Environment variable (X_4) has a non-significant effect on the English Productive Skills (Y_1) variable. It indicates that school environment does not give effect to the students' English productive skills.

School Environment (X_4) variable has a positive influence on Environmental Awareness (Y_2). It means that the higher School Environment (X_4) will consequently raise the Environmental Awareness (Y_2) variable, where the Path coefficient obtained is 0.290 with a CR value of 2.107 . Because the CR value is greater than the critical value ($2.107 > 1.96$), the statistical hypothesis states that H_0 is rejected, meaning that the School Environment variable (X_4) has a significant influence on the Environmental Awareness (Y_2) variable. It indicates that school environment gives effect to the students' environmental awareness.

The School Environment variable (X_4) is known having a positive influence

on Problem Based Learning (X1). It indicates that the higher School Environment (X4) will result in the Problem based Learning (X1) variable, where the path coefficient obtained is 0.822 with a CR value of 17.108. Because the CR value is greater than the critical value ($17.108 > 1.96$), the statistical hypothesis states that H_0 is rejected, meaning that the School Environment variable (X4) has a significant influence on the Problem Based Learning(X1) variable. It indicates that school environment gives effect to the Problem Based Learning.

School Environment (X4) variable has a positive influence on Project Based Learning (X2). It means that the higher School Environment (X4) will consequently raise the Project Based Learning (X2) variable, where the path coefficient obtained is 0.379 with a CR value of 3.851. Because the CR value is greater than the critical value ($3.851 > 1.96$), the statistical hypothesis states that H_0 is rejected. It indicates that the School Environment variable (X4) has a significant influence on the Project Based Learning (X2) variable. It indicates that school environment gives effect to the Project Based Learning.

4.1.7.5 The Results and Hypothesis Testing of Community Involvement (X5)

The variable Community Involvement (X5) is known having a positive influence on English Productive Skills (Y1). It means that the higher Community Involvement (X5) will consequently increase the English Productive Skills (Y1) variable, where the path coefficient obtained is 0.056 with CR value of 0.590. Because the CR value is smaller than the critical value ($0.590 < 1.96$), the statistical hypothesis states that H_0 is accepted. It means that the Community Involvement (X5) variable has a non-significant effect on the English Productive Skills (Y1)

variable. It indicates that community involvement does not give effect to the students' English productive skills.

It is known that the variable Community Involvement (X5) has a positive influence on Environmental Awareness (Y2). It means that the higher Community Involvement (X5) will consequently increase the variable Environmental Awareness (Y2); where the path coefficient obtained is 0.295 with a CR value is 2.580. Since the CR value is greater than the critical value ($2.580 > 1.96$), the statistical hypothesis states that H_0 is rejected. It means that the Community Involvement (X5) variable has a significant influence on the variable Environmental Awareness (Y2). It indicates that community involvement gives effect to the students' environmental awareness.

4.1.7.6 The Results and Hypothesis Testing of The English Productive Skills (Y1) and Environmental Awareness (Y2)

The English Productive Skills (Y1) variable is known having a positive influence on Environmental Learning Model (Z). It means that the higher English Productive Skills (Y1) will increase the Environmental learning Model (Z) variable, where the path coefficient obtained is 0.513 with a CR value 9.517. Because the CR value is higher than the critical value ($9.517 > 1.96$), the statistical hypothesis states that H_0 is rejected. It means that the English Productive Skills (Y1) variable has significant effect on the Environmental Learning Model (Z) variable. It indicates that English productive skills gives effect to the Environmental Learning Model.

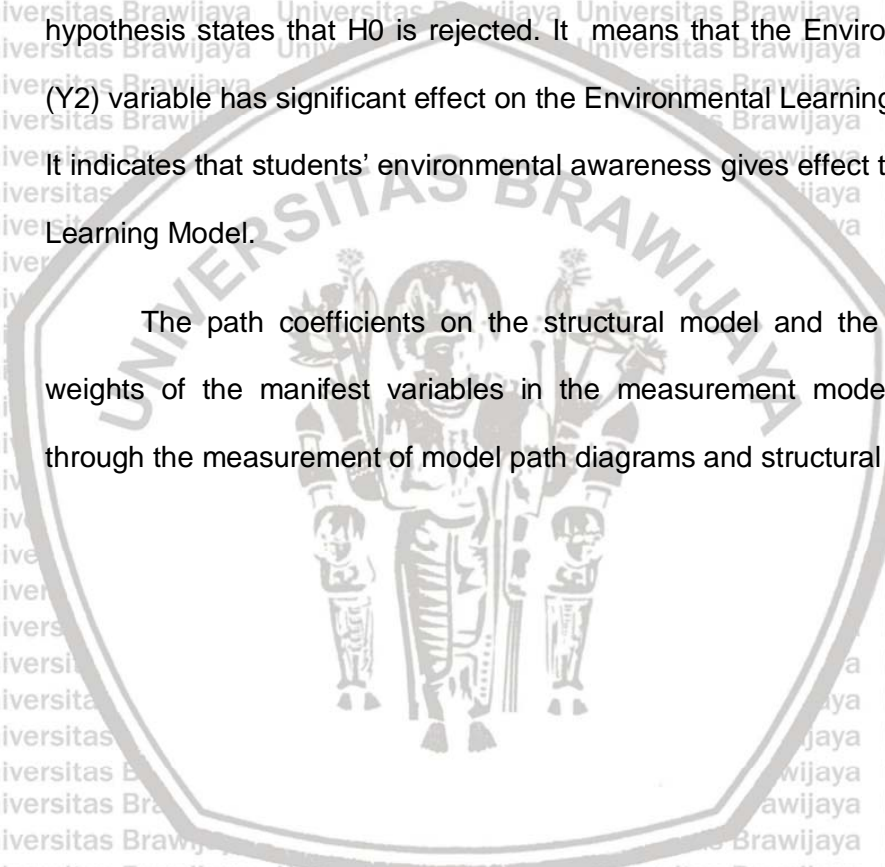
The Environmental Awareness (Y2) variable is known having a positive

influence on Environmental Learning Model (Z). It means that the higher students' Environmental awareness (Y2) will increase the Environmental Learning Model (Z) variable, where the path coefficient obtained is 0.526 with a CR value 9.431.

Because the CR value is higher than the critical value ($9.431 > 1.96$), the statistical hypothesis states that H_0 is rejected. It means that the Environmental Awareness (Y2) variable has significant effect on the Environmental Learning Model (Z) variable.

It indicates that students' environmental awareness gives effect to the Environmental Learning Model.

The path coefficients on the structural model and the value of the factor weights of the manifest variables in the measurement model can be illustrated through the measurement of model path diagrams and structural models as follows:



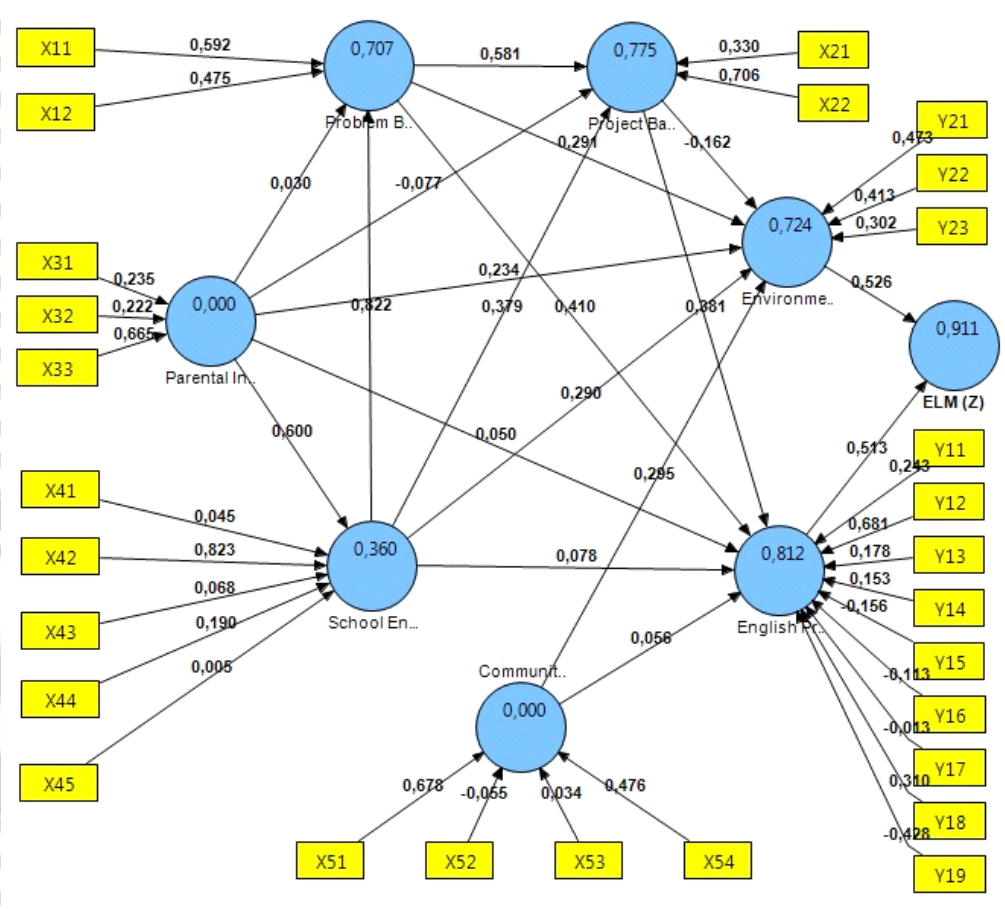


Figure 4.1 PLS Path Chart (Outer and Inner Models)

4.1.7.7 The Target of Students' Learning Achievement

Based on the target of the students' achievement those are: 1) 70 % of the students writing score reach above 75 in a 0-100 scale, 2) 70 % of the students speaking score reach above 75 in a 0-100 scale, 3) 50 % of the students use drinking bottles brought from home and 4) 50 % of the students already throw garbage in the proper places, the students' learning achievement had matched with

the objective of the study. The students' learning achievement is presented in the following table.

Table 4.31 The Target of Students' Productive Skills Achievement

| No | Aspect | Target | N | Achievement |
|----|---|--------|----|-------------|
| 1 | The students writing score reach above 75 in a 0-100 scale. | 70 % | 64 | 94.12 % |
| 2 | The students speaking score reach above 75 in a 0-100 scale | 70 % | 58 | 85.29 % |

Source: the result of data processing, 2019

Based on the table above, it can be seen the number of the students who can reach the writing score above 75 in a 0 -100 scale was 64 students or 94.12 %. While, the number of the students who can reach the speaking score above 75 in 0 - 100 scale was 58 students or 85.29 %. It indicates that Problem Based Learning could increase the students' writing skills and Project Based Learning could increase the students' speaking skills.

Table 4.32 The Target of Students' Environmental Awareness Achievement

| No | Aspect | Target | Occurrences | | | | | Achievement |
|----|--|--------|-------------|----|----|----|---|-------------|
| | | | 5 | 4 | 3 | 2 | 1 | |
| 1 | The students use drinking bottles brought from home | 50 % | 26 | 10 | 16 | 12 | 4 | 52.94 % |
| 2 | The students already throw garbage in the proper places. | 50 % | 24 | 29 | 10 | 5 | 0 | 77.94 % |

Source: the result of data processing, 2019

Note : 5 =Always, 4 =Often, 3 =Sometimes, 2 = Rarely and 1 = Never

Based on the table above, it can be seen the number of the students who answer always using drinking bottles brought from home was 26 students and the students who answer often using drinking bottles brought from home was 10

students. It means there were 36 students or (52.94 %) who use drinking bottles brought from home. While, the number of the students who always throw garbage in the proper places was 24 students and the students who answer often throw garbage in the proper places was 29 students. It means there were 53 students or (77.94 %) who already throw garbage in the proper places. It indicates that Environmental Learning Models gives effect to the students' Environmental Awareness.

4.2 Minor Finding

The minor finding discusses the analysis data obtained from secondary research data. Secondary data is data obtained by researcher from library sources or reports. Secondary data in this study was obtained from the second semester of the students' report books in class XI MIPA 1 and XI MIPA 4. A sample of 68 students consisted of 36 students in class XI MIPA 1 and 32 students in class XI MIPA 4. This study was a scanning conducted to determine the relationship between the scores of science and math and learning motivation with the results of learning English.

4.2.1 Univariate Analysis

Univariate analysis was used to obtain a description of the research variables which are gotten from the secondary data of the study. With the following results:

Table 4.31 Overview of Science and Mathematic' Scores

| | Explanation | Science and Math Scores |
|---------|-------------|-------------------------|
| Maximum | | 680 |
| Minimum | | 617 |

| | |
|---------|--------|
| Average | 637.21 |
| SD | 12.80 |

Source: results of data processing, 2019

Table 6.5 above, shows a picture of student scores obtained based on IPA values. The highest Science and Math score is 680, while the lowest score is 617, and the average score is 637.21. Based on the table above, it can be described the frequency distribution of the number of students based on the Science and Math scores with the following results:

Table 4.34 Students Frequency Distribution Based on Science and Math Scores

| Science and Math Score | Frequency (f) | Percentage (%) |
|----------------------------|---------------|----------------|
| High (Score \geq 637.21) | 25 | 36.8 |
| Low (Score $<$ 637.21) | 43 | 63.2 |
| Total | 68 | 100 |

Source: results of data processing, 2019

Based on table 6.6, it can be seen, the number of students based on the scores of science and math, the majorities 43 students or (63.2%) are the students with the low scores, and the rest 25 students or (36.8%) are the students with the high scores. It indicates that students' science and math scores does not give effect to the students' English learning out comes.

Table 4.35 Overview of Learning Motivation Skors

| Explanation | Learning Motivation Skor |
|-------------|--------------------------|
| Maximum | 92 |
| Minimum | 60 |
| Average | 76.06 |
| SD | 7.18 |

Source: results of data processing, 2019

Table 6.8 above shows an overview of students' scores obtained based on the students learning motivation. The highest learning motivation is 92, while the lowest score is 60 and the average score is 76.06. Based on the table above, it can be described the frequency distribution of the number of students based on learning motivation scores with the following results:

Table 4.36 Frequency Distribution of Students Based on Learning Motivation Scores

| Learning Motivation | Frequency (f) | Percentage (%) |
|---------------------------|---------------|----------------|
| High (Score \geq 76,06) | 31 | 45.6 |
| Low (Score $<$ 76,06) | 37 | 54.4 |
| Total | 68 | 100 |

Source: results of data processing, 2019

Based on table 6.8, it can be seen the number of students based on learning motivation scores, the majority 37 students or (54.4%) are the students with low learning motivation and the rest 31 or (45.6%) are students with high learning motivation.

Table 4.37 Overview of Score in English Learning Outcomes

| Explanation | English Learning Outcomes |
|-------------|---------------------------|
| Maximum | 90 |
| Minimum | 65 |
| Average | 79.87 |
| SD | 4.14 |

Source: results of data processing, 2019

Table 6.9 above, shows an overview of the acquisition of student scores based on the results of learning English. The highest English learning outcomes was 90, while the lowest score was 65, and the average score was 79.87. Based on the



table above, it can be described that the frequency distribution of the number of students based on the score of the results of learning English with the following results:

Table 4.38 Frequency Distribution of The Students Based on The Scores of English Learning Outcomes

| English Learning Outcomes | Frequency (f) | Percentage (%) |
|----------------------------|---------------|----------------|
| High (Score $\geq 79,87$) | 40 | 58.8 |
| Low (Score $< 79,87$) | 28 | 41.2 |
| Total | 68 | 100 |

Source: results of data processing, 2019

Based on table 6.10, it can be seen the number of students based on the results of learning English, the majority as many as 40 or (58.8%) are the students with high English learning outcomes and the rest 28 or (41, 2%) are the students with low English learning outcomes. It indicates that students' motivation to learn English does not give effect to the students' English learning out comes.

4.2.2 Bivariate Analysis

Bivariate analysis was used to determine the relationship between science and math scores and learning motivation with the results of learning English. The results as follows:

Table 4.39 The Relationship between Science and Math Scores with English Learning Outcomes (n = 68)

| | | English Learning Outcomes | | | | Total | | χ^2 | <i>P</i> value | OR (95% CI) |
|-------------------------|-------|---------------------------|------|------|------|-------|------|----------|----------------|-----------------------|
| | | Low | | High | | f | % | | | |
| | | f | % | f | % | | | | | |
| Science and Math Scores | Low | 21 | 30.9 | 22 | 32.4 | 43 | 63.2 | 2.834 | 0.092 | 2,455 (0,852 - 7,072) |
| | High | 7 | 10.3 | 18 | 26.5 | 25 | 36.8 | | | |
| | Total | 28 | 41.2 | 40 | 58.8 | 68 | 100 | | | |

The *p*-value score is calculated based on the Chi-square Test statistical test with 95% value of significant. The significance *p* value score based on *p* value < 0.05.

Explanation:

f = number of frequencies (respondents)

% = percentage

P value = value of significance

Table 5.39 shows the relationship between the science and math scores and the results of learning English, from 68 students, the majority as many as 43 students (63.2%) are low in science and math scores, consisting of 21 students (30.9%) were low English learning outcomes and the rest 22 students (32.4%) were high English language learning outcomes. Based on the results of statistical tests obtained with *p* value 0.092. Since the score of *p* value is more than the score of α (5%) or (0.092 > 0.05), it can be concluded that there is no relationship between the scores of science and math and the results of learning English. In addition, the Odd

Ratio score was 0.092 which showed that students who had high science and math scores tended to have high English learning outcomes of 0.092 times compared to the students who had low science and math scores.

4.2.2.1 The Relationship Between Learning Motivation and English Learning Outcomes

Table 4.40 The Relationship Between Learning Motivation and English Learning Outcomes

| | | English Learning Outcomes | | | | Total | | X ² | P value | OR (95% CI) |
|---------------------|------|---------------------------|------|------|------|-------|------|----------------|---------|-----------------------|
| | | Low | | High | | | | | | |
| | | f | % | f | % | f | % | | | |
| Learning Motivation | Low | 14 | 20.6 | 23 | 33.8 | 37 | 54.4 | 0.373 | 0.541 | 0,739 (0,281 - 1,951) |
| | High | 14 | 20.6 | 17 | 25.0 | 31 | 45.6 | | | |
| Total | | 28 | 41.2 | 40 | 58.8 | 68 | 100 | | | |

The p-value score was calculated based on the Chi-square Test statistical test with 95% significance value. The significance value based on *p value* < 0.05.

Explanation:

f = number of frequencies (respondents)

% = percentage

P value = value of significance

Table 5.40 shows the correlation between learning motivation and the results of learning English, from 68 students, the majority of 37 students (54.4%) were low learning motivation, consisting of 14 students (20.6%) with low English learning outcomes and the rest 23 students (33.8%) were high English learning outcomes.

Based on the results of statistical tests obtained *p value* 0.541. Since the score of *p value* was higher than the score of α (5%) or (0.541 > 0.05), it can be concluded that there is no relationship between motivation to learn and the results of learning English. In addition, it was obtained an Odd Ratio score of 0.739 which indicates that the students who have high learning motivation tend to have high English learning outcomes of 0.739 times compared with the students with low learning motivation.

It can be concluded that based on the results of the research and discussion about the scores of science and math and learning motivation with the results of learning English, it can be concluded as follows: 1) There is no relationship between the students' score of science and math and the results of learning English, 2) There is no relationship between the students' motivation to learn English and the results of learning English.

4.2.3 The Students' attitude Towards PBL and PjBL

Table 4.41 The Summary of the Students' Answers and the Interpretations of the Questionnaire for the Students

| No | Topics of the questions | Students' Responses | | |
|----|---|---------------------|------------|-----------|
| | | Positive | Negative | Not clear |
| 1 | The students' general impression on problem based learning and project based learning | 62 93.9 % | 2 1.5 % | 2 3.0% |
| 2 | Good things from hortatory scaffolds and campaign | 64 97.0 % | 2 3.0% | - |
| 3 | Benefits of learning writing and speaking by means of PBL and PjBL | 64 97.0 % | 2 3.0 % | - |
| 4 | Weaknesses of PBL and PjBL | 60 90.9 % | 6 9.1 % | - |
| 5 | The purpose of using PBL in learning writing and PjBL in learning speaking | 66 100 % | - | - |
| 6 | The students' experience in learning productive skills and environmental education using PBL and PjBL | 64 97.0% | 2 3.0 % | - |

| | | | |
|-------|-------|------|------|
| Total | 168 | 11 | 2 |
| | 93.3% | 5.6% | 1.1% |

4.2.3.1 The Students' General Impression of PBL and PjBL

In response to question no 1 in questionnaire, it can be seen that 93.9 % of the students felt that PBL and PjBL helping them in improving their writing and speaking skills. This feeling became the general impression. However, 2 students (1.5 %) stated that they were sometimes confused to answer the questions in the scaffold and to respond to teacher question during revision. Moreover, 2 students (1.5 %) gave statement in between. They said that PBL and PjBL were so helpful and fun for them but sometimes, they got bored and scared with them since they had to do them in short meeting.

4.2.3.2 Good Things from PBL and PjBL

When the students were asked to see this PBL and PjBL more objectively, 97.0 % of the students thought that PBL and PjBL have good things. The good things were in the form of making them active in writing, easily to develop the content of their writing and organize their writing and easily to differentiate the difference of each kind of text that they learn. Moreover, some students also stated that revision helped them to understand more about the feedback that the teacher gave to them.

On the other hand, 2 students (3.0 %) stated that PBL and PjBL sometimes made them confused since they found difficulties in answering the questions in the scaffold and sharing their problems with the teacher during revision and they felt scared when they should do campaign in the XII classes



4.2.3.3 Benefits of Learning Writing through Scaffolds and Revision

Answering the third question, 97.0 % of the students show their positive attitude towards this procedure, yet, 3.0 % of the students did not think that PBL and PjBL would be beneficial for them. This one student kept consistent showing his negative attitude towards the procedure by saying that he sometimes found difficulties in answering the scaffolds questions and responded to the teacher's questions or feedback during revision and felt scared during campaign.

However, 64 students shows positive attitude towards PBL and PjBL. Most of them stated that scaffolds and campaign indeed helped them in developing the content of their writing and speaking, organize their writing, write and speak with good grammatical sentences, and build their vocabulary. They also found that answering the questions in the scaffold was a fun yet challenging activities to do. Moreover through campaign, they said that it helped them to understand more about environmental problems especially plastic waste and then make them remembering for not littering. Revision also made them happy because it helped them to be close with their teacher and made them more relax to share all of their problems they faced in writing. In addition, PBL and PjBL also helped them to be more aware of the writing aspects that they should pay attention to for making their writing better and they were more confidence to speak in front of the public.

4.2.3.4 Weaknesses of PBL and PjBL

There were some weaknesses of PBL and PjBL revealed from the students' answers to question number 4. There were 60 students (90.9 %) that mentioned

that there were no weaknesses on PBL and PjBL. However, 6 students (9.1 %) mentioned there were some problems they faced in experiencing PBL and PjBL. 2 students who were discouraged with scaffolds mentioned that the questions in hortatory scaffold were difficult to answer. Meanwhile for the campaign, they said that they often felt nervous and scared speaking in front of others classes. They felt afraid if they speech were wrong. Nervous is the next main problem in applying this procedure as indicated by 4 students. They tent to felt nervous speaking infront of the others classes. These students' answers showed that the learning using public speaking (campaign) was not the factor that disadvantages them, but nervous was. If these students did not speak infront of the X or XII class' students, they would agree with the use of PjBL.

4.2.3.5 PBL and PjBL in the Teaching Productive Skills and Environmental Awareness

Responding to the question whether or not this procedure should be used in writing and speaking classes (question no.5), 100 % of the students thought that this technique should be used in teaching writing and speaking. They all agreed that scaffolds and campaign was suitable to teach writing and speaking, since scaffolds and campaign gave a lot of advantages and increasing their environmental awreness.

4.2.3.6 Additional Comments for PBL and PjBL Implementation

Answering the last question, 97.0 % of the students showed their positive attitude towards PBL and PjBL. Opportunity to experience scaffolds and campaign

made 5 students find writing is no longer difficult for them. They highlighted that this technique made writing no longer boring and difficult to learn. In line with these students statements, some other students said that it was fun to learn by having revision because sometimes it was difficult for them to understand the written feedback given by the teacher without having a revision. However, the negative impression mentioned by 2 (3.0 %) students that said that sometimes they found scaffolds and campaign was quite boring and scared for them.

4.2.4 Findings of the Field Notes

From the field notes, it was revealed that introducing the PBL through scaffold to the students by using a model text really helped the students to understand the use scaffold in writing their text and developing students' environmental awreness. By answering the question in the scaffold, it was easier for the students for making the draft of the text. Moreover, almost all of the students were enthusiastic in learning writing.

Related to the campaign, the observer noted that it was better for having a campain by using English for some midle level students. This was good for helping them to communicate the problems infront of the others classes that they faced around them. Moreover, it was increasing confidance the low level students todo public speaking. In addition, explaining about the environmental awareness in the building knowledge of the field stage made the students aware of environmental problems around them during their writing. It also made them actively involve to make their environment better. However, the observer also noted that the researcher should pay more attention to time management in doing the lesson. Moreover, giving

students a writing checklist also helped the students to be more aware of writing aspects. In addition, choosing happening and interesting topics really helped to keep the students' enthusiasm during the teaching and learning activities.



CHAPTER V

DISCUSSIONS

In this chapter, based on the analytical computation and SEM, the results of the present study are discussed. The discussion deals with the interpretation on the result of data analysis and relation with the earlier theories and previous studies.

5.1. Interpretation of Research Findings

In relation to the research findings discussed in Chapter IV, it was found that there were significant differences between the mean scores of hortatory exposition test in the experiment group. It lead to the rejection of the null hypotheses which stated that “there is no significant differences in writing hortatory achievement between students who are taught using problem based learning and those who are taught using conventional method” and “there is no significant differences in speaking hortatory achievement between students who are taught using project based learning and those who are taught using conventional method”

Moreover, the mean scores of the content and organization aspects of hortatory exposition writing test in the experimental group were significantly higher compared to the control group. The vocabulary aspect of the hortatory exposition test in the experimental group was also higher than the control group but it was not significantly different. In other words, the hypotheses of this study worked. It means that using problem based learning in teaching hortatory exposition writing at the senior high school students was significantly more

effective than using conventional method. The success of achieving better score by the experimental group on the posttest compared to the control group might be caused by several reasons.

Richards and Renandya (2002, as cited in Ratnaningsih 2016) state that writing is not easy because it is difficult to generate, organize, and translate ideas into a readable text. However, scaffolds appear to solve all these difficulty. Dealing with generating ideas, the guided questions in the scaffolds help the students to generate ideas and giving details to their writing. Related with the difficulty in organizing idea, scaffolds were constructed following the generic structure of text. Thus, it is easier for the students to organize their writing following the generic structure of the text. As what Yangrifqi (2008) states that the scaffold which was constructed following the generic structure of a text helped the students to organize their writing into a good order. Meanwhile, regarding the difficulty in translating ideas into readable text, after answering the guided questions in the scaffolds, the students then convert their answers into the complete sentences for their draft. It helps them to make correct and readable sentences more easily.

Moreover, after finishing writing their draft by using scaffolds, the students were having group' revision with the teacher that allowed the students to receive direct oral feedback from the teacher. The feedback given to the students deal with all aspects of writing, i.e., content, organization, grammar, vocabulary and mechanics. Feedback on all aspects was proved to enable the students to write better (Watanabe, 2016). The improvement on the students' writing was possible because in revision, the input that the students received was specifically directed to each aspect of writing in the form of teacher oral feedback about their own

work. As what Chaudron (1984, as cited in Lestari, 2008) says that the important component in the revision process is the provision of feedback from other readers. During revision, students received feedback to the effectiveness of their writing and were required to respond to the teacher's feedback directly before counting their product finished. This would help the students to discover that good writing involves an interaction between their ideas, the expression of the ideas, and their readers' perception and reaction to the expression. By means of feedback which made students receiving information about the effect of their writing on readers, students developed their skills in effective writing.

Dealing with the organization writing, scaffolds were indeed effective in guiding the students to construct their writing. As what stated previously, Anderson and Anderson (1997) describe a scaffold as a guide for constructing a piece of text. It helps writer constructing texts just like a builder uses scaffolds when constructing a building. These scaffolds, give a writer a right structure for creating a certain text type. Besides scaffolds, conferencing also contributes in helping the students to write more well-organized essays. It was likely to happen because during the conferencing, feedback given to the students writers was not only on minor aspects of writing, such as grammar, vocabulary and mechanics but also on the major aspects, i.e., content and organization. During conferences, since the teacher act as "the real audience" of the students writing who give not only written feedback but also interactive feedback, better organization was achieved by the students. This is in line with what Chen (2010) found in his research that "the involvement of teachers as audiences during revision also gives contribution to the improvement of the student writing on the aspect of organization".

Among all aspects of writing, it is found on this study that mechanics and grammar are the aspects that improved not significantly higher in the tests than the control group. The reason why the students' gain score were not significantly higher might be due to the fact that when tested they concentrated more on the other aspects which were more important in writing, such as content and organization, than to the mechanical and grammar aspects which were considered less important

The reason why such condition happened is checking the correct usage of mechanics is usually done in the last part of the writing process, editing. It might be that during the test, the students did not have enough time to edit their essay as attention was mostly spent on other aspect of writing. That is why, even though during the treatment the aspect of mechanics was not neglected, their achievement for the mechanical aspect was not very encouraging. This is in line with the monitor hypothesis proposed by Krashen (1982, in Lightbown and Spada, 2001) which says that in the acquisition process, the monitor will work if the learners focus on form, they know the rules, and when they have enough times. In the case of the experimental group in this study, what happened was the students might not have enough time for the monitor to work on the aspect of mechanics and grammar as they were busier with other aspects which were more important. Furthermore, Alfiyani (2013) stated that the students can make a good idea in making English sentences but they find difficulties in learning grammatical structures in writing process.

The mean scores of the fluency, content, grammar and diction aspects of speaking test in the experimental group were significantly higher compared to the control group. In other words, the hypotheses of this study worked. It mens that

using project based learning in teaching hortatory exposition speaking at the senior high school students was significantly more effective than using conventional method. The success of achieving better score by the experimental group on the posttest compared to the control group might be caused by several reasons.

Speaking in public is not an easy matter, because we often assume that we will make mistakes and be directly judged by our audience. The most fear thing is public embarrasshment. Tsaousides (2017) stated that fear often arises when people speak in public, because they risk their ideas in front of others, threatening credibility, image, and ways of attracting audience attention. Related to the fear and anxiety to speak in public, to overcome this problem Raja (2017) stated that fear speaking in front of the public can be solve by practicing and rehearsing before presentations or speeches. During the practicing and rehearsing, students recieve feedback directly from the members of the group. This would help the students to discover their ideas about the topic, punctuality and their audience perception and reaction to the theme of the campaign. The students developed their skills in effective speaking.

Based on the above explanations, they might be become the reasons why implementing campaign made the students in the experimental group achieve better in speaking hortatory exposition texts than the students in the control group. Moreover, according to the finding of the questionnaire on the students' opinion, most of the students found that campaign was beneficial for their speaking ability. The students specifically said that campaign helped them to develop their fluency, content, to organize their idea, and to speak in good grammatical sentences.

Problem-Based Learning (PBL) is a teaching method where students are faced with complex real-world problems in the form of concepts and principles.

This is a contradiction with what students learn in the form of facts and concepts through learning in the classroom (Illinois Citi, 2019). Moreover, "PBL is also a student-centered pedagogy in which students learn about a subject through the experience of solving an open-ended problem found in trigger material" (Wikipedia, 2019). In this study, PBL learning covered students' learning experiences in seeing environmental problems in their village and explaining them in writing learning. The relationship among Problem based learning, project based learning, English productive skills and students' environmental awareness will be discussed as follows:

It is known that Problem Based Learning variables have a positive influence on English Productive Skills. It means that the higher Problem Based Learning will consequently raise the English Productive Skills. From the findings of the Namaziandost et. al (2018) study, revealed that the practice of writing can affect the increase in student writing and also significantly increase the pre-middle EFL students' speaking ability. Furthermore, Poonpon (2017) states that PBL can improve students' skills and self-confidence to use English that they learned from English classes and assessment of learning is done by looking at projects undertaken by students.

Faraj (2015) stated that teacher's scaffolding techniques in teaching writing skill can help students and gives a better basis for enhancing the students to write a good and an academic piece of writing in English compared to the students that are taught conventionally, they only get knowledge about writing process without practically practicing it through sequence of steps. In line with

Faraj, Wulandari et al (2014) stated that scaffolding teaching technique makes the students writing skill significantly improve. It can be identified from the students writing skill achievement like: 1) developing ideas appropriate with the topic provided, 2) organizing a text, 3) using vocabularies appropriate with the topic, 4) using grammatical pattern and sentence pattered appropriate with the topic, 5) spelling the words appropriately and 6) using suitable punctuation in the text.

Furthermore, it is known that the Problem Based Learning has a positive influence on Environmental Awareness. It indicates that the higher Problem Based Learning will consequently raise the Environmental Awareness. Based on Kuvac and Koc (2018) studied, they stated that Problem Based Learning helped the science teachers explore the nature and factors of environmental problems that can harm human activity and it also support to give solutions for real-life environmental problems and teach the students to realise the importance of taking an active role in environment healing. Moreover, Iswandari at al (2017) stated that teaching is carried out through an environmental PBL involving eleventh grade Indonesian class students shows a significant effect on the achievement of vocabulary and writing abilities related to the environment.

Moreover, Problem Based Learning has a positive influence on Project Based Learning. It means that the higher Problem Based Learning will consequently raise the Project Based Learning. In this study, through PBL, the students in experiment groups had responsible attitudes in terms of exploring their village environment, realized that there are environmental threat and started environmental movement activism. In other words, the students indicated that they realize about their environment and believed the environment is fragile and easily damaged by human activity. They were also willing to actively support

environmental conservation actions. In line with it, Artini & Nitiasih (2017) stated that their study significantly improve the students' productive skills in speaking and writing skills as the result of the implementation of PBL activities in English as a foreign language classes. In line with them, Namaziandost et al (2018) study showed that the writing practice can improve speaking skill among pre-intermediate Iranian EFL learners.

Project-based learning is the creation of instructional materials, modules or lessons to develop knowledge and skills students through engaging projects that challenge and introduce the real problems they may face (Schuetz, 2018). In PjBL learning, students are assigned to campaign to reduce plastic waste in other classrooms and presented it in speaking learning. The relationship among Project Based Learning, the English Productive Skill (Speaking skill) and Students' Environmental Awareness will be discussed as follows:

It is known that the Project Based Learning has a positive influence on English Productive Skills. It indicates that the higher Project Based Learning will consequently raise the English Productive Skills. According to Tuan and Mai (2015), they stated that there are many factors influencing students speaking performance one of it is topical knowledge. Students got topical knowledge from previous PBL learning, such as pollution and garbage. It made them confident and spoke fluently in front of the students in X and XII classes. Furthermore, they also easily answered the post test questions than the students in control classes.

However, Project Based Learning has a negative influence on Environmental Awareness. According to Abrahamse & Mathies (2012), they stated that the provision of information is not enough to develop environmental

behaviour, it is only increased awareness. Furthermore, they said that environmental issues are multifarious. The informational strategies are not enough to encourage people to adopt a more environmentally friendly lifestyle, they need to be combined with structural intervention strategies. In line with Abrahamse and Mathies, Hadijah (2017) stated that environmental awareness campaign certainly is not effective to make other people who hear it changing their behaviour although it done with various appeals, it is easier if they see something and then emulate it. Therefore, it is better for parents to teach environmental awareness earlier to their children.

This research involved students who have parents who worked as farmers, farm workers, private workers / entrepreneurs, teachers and civil servants. Where the amount of their parents' jobs are 14 farmers, 4 farm workers, 40 private workers/ entrepreneurs, 2 teachers and 8 civil servants. Based on the testing of the hypothesis in the research findings, there is an insignificant relationship between Parental Work and the Result of Learning English. Parents' involvement in children's education has several forms. Parents who are behaviourally involved, they participate in every school activities. Parents who are cognitively involved effort their children to learn subject materials and join activities that can boost their children knowledge. Parents who are personally involved share events that occur at school. They believe school is valuable and expect their children to as well (Mare, 2014).

Parental Involvement is known having a positive influence on Problem Based Learning. In line with the result, Sapungan & Sapungan (2014) stated parental involvement regardless of ethnic or racial background, socioeconomic status, or parents' education level, they have benefits for children, the children

tend to get achievement in grades, test scores, and well attendance and children always accomplish their homework. Moreover, Mutodi & Ngirande (2014), stated that parental involvement, such as good communication with teacher and school, and family support like helping their children with homework was found to be positively related to students' academic achievement.

It is known that the Parental Involvement has a negative influence on Project Based Learning According to Syamsudduha and Ginanto (2017); they stated that the role of parental involvement in two public schools in Makasar is parents have been involved in school activities related on help their children on assistance their school' assignments at home and actively involve in activities requiring parental support. Although, they do not interfere in classroom learning activities. Furthermore, Junianto and Wagiran (2013) stated that intellectual involvement and behavioral involvement are powerlessness aspects of the parent involvement variable. Aspects of behavioral involvement include enthusiasm, commitment and tolerance, while the intellectual involvement of parents includes stimulating children's intelligence, learning assistance at home, monitoring children's academic development, giving models in learning and efforting the writing, reading and discussion habits.

Parental Involvement is known having a positive influence on English Productive Skills, but the Parental Involvement has a non-significant effect on the English Productive Skills. In line with the result above, Dewi (2017) stated that the parents' opinion about English is also influenced to the participation of what they do. Parents who have upper cognition about the benefit of English in the future have indication to monitoring their children's English learning development and to achieve more. Furthermore, Kalayci & Öz (2018) stated that parental

involvement does not improve their children's English development. Parents believe the children's success is caused of their teacher, since their role cannot go beyond the revision of the language and vocabulary structure and language exposure for the development of English students is very important.

Parental Involvement variable is known having a positive influence on School Environment and it has a significant effect on the School Environment.

Parental involvement has always been an important factor for every teacher, student and school academic achievement. Parental involvement refers to the behavior of parents where they play an active role in their child's school as a form of their concern for children's education affairs (Bakker & Denessen in Yulianti et.al, 2018). According to Park & Holloway (2017), they stated that parental involvement has a very important role in improving student achievement at the school level, especially schools that care for low-income students. In addition, the network size of parents is a very strong predictor of progress and achievement in school.

Parental Involvement is known having a positive influence on Environmental Awareness and has a significant influence on the students' Environmental Awareness. In line with Erhabor & Oviahon (2018), they state that families have a stronger influence on students' attitudes, attention and environmental behavior. Beside family functions, the attitude of the community environment is also seen as having a major influence on the environmental behavior of students. This shows that students from families who teach good behavior tend to behave environmentally friendly and show attention and act by protecting the environment.

The school environment is characterized by facilities, classrooms, school health clinics, and disciplinary policies and practices designed to protect students from external factors. (AIR, 2019). The relationship among school environment with Problem Based Learning, Project Based Learning, English productive skills and students' environmental awareness will be discussed as follows:

The School Environment variable is known having a positive influence on Problem Based Learning and has a significant influence on the Problem Based Learning. School Environment also has a positive and significant influence on Project Based Learning. It in line with Usaini et.al (2015), they stated that the school environment has a positive effect on student academic performance. Where their research showed that students from schools that have adequate learning facilities, good relationships between teacher-students and a good learning environment, students will have good performance. Furthermore, Rahmatika and Hernawati (2016) study stated that the students believe their nonphysical school environment affects their academic achievement.

The School Environment variable (X4) has a positive influence on English Productive Skills but it has a non-significant effect on the English Productive Skills. According to Adams (2015), she stated that ability, self-confidence, and understanding of students are influenced positively and negatively by their learning environment.

School Environment has a positive and significant influence on Environmental Awareness. According to Bozoglu et. al (2016), they said that environmental education in schools affects students' attitudes and behavior towards the environment. Furthermore, Borg et. al (2017), they stated that there

was a positive relationship between children who learned about the sustainability and involvement of teachers in schools in discussions where children were given the opportunity to participate in discussions and practical activities, both at home and at school. In fact they are able to be involved in responding to environmental problems and various issues around them.

Community involvement is useful in all areas of life. It has many impacts in the human life, society, culture, schools, towns, and small businesses around the world. According to EPA (2019), "community involvement means the process of engaging in dialogue and collaboration with community members".

The variable Community Involvement is known having a positive influence on English Productive Skills, but it has a non-significant effect on the English Productive Skills. According to Febriana et al (2018), they stated that people in rural Indonesia did not support the development of their children in school. Parents at home do not encourage children to achieve maximum achievement and this puts a burden on the teacher.

It is known that Community Involvement has a positive and significant influence on Environmental Awareness. According to Kammarudi et. al (2016), they stated public awareness can be the basis of the capacity to participate in pro-environmental behavior, it is considered the beginning of change towards pro-environment action. It can be said schools, parents, and the community should work together to promote the students' environmental awareness, well being, and learning of all students. When schools actively involve parents and engage community resources they are able to respond more effectively to the environment. Family and community involvements foster partnerships among

schools, family and community groups, and individuals. These partnerships result in sharing and maximizing resources. And they help students to develop environmental behaviors.

Furthermore, English Productive Skills is known having a positive influence and significant effect on Environmental Learning Model. In line with Setyowati (2013), she stated that from the Project work can develop the character of students through English lessons, where students will connect with life outside of school and give them an awareness of environmental problems.

Moreover, Environmental Awareness is known having a positive influence on Environmental Learning Models and has significant effect on the Environmental Learning Models. According to Li (2018), he stated that the students with better environmental awareness show more positive environmental attitudes because cognition refers to individual understanding, knowledge, and opinions of affairs and is the powerful evaluation.

It is undeniable that national education in Indonesia has shown significant progress. Many things have been achieved. Many Indonesian students win various world activities in various fields of science. However, on the other hand it turns out that our education world has not been able to change society behavior. This behavior can be the outcome of the education system. A simple example is community behavior towards garbage. Bad behavior of people throwing garbage nowadays has entered the acute level. We can say that no places and activities are immune to garbage in Indonesia, especially plastic waste.

Our education system is expected to play a major role in changing bad behavior, changing culture and attitudes and behavior of the students as the part

of society to increase awareness of their environment. Likewise, our society has been very difficult to be invited to participate in hygiene, even though they are educated people. To overcome this problem, the government conducts Adiwiyata school program to instilling the environmental awareness value among the students. This program is carried out by the Department of Environment and the Directorate General of Primary and Secondary Education of the Ministry of Education and Culture. According to Susilowati at al. (2018), Adiwiyata School is a school that has implemented a system so that school is responsible for supporting sustainable development. But, Rahmawati and Suwanda (2015) stated that there were obstacles in Adiwiyata's school due to the students turnover every year, students' socio-economic conditions, and teachers concern.

SMAN 1 Gambiran is not an Adiwiyata school, this school has branding as a mainstay school in volleyball in Banyuwangi regency and also in East Java Province. So, that more school policies are focused on developing and looking for talented volleyball athletes. For environmental issues are not a priority. Although there is a new school policy where one day in every month is held clean Friday where all the students should clean their classes and small garden in front of each class, but this activity cannot change the behavior of students, teachers and school staffs to protect the environment. According to Landriany (2014), she stated that the ineffectiveness of adiwiyata schools in two high schools in Malang because some students still did not understand the eco-school concept and the lack of community, teachers and school staff participation in the implementation of Environmental Education.

5.2 The Achievement of Student Learning Targets

In relation to the research findings, it was found that there were significant differences between the mean scores of problem based learning in hortatory exposition writing test in the experiment group. It led to the rejection of the null hypotheses which stated that “there is no effect of problem based learning on the students’ writing skill between students who are taught using PBL and those who are taught using conventional method” and “there is no effect of project based learning on the students’ speaking skills between students who are taught using PjBL and those who are taught using conventional method”.

From the research finding showed that the mean scores of the content, organization and grammar aspects of the hortatory exposition test in the experimental group was significantly higher compared to the control group. The vocabulary aspect of hortatory test in the experimental group was also significantly higher than the control group. In other words, the hypotheses of this study worked. It meant that using PBL in teaching hortatory exposition writing at the senior high school students was significantly more effective than using conventional method. The success of achieving better score by the experimental group on the posttest compared to the control group might be caused by several reasons.

Parameswari et. al (2018) state that writing is not easy because it is difficult to generate, organize, and translate ideas into a readable text. However, scaffolds appear to solve all these difficulty. Dealing with generating ideas, the guided questions in the scaffolds help the students to generate ideas and giving details to their writing. Related with the difficulty in organizing idea, scaffolds were

constructed following the generic structure of text. Thus, it is easier for the students to organize their writing following the generic structure of the text. As what Sedita (2013) states that the scaffold which was constructed following the generic structure of a text helped the students to organize their writing into a good order. Meanwhile, regarding the difficulty in translating ideas into readable text, after answering the guided questions in the scaffolds, the students then convert their answers into the complete sentences for their draft. It helps them to make correct and readable sentences more easily.

Based on the above explanations, they might be become the reasons why implementing PBL usingscaffolds made the students in the experimental group achieve better in writing hortatory exposition text than the students in the control group. The results of the field notes also confirmed the above reasons that PBL with scaffolds is beneficial for the students' writing ability. According to the field notes, scaffolds eased the students in making the draft of the text. Almost all of the students were enthusiastic in making the draft by using scaffold. Moreover, the use of model text and scaffolds did help the students to be more aware of the generic structures and linguistics features of a text. Dealing with the writing aspects, it was revealed that scaffolds is effective in improving students' achievements in writing hortatory exposition text, especially in term of content, organization, and grammar aspects. Furthermore, the vocabulary aspect in the hortatory writing was also significantly higher than the control group.

Moreover, from the research finding it was found that the mean scores of the fluency, content, diction and grammar aspects of students' speaking test in the experimental group was significantly higher compared to the control group. In other words, the hypotheses of this study worked. It meant that using PjBl in

teaching speaking through campaign at the senior high school students was significantly more effective than using conventional method. The success of achieving better score by the experimental group on the posttest compared to the control group might be caused by several reasons.

Molinsky (2016) stated that there are many ESL students reluctant to speak because the embarrassment and shame factor. When the teacher wants the students to be active they prefer to be passive, they have problem to express their ideas. Related with the students reluctant to speak since they feel embarrassment mainly cause of difficulty in expressing their ideas. As what Humairoh (2014) stated Project-Based Learning gives opportunity for students to be active and participate and can improve students' productive skills, especially in speaking skills related to their speaking components, including content, fluency, vocabulary, pronunciation, and grammar. Furthermore, campaign through presentation in other classes is useful to increase students' understanding. It is a media for students to share with others what they have learned. It is also a chance to challenge and expand on their understanding of the topic by having students from other classes ask questions.

Based on the above explanations, they might be become the reasons why implementing PjBL using campaign where students should make presentation about reducing plastic wastes in other classes made the students in the experimental group achieve better in speaking than the students in the control group. The results of the field notes also confirmed the above reasons that PjBL with campaign is beneficial for the students' speaking ability. According to the field notes, campaign (presentation) encouraged students to speak up in public. Dealing with the speaking aspects, it was revealed that campaign in other

classes is effective in improving students' speaking skill, especially in term of content, organization, and grammar aspects. Furthermore, the vocabulary aspect was also significantly higher than the control group.

In other words, on the basis of evidence above, it could be inferred that problem based learning and project based learning was more effective than the conventional method. PBL was also more effective to increase the students' writing achievement in term of content, organization, grammar and vocabulary aspects. While, PjBL was effective to increase the students' speaking achievement in term of fluency, contain, grammar and diction. Therefore, the finding of the research filled in position of adding the existing theory that mentioned PBL and PjBL were effective to be used in teaching hortatory exposition writing and speaking, especially to the senior high school students.

CHAPTER VI

RESEARCH IMPLICATIONS

The implications of the research findings include two things, namely theoretical and practical implications. These theoretical implications relate to the contributions and the expanding of research associated to teaching methods and models to increase student awareness of the environment. While, the practical implications relate to the contribution of research findings to the steps that must be taken by schools that concern about environmental education and moreover Education and Culture Ministry advocates teaching and learning curriculum in class should integrate environmental education with the subject matters for sustainability.

6.1 Theoretical Implications

This dissertation contributes theoretically to the learning model in English lesson to improve and promote the environmental awareness of high school students. It can also be proven that the Problem Based Learning model teaches students to be active in seeing environmental problems around them. Through Hortatory Exposition scaffold students can write and develop the problems that they gotten in the field into : thesis, arguments and recommendations in a good organizing text , appropriate vocabularies with the topic, good grammatical and sentence paterents which appropriate with the topic. It can be seen that the outputs of this study are are not much different with the result of research from Illinois University which stated PBL is a model of teaching and learning by exposing students to complex real-world problems in the form of concepts and

principles. This is a contradiction with what students learn in the form of facts and concepts through learning in the classroom.

Moreover, Project Based Learning model teaches students to be pay more attention to reducing plastic waste in the school environment. Through campaigns in other classes, students were suggested to bring drink bottles and food container from home and reject straws in the school canteen. This learning activity teaches students to improve their capability to speak English in public. Unfortunately, the result of the study was insignificant to develop the students' environmental awareness. According to Abrahamse & Mathies (2012), they said that environmental issues are multifarious. The informational strategies are not enough to encourage people to adopt a more environmentally friendly lifestyle, they need to be combined with structural intervention strategies.

The outputs of this study are are not much different with the result of Hadijah (2017) study, that environmental awareness campaign certainly is not effective to make other people who hear it changing their behaviour although it done with various appeals, it is easier if they see something and then emulate it. Therefore, it is better for parents to teach environmental awareness earlier to their children.

6.2. Practical Implications

This dissertation provides two practical benefactions that can be used as a reference for: 1) Senior high schools which are not adiwiyata schools (Green School) that care about their students' environmental awareness, 2) English teacher who want to increse the students' productive skills 3) for athletes who want to improve their speaking skills as skills that support their abilities later as

international athletes and 4) for Education and Culture Ministry this practical benefaction can be used as a reference for arranging a sustainable environmental awareness based on the national curriculum for all subjects. The aims expected to be generated from the integration of environmental education material into the education curriculum in high school are as follows:

1. Reducing the amount of trash, mainly plastic waste in schools and in the village where the students live.
2. Change students behaviour not to litter in the classroom and especially to the river.
3. Improve students' productive skills in writing, such as content, organization, grammar and vocabulary and speaking skills, such as fluency, content, grammar and diction through a constructivist based learning models
4. Integrating the content of environmental education into each subject matter in the national curriculum from elementary school to the high school to increase student environmental awareness is a necessity.

Building environmental awareness of the students who are also the part of community must have synergies among schools, communities, local government and law enforcement officials both the judiciary and police institutions. Without involving police and judicial institutions, local government, individuals or institutions / communities, there will not be the optimal results because there are no real sanctions and punishments for perpetrators of littering, especially plastic and industrial waste. If this problem is not resolved immediately, then Indonesia remains as the biggest contributor of plastic waste in the world to the sea.

CHAPTER VII

CONCLUSIONS AND RECOMMENDATIONS

7.1. Conclusions

From the results of the discussion on Integration of the Students' Environmental Awareness and English Productive Skills in Environmental Learning Model at SMAN 1 Gambiran Banyuwangi, it can be concluded as follows:

1. Problem Based Environmental Learning is a model used in learning that expands students' information and mindfulness about environmental problems around them. It provides good chance and challenge for students to take part in real environmental issue and it is also significant to foster their environmental awareness. Student environmental awareness can be formed because it is influenced by parents' behavioral involvement, the school environment and community involvement. Problem based environmental learning with scaffold also could increase students writing skills in hortatory exposition organization, content and vocabulary. Grammar and mechanic are the aspects which can not improve significantly increase than the control group. Overall, it can be showed that students who are taught by using PBL through scaffold achieve significantly higher scores in writing hortatory exposition text than students who were taught by using conventional method.

2. Project Based Environmental Learning is learning model that challenge and introduce students to the real problems they faced. It develops students' knowledge and skills about environment through engaging projects but the

campaign as a student project has not yet completely developed students' environmental awareness. It is not effective to make people hear the message and changing their behaviour. However, project based environmental learning can increase students' speaking skills in students' fluency, content, grammar and diction. It can be showed that students who are taught by using PjBL through campaign achieve significantly higher scores in speaking than students who were taught by using conventional technique.

3. Environmental awareness of class XI students in SMAN 1 Gambiran is influenced by the environmental learning models using Problem Based Learning but Project Based Learning that uses campaign projects does not significantly affect students' environmental awareness. Besides environmental learning model, there are parental involvement, school environment, and community involvement that influence students' environmental awareness. However, teaching environmental issues through environmental learning models in English lesson can develop the students' higher-order skills that promote them to implement and use what they have learned in fun and more meaningful ways.

7.2 Recommendations

Based on the above conclusions, some suggestions are recommended to the further researches or teachers who wish to develop students' environmental awareness and fuse environmental education into subjects matters use environmental learning models.

- a. Teachers or further researchers are suggested to use Problem Based Learning in teaching environment education since it helps the students to aware environmental problems. For English teachers are recommended

to apply a hortatory scaffold, which covers the aspect of writing to improve the terms of organization, content, and vocabulary in writing exposition or argument text. However, since the statistical analysis result of the grammar and mechanic aspects of the hortatory exposition writing in experimental group are not significantly higher than the control group, it is suggested to give more emphasis on the grammar and mechanic aspects.

b. English teachers are recommended to apply campaign as learning project, to improve students' speaking skills in the terms of fluency, content, grammar and diction, but it is not advocated to use campaign to develop students' environmental awareness since it is not effective to make other people who hear it changing their behaviour although it was done with various attractions, it is easier if they see something and then emulate it. It is suggested to create an assignment project where the students directly see the environmental problem and make improvements, such as planting trees on empty land, making compost from wet wasteor using certain waste to be cultivated into more beneficial items.

c. Arrange the interesting activity in each phase of Problem Based Learning that can make the students actively motivated and involved in the teaching and learning activity and to find the solution of their local environmental problems through English lesson. A topic is the important thing to select since the more interesting topic assigned to the students, the more enthusiastic the students do their assignment. Moreover, in order to make the students are more environmentally aware, it is recommended to add environmental education to local content learning

d. This research can be a reference for researchers to make mini research in the form of classroom action research for other subjects who want to increase students' environmental awareness with constructivism learning models. Furthermore, to integrate environmental education with subject matters, facilities and physical environment of the school, in order the target of green behavior achieved, the writer recommends the existence of green school or adiwiyata schools in the high school level in Banyuwangi and planting crops that can bind pollutants and reduce bad smell.



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Appendix 1.

A hortatory exposition scaffold will be used in the research

A Hortatory Scaffold

| | |
|---------------------------|--|
| Thesis | What is the problem in your environment? |
| | Where does it happen? |
| | How do you feel about that? |
| A series of arguments | |
| | What do you know about the problem? |
| First argument | Is the problem harm to the people surround? |
| | What is the evidence that you get from it? |
| | What does the impact to the people/villagers? |
| Second argument | What is another impact caused by the problem? |
| | What is the evidance you get from it? |
| The last argument | What is the worst impact caused by the problem? |
| | What is the evidance you get from it? |
| Recomendation (if any) | How do you feel about the problem? |
| | What should you do to face the problem? |
| | How many solution do you have to overcome the problem? |
| | What are they? |
| | How the people/villagers feel after that? |

Appendix 2

LESSON PLAN

MEETING I (Problem Based Learning)

School identity

Name of school : SMAN 1 Gambiran

Subject : English

Class/ Semester : XI/ I

Language Skill : Writing

Text Type : Hortatory Exposition

Time : 2 x 45 minutes

Kompetensi Dasar:

3.9 Membedakan fungsi sosial, struktur teks, dan unsur kebahasaan beberapa teks hortatory exposition lisan dan tulis dengan memberi dan meminta informasi terkait pandangan/pendapat mengenai topik yang hangat dibicarakan umum, argumentasi pendukung, serta saran, sesuai dengan konteks penggunaannya

4.9.1 Menangkap makna secara kontekstual terkait fungsi sosial, struktur teks, dan unsur kebahasaan teks hortatory exposition lisan dan tulis, terkait isu aktual

4.9.2 Menyusun teks hortatory exposition lisan dan tulis, terkait isu aktual, dengan memperhatikan fungsi sosial, struktur teks, dan unsur kebahasaan, secara benar dan sesuai konteks

Meeting I

I. Lesson Objective

The students understand the features of hortatory exposition text knowledge based on the model text entitled crime in cities, understand how the information from the model text is put into hortatory scaffold, understand how the information in the hortatory scaffold is put in the hortatory exposition is written in the model text.

II. Specified Objectives (Achievement Indicators)

At the end of the lesson the students are able to:

- Identifying generic structures and language features of a hortatory exposition text

III. Materials

- a. Model Essay: Cime in Cities & Garbage

Crime in Cities

Crime is a serious problem in big cities and it is getting worse every year. This is what police departments around the country said in their reports last week. The subways and streets are more dangerous. You may not even be safe in your own houses.

Why is the problem so serious now? This is not an easy question to answer. There may not be a single answer. Many problems together seem to make cities so dangerous from time to time.

One more of the problems is money. To fight crime a city needs police officers, cars, and guns. These cost a lot of money. But right now cities do not have much extra money. So, there are not enough police officers, cars and guns for the cities.

Another problem is drugs. Crime studies have shown that many criminals use and sell drugs. After they start taking drugs, they want to have more. However, drugs are very expensive. So, these people have to sell drugs to other people to make money or they may steal money to get more drugs.

There is an even more important cause of crime. Cities have rich and poor neighborhoods. In the poor neighborhoods, jobs are hard to find. Many young people don't have much hope for a better life. They only know one way to make a better living for themselves, that way is to sell drugs or steal. So, some of these young people have become criminals.

It is not going to be easy to change these crime problems. We must first change many of laws about drugs. We must change the way cities spend their money. Until then, the crime problem will not go away and we will live our lives in fear.

Garbage

Garbage is a phenomenon that we often encounter in the community. Garbage is stuffs that can't be used anymore, and its existence is very annoying. Garbage also has bad impact for our health and environment.

At first garbage looks normal when it's scattered around us, but it will caused many bad impacts if it is ignored continuously by the people. Garbage can harm our health. Rubbish that is pile up will bring smells that contaminate the air and there would be a lot of flies come. Then, pile up trash will also invited other unwanted organisms to come which subsequently bring diseases, such as diarrhea and dengue.

Besides bringing disease, garbage can also bring disaster such as flood. Garbage which dumped into the river by the residents continuously will make the water on the river can not flow, and over time the water will overflows with heavy rains that continue to flush. If flood occurs, it will

make people can not do their activities like usual. In addition, in areas where the land is slope it can caused landslides.

Lots of negative impacts caused by garbage, that is why we must keep our environment clean from garbage. We can start by doing a small thing such as throw garbage in its place, or do the three R, reduce, reuse, and recycle it.

a. Problem Based Learning Phases

- Problem orientation of the students problem
- Group organization
- Group supervision
- Group presentation
- Problem solution process

b. Generic Structure of Hortatory Exposition Text

- Thesis : which contains the announcement or issue
- Arguments : which present reason for concern leading the recommendation
- Recommendation : which states of what ought or ought not to happen

c. Language Features

- The use of present tense
- The use of emotive words, e.g *alaramed. Worried*
- The use of words that quality statements, e.g. *usual, probably*
- The use of words that link arguments, e.g. *firstly, however, on the other hand. Therefore*
- The use of compound and complex sentences
- The use of modal and adverbs, e.g. *can, may, certainly, get, stop*
- The use of subjunctive opinion using pronouns, *I and we*

IV. Instructional Media and sources :

- A hortatory exposition scaffold
- A hortatory exposition text
- Dictionary

V. Method/Approach: Problem Based Learning/Genre-Based Approach

VI. Procedure:

| PBL' Phase | GBA' Stage | Activities |
|---|---------------------------------|---|
| Problem orientation of the students problem | Building Knowledge of the Field | 1. The students are asked about their background knowledge of a hortatory exposition text |
| | | 2. The students are grouped in four. |
| | | 3. The students play game (arranging a hortatory exposition text). |
| | | 4. The students are assigned to discuss and analyze the text (Crime in |

| | | |
|---------------------------|--|--|
| | | <p>Cities).</p> <p>5. Each group of students presents the result of their discussion.</p> <p>6. The students are given explanation about the text in terms of its communicative purpose, generic structure, and language features.</p> |
| Group organization | Modelling of hortatory exposition text scaffold | <p>7. The students are given one other model text (Garbage) and a scaffold.</p> <p>8. The students are grouped in four.</p> <p>9. The students in groups analyze the text focusing on the identification of features of a text by using a scaffold and answering the questions in the scaffold based on the text</p> <p>10. Each group presents the result of their discussion.</p> <p>11. The teacher guide the students to identify how the answers of the questions in the scaffold are elaborated in the model text through a class discussion</p> <p>12. The students listen to an explanation of present tense including emotive words, qualify statements and the words that link arguments.</p> <p>13. The students give comments related to the teaching and learning hortatory exposition text</p> <p>14. As homework, the students are assigned to find the environmental problem (air, water or land pollution) in their village</p> |

VII. Assessment

o Process / ongoing assessment : non test

Giving feedback for improvement when the students fill the hortatory exposition scaffold and make sentences based on the picture

Form of instrument: observation

- Sample of instruments

- a. observation checklist
- b. field notes

MEETING II, III, IV & V (Problem Based Learning)

I. Lesson objective(GOAL)

The students are able to write a hortatory exposition text in group appropriately.

II. Specified Objectives (Achievement Indicators)

- Writing a thesis statement to begin the essay by answering the hortatory scaffold.
- Giving arguments by answering the hortatory scaffold.
- Giving recommendation at the end of the essay by answering the hortatory scaffold..
- Using technical terms and grammatical features correctly.
- Using appropriate mechanics (spelling, punctuation, capitalization, and paragraphing).

III. Instructional Materials

b. Problem Based Learning Phases

- Problem orientation of the students problem
- Group organization
- Group supervision
- Group presentation
- Problem solution process

c. Generic Structure of Hortatory Exposition Text

- Thesis : which contains the announcement or issue
- Arguments : which present reason for concern leading the recommendation
- Recommendation : which states of what ought or ought not to happen

d. Language Features

- The use of present tense
- The use of emotive words, e.g *alaramed. Worried*
- The use of words that quality statements, e.g. *usual, probably*
- The use of words that link arguments, e.g. *firstly, however, on the other hand, therefore*
- The use of compound and complex sentences
- The use of modal and adverbs, e.g. *can, may, certainly, get, stop*
- The use of subjunctive opinion using pronouns, *I* and *we*

IV. Instructional Media and sources :

- A Hortatory Exposition scaffold
- Writing work sheet
- Dictionary

V. Method/Approach: Problem Based Learning/Genre-Based Approach Teaching Procedure



| Meeting II | | |
|---------------------------------|---|--|
| PBL' Phase | GBA' Stage | Activities |
| Group supervision | Joint Construction of Text Stage | <ol style="list-style-type: none"> 1. The students bring the datas about environmental problem (air, water or land pollution) in their village which they found. 2. The teacher review about the social purpose and characteristics of a hortatory exposition text. 3. The students are given a hortatory scaffold and explanation about how to make draft using a hortatory scaffold. 4. The students, in group, are assigned to make a hortatory exposition text using hortatory scaffold based on the data that students had been obtained from their village by modeling at the model text that had been given in the last meeting. 5. The teacher walks around and gives mini lesson to correct the group's mistake if there is/are mistake(s) in completing the scaffold. 6. The groups start to make a draft of hortatory exposition text of joint construction of text based on the scaffold |
| Meeting III | | |
| PBL' Phase | GBA' Stage | Activities |
| Problem solution process | Independent Construction of the Text Stage | <ol style="list-style-type: none"> 1. The groups start to complete the draft until the recomendation which contains problem solving. 2. The groups are assigned to revise and edit their groups' drafts while in turn each group is having discussion with the teacher for discussing their draft and problem solving 3. The students, still in groups, write the final draft based on the feedback of the discussion 3. The groups give and collect their final draft of independent construction of the text 4. As homework, the students are assigned to prepare their presentation for the next |

| | | |
|---------------------------|---|---|
| | | meeting |
| Meeting IV& V | | |
| Group presentation | Independent Construction of the Text Stage | <ol style="list-style-type: none"> 1. Every student should be ready to present their works 2. The teacher points the student who will be the speaker to present the assignment 3. The groups present their works with power-point. |

Assessment

- **Product** : test
- Asking the students to write a hortatory exposition text based on the environmental problem (air, water or land pollution) in the students villages independently. The result of writing will be scored by scoring rubric
- **Form of instrument** : observation
 - **Sample of instruments**
 - a. observation checklist
 - b. field notes

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MEETING VI (Project Based Learning/Campaign)

School identity
 Name of school : SMAN 1 Gambiran
 Subject : English
 Class/ Semester : XI/ I
 Language Skill : Speaking
 Text Type : Hortatory Exposition
 Time : 2 x 45 minutes

Kompetensi Dasar:

3.9 Membedakan fungsi sosial, struktur teks, dan unsur kebahasaan beberapa teks hortatory exposition lisan dan tulis dengan memberi dan meminta informasi terkait pandangan/pendapat mengenai topik yang hangat dibicarakan umum, argumentasi pendukung, serta saran, sesuai dengan konteks penggunaannya

4.9.1 Menangkap makna secara kontekstual terkait fungsi sosial, struktur teks, dan unsur kebahasaan teks hortatory exposition lisan dan tulis, terkait isu aktual

4.9.2 Menyusun teks hortatory exposition lisan dan tulis, terkait isu aktual, dengan memperhatikan fungsi sosial, struktur teks, dan unsur kebahasaan, secara benar dan sesuai konteks

Meeting VI

I. Lesson Objective

The students are able present a Hortatory Exposition Text & a “Waste Reduction” campaign appropriately.

II. Specieified Objectives (Achievement Indicators)

At the end of the lesson the students are able to:

Students will be able to define air, water and land pollutions

- Students will understand how reduce, reuse and recycle may offset the overall trash production in their household, and community.

- Students will discuss how they will change their attitude to improve their own ‘trash’ situation.

- Students will develop a mini-campaign promoting the advantages of reduce and reuse waste in their communities.

III. Materials

a. Model Campaign: Waste Reduction Video

<https://www.youtube.com/watch?v=Q6TQ9nVb0qI>

b. Generic Structure of Hortatory Exposition Text

- Thesis : which contains the announcement or issue
- Arguments : which present reason for concern leading the recommendation
- Recommendation : which states of what ought or ought not to happen

c. Project Based Learning Stage

- Introduction
- Investigate/ plan
- Create/ Design
- Present

d. Language Features

- The use of present tense
- The use of emotive words, e.g *alarmed. Worried*
- The use of words that quality statements, e.g. *usual, probably*
- The use of words that link arguments, e.g. *firstly, however, on the other hand. Therefore*
- The use of compound and complex sentences
- The use of modal and adverbs, e.g. *can, may, certainly, get, stop*
- The use of subjunctive opinion using pronouns, *I and we*

IV. Instructional Media and sources :

- Hortatory Exposition Text
- A Campaign Speech Video
- Dictionary
- Power point

V. Method/Approach: Genre-Based Approach

V. Procedure:

| Stage | Activities |
|--------------|--|
| Introduction | <ol style="list-style-type: none"> 1. The students are asked about their background knowledge of a campaign 2. The students are grouped in four. 3. The students watch the waste reduction campaign video https://www.youtube.com/watch?v=aweX1AadnDE 4. The students are assigned to discuss about the idea or theme they would present 5. Each group of students presents the result of their discussion. 6. The students are given explanation about the campaign speech in terms of the connect, construct and content |

**Investigate/
plan**

7. The students are given one other model video (proper waste management) <https://www.youtube.com/watch?v=Sk2PHQe526A>
8. The students are grouped in four.
9. The students in groups analyze the text focusing on the terms of the connect, construct and content
10. As homework, the students are assigned to create a waste reduction campaign

VI. Assessment

- **Process / ongoing assessment** : non test

Giving feedback for improvement when the students create their campaign

Form of instrument: observation

Sample of instruments

- a. observation checklist
- b. field notes



MEETING VII&VIII (Project Based Learning)

I. Lesson objective(GOAL)

The students are able to write a hortatory exposition text in group appropriately.

II. Specified Objectives (Achievement Indicators)

- Writing a thesis statement to begin the essay by answering the hortatory scaffold.
- Giving arguments by answering the hortatory scaffold.
- Giving recommendation at the end of the essay by answering the hortatory scaffold..
- Using technical terms and grammatical features correctly.
- Using appropriate mechanics (spelling, punctuation, capitalization, and paragraphing).

III. Instructional Materials

a. Generic Structure of Hortatory Exposition Text

- Thesis : which contains the announcement or issue
- Arguments : which present reason for concern leading the recommendation
- Recommendation : which states of what ought or ought not to happen

b. Project Based Learning Stage

- Introduction
- Investigate/ plan
- Create/ Design
- Present

c. Language Features

- The use of present tense
- The use of emotive words, e.g *alarmed*, *Worried*
- The use of words that qualify statements, e.g. *usual*, *probably*
- The use of words that link arguments, e.g. *firstly*, *however*, *on the other hand*, *therefore*
- The use of compound and complex sentences
- The use of modal and adverbs, e.g. *can*, *may*, *certainly*, *get*, *stop*
- The use of subjunctive opinion using pronouns, *I* and *we*

IV. Instructional Media and sources:

- A Hortatory Exposition text
- Reduction waste videos
- Power point
- Speaking work sheet
- Dictionary

V. Method/Approach: Project Based Learning Teaching Procedure Meeting VII

| Stage | Activities |
|---------------------------|---|
| Create/ Design | <ol style="list-style-type: none"> 1. The teacher review about the students' theme campaign. 2. The students, in group, explain about how to gather materials for their campaign 3. The students create their campaign project 4. The teacher walks around to revise the group's mistake if there is/are mistake(s). 5. As homework, the students are assigned to prepare their campaign in other class. |

Meeting VIII

| Stage | Activities |
|----------------|---|
| Present | <ol style="list-style-type: none"> 6. The students, in group, present their campaign about reduce plastic waste in class X or XII 7. The teacher reflect on the students inquiry process 8. The teacher evaluate the students' projects (campaign) |

VI. Assessment

- **Product:** speaking test
 - Asking the students to present their own campaign independently. The result of speaking will be scored by scoring rubric
- **Form of instrument** : observation
 - **Sample of instruments**
 - a. observation checklist
 - b. field notes

Appendix 3.
Environmental Learning Model Material Samples

Environmental Learning Model Material Samples

1. Designing thesis statement.
2. Write Hortatory Exposition text.
3. Campaign the particular topic.
4. Distribute questionnaires.
5. Students' environmental awareness



Appendix 4 Test Specification for Writing Test

TABLE OF SPECIFICATION OF THE WRITING TEST

| OBJECT OF TEST | OBJECTIVES OF TEST | SPECIFICATION OF OBJECTIVES | PROPORTION % |
|-----------------------|--|---|--|
| LANGUAGE SKILL | | | |
| WRITING | Menyusun teks hortatory exposition lisan dan tulis, terkait isu aktual, dengan memperhatikan fungsi sosial, struktur teks, dan unsur kebahasaan, secara benar dan sesuai konteks | <ol style="list-style-type: none"> 1) To test the students' ability to express relevant ideas to the topic 2) To test students' ability to organize their ideas in a complete generic structures of hortatory exposition text, namely thesis, arguments and recommendations 3) To test students' ability to express their ideas in grammatical sentences 4) To test students' ability to express their ideas by using effective vocabularies/words 5) To test students' ability to express their ideas by using good spelling, punctuation, capitalization, and paragraphing | <p>30</p> <p>30</p> <p>20</p> <p>10</p> <p>10</p> |

Appendix 5 Questionnaire for the Students Experiencing PBL and PjBL in Learning Environmental Education and Productive Skills

Nama :

Kelas :

Jawablah pertanyaan-pertanyaan berikut dengan singkat dan jelas.

1. Apa pendapat anda tentang PBL dan PjBL?

2. Apakah anda melihat hal positif dari penggunaan scaffolds dalam writing dan kampanye dalam speaking? jika ya, apa saja hal tersebut? Jika tidak, apakah alasan anda?

3. Apakah metode PBL dan PjBL menguntungkan bagi anda? Kenapa?

4. Apakah anda melihat kelemahan dari PBL dan PjBL? Jika ya, apa saja kelemahannya? Dan bagaimana cara mengatasi hal tersebut?

5. Apakah PBL dan PjBL sebaiknya digunakan dalam mengajar menulis dan berbicara? Untuk tujuan apa?

6. Apakah anda memiliki komentar tambahan? Tuliskan tentang pengalaman anda dalam belajar pendidikan lingkungan melalui menulis dengan menggunakan PBL dengan scaffold dan belajar berbicara dengan menggunakan PjBL (kampanye) dengan singkat.

Appendix 5

Feedback Sheet on Test Prompt for Expert Validation

FEEDBACK SHEET ON TEST PROMPT

Directions:

1. Read the test specification and test task
2. Give response to the following statements (about the test on the basis of test specification) by: 1) crossing the letter a, b, or c (as appropriate), and 2) writing your comments on the blank space provided following each statement (where applicable)

| | |
|---|--|
| 1 | Level of difficulty of the test task a. Too difficult b. Difficult c. Fair Comments: |
| 2 | Ability to address with regard to the syllabus of teaching writing at grade XI, semester 1. a. Appropriate b. Fairly appropriate c. In appropriate Comments: |
| 3 | Clarity of task a. Very clear b. Clear c. Unclear Comments: |
| 4 | Allocated time to complete the task a. Too long b. Enough c. Too short Comments: |
| 5 | Test Layout a. User friendly b. Fairly user friendly c. Poorly user friendly Comments: |

General Comments:

.....

.....

Appendix 6

FIELD NOTES

Subject :

Meeting :

Class :

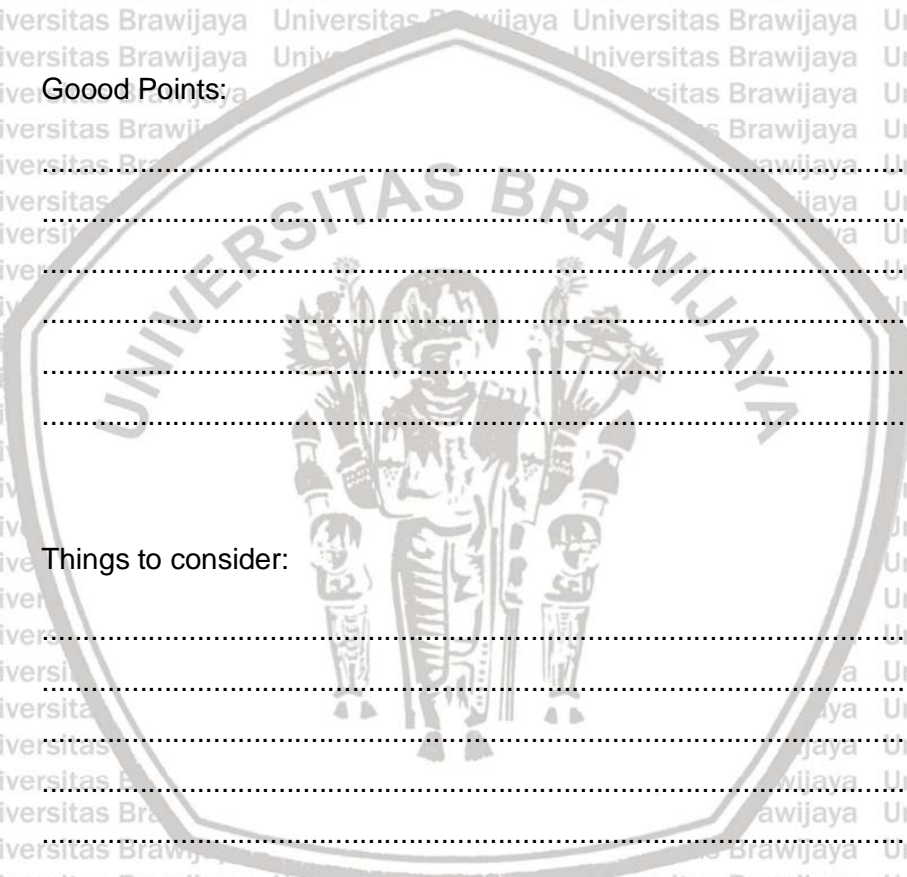
Date :

Good Points:

Things to consider:

Banyuwangi,

Observer



Appendix 7

Observation Checklist on the Students' Participation during the Treatment

Subject :

Meeting :

Class :

Date :

| No | Indicators | Scores | | | | |
|----|---|--------|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| 1 | Students pay attention toward the presenting materials | | | | | |
| 2 | Students interact actively in the process by questioning and answering | | | | | |
| 3 | Students actively involved in the activities set by the teacher, individually or in group | | | | | |
| 4 | Students collect the work required by the teacher | | | | | |

Description of the Scores:

1. < 40 % of the students do
2. 40 % up to 59% of the students do
3. 60 % up to 74 % of the students do
4. 75 % up to 84 % of the students do
5. 85 % up to 100 % of the students do

Banyuwangi,

Observer

Appendix 8


**KRITERIA KETUNTASAN MINIMAL
TAHUN PELAJARAN 2018/2019**

Nama Sekolah : SMA Negeri 1 Gambiran


Mata Pelajaran : Bahasa Inggris – Wajib

Kelas / Program : XI

KKM : 75

| Kompetensi Inti | Kompetensi Dasar | Indikator | Kompleksitas | Daya Dukung | Intake Siswa | KKM Indikator | KKM KD |
|---|--|--|--------------|-------------|--------------|---------------|--------|
| 1. Menghayatidan mengamalkan ajaranagamayan gdianutnya. |  | Memiliki sikap sebagai insan yang beriman dan bertaqwa, taat/patuh, mencintai sesama, menerima perbedaan sebagai rahmat, menghargai pendapat orang lain. | | | | | |
| 2. Menghayatida n mengamalkanp erilakujujur, disiplin,tanggungj awab,peduli(g otongroyong, kerjasama, tole ran,damai), santun,respons ifdanpro-aktif dan menunjukkan sikapsebagai bagiandarisolu siataserbagai permasalahan | | Memiliki sikap sebagai insan yang jujur, disiplin, tanggungjawab, peduli, santun, rasa ingin tahu, percaya diri, toleran, motivasi internal, pola hidup sehat dan ramah. | | | | | |

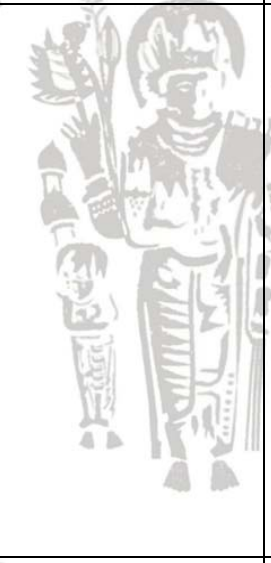
| | | | | | | | |
|---|---|---|----|----|----|----|----|
| alamberinterak sisecara efektifdengan lingkungansosi aldanalamserta dalammenemp atkandirisebag ai cerminan bangsadalama pergaulanduni a. | | | | | | | |
| 3. Memahami, menerapkan, menganalisis pengetahuan faktual, konseptual, prosedural berdasarkanr asaingintahun yatentangilm upengetahuan ,teknologi,se ni, budaya,dan humaniora denganwawas an kemanusiaan, kebangsaan,k enegaraan,da nperadabante rkaitan penyebabfen omenadan kejadian,serta menerapkan engetahuanpr osedural padabidang kajianyangsp esifiksesuaid enganbakatda nminatnya untukmemec | 3.1 menerapka n fungsi sosial, struktur teks, dan unsur kebahasaan teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait saran dan tawaran, sesuai dengan konteks penggunaannya. (Perhatikan unsur kebahasaan <i>should</i> , <i>can</i>) 4.1 menyusun teks interaksi transaksional, lisan dan tulis, pendek dan sederhana, yang melibatkan tindakan memberi dan meminta informasi terkait saran dan tawaran, dengan memperhatikan fungsi sosial, struktur teks, dan unsur kebahasaan yang benar dan | 3.1.1 Mengident ifikasi fungsi sosial, struktur teks dan unsur kebahasaan teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait saran dan tawaran, sesuai dengan konteks penggunaannya. 3.1.2 Menjelask an fungsi sosial, struktur teks dan unsur kebahasaan teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait, saran dan tawaran sesuai dengan konteks penggunaannya. 3.1.3 Mengguna | 82 | 75 | 77 | 78 | 78 |
| | | | 82 | 75 | 77 | 78 | 78 |
| | | | 82 | 75 | 77 | 78 | 78 |
| | | | 82 | 75 | 77 | 78 | 78 |

| | | | | | | |
|---|--|---|---------------------|---------------------|---------------------|---------------------|
| <p>ahkan masalah.</p> <p>4. Mengolah, menalar, dan menyaji dalam ranah konkret dan ranah abstrak terkait dengan pengembangan dari yang dipelajarinya di sekolah secara mandiri, dan mampu menggunakan metoda sesuai kaidah keilmuan</p> | <p>sesuai konteks</p>  | <p>kan fungsi sosial, struktur teks dan unsur kebahasaan teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait saran dan tawaran, sesuai dengan konteks penggunaannya.</p> <p>3.3.4 Membedakan fungsi sosial, struktur teks dan unsur kebahasaan teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait saran dan tawaran, sesuai dengan konteks penggunaannya.</p> <p>4.1.1. Merancang teks khusus dalam bentuk teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait saran dan tawaran, sesuai dengan konteks penggunaannya.</p> | <p>82</p> <p>82</p> | <p>75</p> <p>75</p> | <p>77</p> <p>77</p> | <p>78</p> <p>78</p> |
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| | | 4.1.2. Menulis teks khusus dalam bentuk teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait, saran dan tawaran sesuai dengan konteks penggunaannya. | | | | |
| | 3.2 menerapkan fungsi sosial, struktur teks, dan unsur kebahasaan teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait pendapat dan pikiran, sesuai dengan konteks penggunaannya. (Perhatikan unsur kebahasaan <i>I think, I suppose, in my opinion</i>) | 3.2.1 Mengidentifikasi fungsi sosial, struktur teks dan unsur kebahasaan teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait pendapat dan pikiran, sesuai dengan konteks penggunaannya. | 73 | 75 | 77 | 75 75 |
| | 4.2 menyusun teks interaksi transaksional, lisan dan tulis, pendek dan sederhana, yang melibatkan tindakan memberi | 3.2.2 Menjelaskan fungsi sosial, struktur teks dan unsur kebahasaan teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait | 73 | 75 | 77 | 75 |




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|--|---|-------------------------------|-------------------------------|-------------------------------|-------------------------------|--|
| <p>dan meminta informasi terkait pendapat dan pikiran, dengan memperhatikan fungsi sosial, struktur teks, dan unsur kebahasaan yang benar dan sesuai konteks</p> | <p>pendapat dan pikiran, sesuai dengan konteks penggunaannya.</p> <p>3.2.3 Menggunakan fungsi sosial, struktur teks dan unsur kebahasaan teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait pendapat dan pikiran, sesuai dengan konteks penggunaannya.</p> <p>3.2.4 Membedakan fungsi sosial, struktur teks dan unsur kebahasaan teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait pendapat dan pikiran, sesuai dengan konteks penggunaannya.</p> <p>4.2.1 Merancang teks khusus dalam bentuk teks interaksi transaksional lisan dan tulis</p> | <p>73</p> <p>73</p> <p>73</p> | <p>75</p> <p>75</p> <p>75</p> | <p>77</p> <p>77</p> <p>77</p> | <p>75</p> <p>75</p> <p>75</p> | |
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| | | yang melibatkan tindakan memberi dan meminta informasi terkait pendapat dan pikiran, sesuai dengan konteks penggunaannya. | | | | |
| | | 4.2.2. Menulis teks khusus dalam bentuk teks interaksi terkait pendapat dan pikiran, sesuai dengan konteks penggunaannya. | | | | |
| |  | 4.2.3. Mempresentasikan teks khusus dalam bentuk teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait pendapat dan pikiran, sesuai dengan konteks penggunaannya. | 73 | 75 | 77 | 75 |
| | 3.3 | 3.3.1 | 76 | 75 | 77 | 76 |
| | membedakan fungsi sosial, struktur teks, dan unsur kebahasaan beberapa teks khusus dalam bentuk undangan resmi dan meminta informasi terkait | Mengidentifikasi fungsi sosial, struktur teks dan unsur kebahasaan teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait | 76 | 75 | 77 | 76 |



| | | | | | | | |
|---|---|-------|--|----|----|----|----|
| kegiatan sekolah/tempat kerja sesuai dengan konteks penggunaannya | undangan resmi, sesuai dengan konteks penggunaannya. | 3.3.2 | Menjelaskan fungsi sosial, struktur teks dan unsur kebahasaan teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait undangan resmi, sesuai dengan konteks penggunaannya. | 76 | 75 | 77 | 76 |
| 4.3 teks undangan resmi 4.3.1 menangkap makna secara kontekstual terkait fungsi sosial, struktur teks, dan unsur kebahasaan teks khusus dalam bentuk undangan resmi lisan dan tulis, terkait kegiatan sekolah/tempat kerja | undangan resmi, struktur teks dan unsur kebahasaan teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait undangan resmi, sesuai dengan konteks penggunaannya. | 3.3.3 | Menggunakan fungsi sosial, struktur teks dan unsur kebahasaan teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait undangan resmi, sesuai dengan konteks penggunaannya. | 76 | 75 | 77 | 76 |
| 4.3.2 menyusun teks khusus dalam bentuk undangan resmi lisan dan tulis, terkait kegiatan sekolah/tempat kerja, dengan memperhatikan fungsi sosial, struktur teks, dan unsur kebahasaan, secara benar dan sesuai konteks | undangan resmi, struktur teks dan unsur kebahasaan teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait undangan resmi, sesuai dengan konteks penggunaannya. | 3.3.4 | Membedakan fungsi sosial, struktur teks dan unsur kebahasaan teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi | 76 | 75 | 77 | 76 |

| | | | | | | |
|--|--|--|----|----|----|----|
| |  | <p>dan meminta informasi terkait undangan resmi, sesuai dengan konteks penggunaannya</p> <p>4.3.1.1.Menjelaskan makna terkait fungsi sosial, struktur teks dan unsur kebahasaan teks khusus dalam bentuk undangan resmi.</p> <p>4.3.1.2.Menyimpulkan informasi dari teks khusus dalam bentuk undangan resmi</p> <p>4.3.2.1.Merancang teks khusus dalam bentuk undangan resmi.</p> <p>4.3.2.2.Menulis teks khusus dalam bentuk undangan resmi.</p> <p>4.3.2.3.Mempresentasikan teks khusus dalam bentuk undangan resmi.</p> | 76 | 75 | 77 | 76 |
| | <p>3.4 membedakan fungsi sosial, struktur teks, dan unsur kebahasaan beberapa teks eksposisi analitis lisan dan tulis dengan memberi dan meminta informasi terkait isu aktual, sesuai dengan konteks penggunaannya</p> | <p>3.4.1 Mengidentifikasi fungsi sosial, struktur teks dan unsur kebahasaan teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta</p> | 58 | 75 | 77 | 70 |



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| <p>4.4 teks eksposisi analitis</p> <p>4.4.1 menangkap makna secara kontekstual terkait fungsi sosial, struktur teks, dan unsur kebahasaan teks eksposisi analitis lisan dan tulis,</p> <p>4.4.2 menyusun teks eksposisi analitis tulis, terkait isu aktual, dengan memperhatikan fungsi sosial, teks, dan unsur kebahasaan, secara benar dan sesuai konteks</p> | <p>informasi terkait teks eksposisi analitis, sesuai dengan konteks penggunaannya.</p> <p>3.4.2 Menjelaskan fungsi sosial, struktur teks dan unsur kebahasaan teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait teks eksposisi analitis, sesuai dengan konteks penggunaannya.</p> <p>3.4.3 Menggunakan fungsi sosial, struktur teks dan unsur kebahasaan teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait teks eksposisi analitis, sesuai dengan konteks penggunaannya.</p> <p>3.4.4</p> | <p>58</p> <p>58</p> <p>58</p> <p>58</p> | <p>75</p> <p>75</p> <p>75</p> <p>75</p> | <p>77</p> <p>77</p> <p>77</p> <p>77</p> | <p>70</p> <p>70</p> <p>70</p> <p>70</p> | |
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| | Membedakan fungsi sosial, struktur teks dan unsur kebahasaan teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait teks eksposisi analitis, sesuai dengan konteks penggunaannya. | 58 | 75 | 77 | 70 |
| | 4.4.1.1. Menjelaskan makna terkait fungsi sosial, struktur teks dan unsur kebahasaan teks khusus dalam bentuk eksposisi analitis. | 58 | 75 | 77 | 70 |
| | 4.4.1.2. Menyimpulkan informasi dari teks khusus dalam bentuk eksposisi analitis. | 58 | 75 | 77 | 70 |
| | 4.4.2.1. Merancang teks khusus dalam bentuk eksposisi analitis. | | | | |
| | 4.4.2.2. Menulis teks khusus dalam bentuk eksposisi analitis. | | | | |
| | 4.4.2.3. Mempresentasikan teks | | | | |

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| | | husus dalam bentuk eksposisi analitis. | | | | |
| | 3.5 menerapkan fungsi sosial, struktur teks, dan unsur kebahasaan teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait keadaan /tindakan/ kegiatan/ kejadian tanpa perlu menyebutkan pelakunya dalam teks ilmiah, sesuai dengan konteks penggunaannya. (Perhatikan unsur kebahasaan passive voice) | 3.5.1 Mengidentifikasi fungsi sosial, struktur teks dan unsur kebahasaan teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait keadaan /tindakan/ kegiatan/ kejadian tanpa perlu menyebutkan pelakunya dalam teks ilmiah, sesuai dengan konteks penggunaannya. | 73 | 75 | 77 | 75 75 |
| | 4.5. menyusun teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait keadaan/tindakan/kegiatan/ kejadian tanpa perlu menyebutkan pelakunya dalam | 3.5.2 Menjelaskan fungsi sosial, struktur teks dan unsur kebahasaan teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait keadaan/tindakan/kegiatan/ kejadian tanpa perlu menyebutkan pelakunya dalam | 73 | 75 | 77 | 75 |



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|---|---|---|---|---|---|
| <p>teks ilmiah, dengan memperhatikan fungsi sosial, struktur teks, dan unsur kebahasaan yang benar dan sesuai konteks</p> | <p>penggunaannya. 3.5.3 Menggunakan fungsi sosial, struktur teks dan unsur kebahasaan teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait keadaan /tindakan/ kegiatan/ kejadian tanpa perlu menyebutkan pelakunya dalam teks ilmiah, sesuai dengan konteks penggunaannya. 3.5.4 Membedakan fungsi sosial, struktur teks dan unsur kebahasaan teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait keadaan /tindakan/ kegiatan/ kejadian tanpa perlu menyebutkan pelakunya dalam teks ilmiah, sesuai dengan konteks penggunaannya. 4.5.1. Merancang g teks khusus</p> | <p>73</p> <p>73</p> <p>73</p> <p>73</p> | <p>75</p> <p>75</p> <p>75</p> <p>75</p> | <p>77</p> <p>77</p> <p>77</p> <p>77</p> | <p>75</p> <p>75</p> <p>75</p> <p>75</p> |
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dalam bentuk teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait keadaan /tindakan/ kegiatan/ kejadian tanpa perlu menyebutkan pelakunya dalam teks ilmiah, sesuai dengan konteks penggunaannya.

4.5.2. Menulis teks khusus dalam bentuk teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait keadaan /tindakan/ kegiatan/ kejadian tanpa perlu menyebutkan pelakunya dalam teks ilmiah, sesuai dengan konteks penggunaannya.

4.5.3. Mempresentasikan teks khusus dalam bentuk teks interaksi transaksional lisan dan tulis yang melibatkan

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| | | tindakan memberi dan meminta informasi terkait keadaan /tindakan/ kegiatan/ kejadian tanpa perlu menyebutkan pelakunya dalam teks ilmiah, sesuai dengan konteks penggunaannya. | | | | | |
| | 3.6 membedakan fungsi sosial, struktur teks, dan unsur kebahasaan beberapa teks khusus dalam bentuk surat pribadi dengan memberi dan menerima informasi terkait kegiatan diri sendiri dan orang sekitarnya, sesuai dengan konteks penggunaannya | 3.6.1 Mengidentifikasi fungsi sosial, struktur teks dan unsur kebahasaan teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait surat pribadi, sesuai dengan konteks penggunaannya. | 82 | 75 | 77 | 78 | 78 |
| | 4.6 teks surat pribadi | 3.6.2 Menjelaskan fungsi sosial, struktur teks dan unsur kebahasaan teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait surat pribadi, sesuai dengan konteks penggunaannya. | 82 | 75 | 77 | 78 | 78 |
| | 4.6.1 menangkap makna secara kontekstual terkait fungsi sosial, struktur teks, dan unsur kebahasaan teks khusus dalam bentuk surat pribadi terkait kegiatan diri sendiri | 3.6.3 | 82 | 75 | 77 | 78 | 78 |



| | | | | | |
|--|--|----|----|----|----|
| dan orang sekitarnya 4.6.2 menyusun teks khusus dalam bentuk surat pribadi terkait kegiatan diri sendiri dan orang sekitarnya, lisan dan tulis, dengan memperhatikan fungsi sosial, struktur teks, dan unsur kebahasaan, secara benar dan sesuai konteks | Mengguna kan fungsi sosial, struktur teks dan unsur kebahasaan teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait surat pribadi, sesuai dengan konteks penggunaannya. 3.6.4 | 82 | 75 | 77 | 78 |
| | Membeda kan fungsi sosial, struktur teks dan unsur kebahasaan teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait surat pribadi, sesuai dengan konteks penggunaannya. 4.6.1.1.Menjelask an makna terkait fungsi sosial, struktur teks dan unsur kebahasaan teks khusus dalam bentuk surat pribadi. 4.6.1.2.Menyimp ulkan informasi dari teks khusus dalam bentuk surat pribadi 4.6.2.1.Merancan g teks khusus | 82 | 75 | 77 | 78 |

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|--|---|---|----|----|----|----|
| | | dalam bentuk surat pribadi. 4.6.2.2. Menulis teks khusus dalam bentuk surat pribadi. 4.6.2.3. Memprese ntasikan teks khusus dalam bentuk surat pribadi. | | | | |
| | 3.7 menerapkan fungsi sosial, struktur teks, dan unsur kebahasaan teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait hubungan sebab akibat, sesuai dengan konteks penggunaannya. (Perhatikan unsur kebahasaan because of ..., due to ..., thanks to ...) | 3.7.1 Mengidentifikasi fungsi sosial, struktur teks dan unsur kebahasaan teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait hubungan sebab akibat, sesuai dengan konteks penggunaannya. 3.7.2 Menjelaskan fungsi sosial, struktur teks dan unsur kebahasaan teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait hubungan sebab akibat, sesuai dengan konteks penggunaannya. 3.7.3 Menggunakan fungsi sosial, struktur teks dan unsur kebahasaan teks interaksi transaksional lisan | 73 | 75 | 77 | 75 |
| | 4.7 menyusun teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait hubungan sebab akibat, dengan memperhatikan fungsi sosial, | tindakan memberi dan meminta informasi terkait hubungan sebab akibat, sesuai dengan konteks penggunaannya. 3.7.3 Menggunakan fungsi sosial, struktur teks dan unsur kebahasaan teks interaksi transaksional lisan | 73 | 75 | 77 | 75 |




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|---|--|--|----|----|----|----|
| struktur teks, dan unsur kebahasaan yang benar dan sesuai konteks | dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait hubungan sebab akibat, sesuai dengan konteks penggunaannya. 3.7.4 | Membedakan fungsi sosial, struktur teks dan unsur kebahasaan teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait keadaan /tindakan/ kegiatan/ kejadian tanpa perlu menyebutkan pelakunya dalam teks ilmiah, sesuai dengan konteks penggunaannya 4.7.1. Merancang teks khusus dalam bentuk teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait hubungan sebab akibat, sesuai dengan konteks penggunaannya. 4.7.2. Menulis teks khusus dalam bentuk teks interaksi transaksional lisan dan tulis yang melibatkan | 73 | 75 | 77 | 75 |
| | | | 73 | 75 | 77 | 75 |
| | | | 73 | 75 | 77 | 75 |

| | | | | | | |
|---|---|--|----|----|----|----|
| | | tindakan memberi dan meminta informasi terkait hubungan sebab akibat, sesuai dengan konteks penggunaannya. 4.7.3. Mempresen- tasikan teks khusus dalam bentuk teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait hubungan sebab akibat, sesuai dengan konteks penggunaannya | | | | |
| 1.2.Mensyukuri kesempatan dapat mempelajari bahasa Inggris sebagai bahasa pengantar komunikasi International yang diwujudkan dalam semangat belajar | 3.8 Membedakan fungsi sosial, struktur teks, dan unsur kebahasaan beberapa teks explanation lisan dan tulis dengan memberi dan meminta informasi terkait gejala alam atau sosial yang tercakup dalam mata pelajaran lain di kelas XI, sesuai dengan konteks penggunaannya | 3.8.1 Mengidentifikasi fungsi sosial, struktur teks dan unsur kebahasaan teks explanation lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait gejala alam atau sosial yang tercakup dalam mata pelajaran lain di kelas XI, sesuai dengan konteks penggunaannya. | 58 | 75 | 77 | 70 |
| 2.2.Menunjukkan perilaku tanggung jawab, peduli, kerjasama, dan cinta damai, dalam melaksanakan komunikasi fungsional. | 4.8 menangkap makna secara kontekstual terkait fungsi sosial, struktur teks, dan unsur kebahasaan teks | 3.8.2 Menjelaskan fungsi sosial, struktur teks dan unsur kebahasaan teks explanation | 58 | 75 | 77 | 70 |

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|---|--|---|---|---|---|
| <p>explanation lisan dan tulis, terkait gejala alam atau sosial yang tercakup dalam mata pelajaran lain di kelas XI</p> | <p>lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait gejala alam atau sosial yang tercakup dalam mata pelajaran lain di kelas XI, sesuai dengan konteks penggunaannya.</p> <p>3.8.3</p> <p>Menggunakan fungsi sosial, struktur teks dan unsur kebahasaan teks explanation lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait gejala alam atau sosial yang tercakup dalam mata pelajaran lain di kelas XI, sesuai dengan konteks penggunaannya.</p> <p>3.8.4</p> <p>Membedakan fungsi sosial, struktur teks dan unsur kebahasaan teks explanation lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait gejala alam atau sosial yang tercakup dalam</p> | <p>58</p> <p>58</p> <p>58</p> <p>58</p> | <p>75</p> <p>75</p> <p>75</p> <p>75</p> | <p>77</p> <p>77</p> <p>77</p> <p>77</p> | <p>70</p> <p>70</p> <p>70</p> <p>70</p> |
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|--|---|--|----|----|----|----|
| |  | <p>mata pelajaran lain di kelas XI, sesuai dengan konteks penggunaannya.</p> <p>4.8.1. Merancang teks khusus dalam bentuk teks explanation lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait gejala alam atau sosial yang tercakup dalam mata pelajaran lain di kelas XI, sesuai dengan konteks penggunaannya.</p> <p>4.8.2. Menulis teks khusus dalam bentuk teks explanation lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait gejala alam atau sosial yang tercakup dalam mata pelajaran lain di kelas XI sesuai dengan konteks penggunaannya.</p> <p>4.8.3. Mempresentasikan teks khusus dalam bentuk teks explanation lisan</p> | 58 | 75 | 77 | 70 |
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|--|--|--|----|----|----|----|
| | | dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait gejala alam atau sosial yang tercakup dalam mata pelajaran lain di kelas XI, sesuai dengan konteks penggunaannya. | | | | |
| | 3.9 menafsirkan fungsi sosial dan unsur kebahasaan lirik lagu terkait kehidupan remaja SMA/MA/SMK/MAK | 3.9.1 Mengidentifikasi fungsi sosial, struktur lirik lagu dan unsur kebahasaan teks lirik lagu baik lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait pesan moral, sesuai dengan konteks penggunaannya. | 82 | 75 | 77 | 78 |
| | 4.9 menangkap makna secara kontekstual terkait fungsi sosial dan unsur kebahasaan lirik lagu terkait kehidupan remaja SMA/MA/SMK/MAK | 3.9.2 Membedakan fungsi sosial, struktur teks dan unsur kebahasaan teks lirik lagu lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait pesan moral, sesuai dengan konteks penggunaannya. | 82 | 75 | 77 | 78 |

| | | | | |
|---|--|--|--|--|
| | | 4.9.1Mempresentasikan teks lagu dalam bentuk teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait pesan moral, sesuai dengan konteks penggunaannya. | | |
| KKM Mata Pelajaran = Jml KKM KD : Jml KD | | 675 : 9 = 75 | | |

Mengetahui
Kepala Sekolah

Guru Mata Pelajaran

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