

**CASE-BASED LEARNING IN IMPROVING CRITICAL
THINKING SKILL ON READING COMPREHENSION
FOR THE ELEVENTH GRADE STUDENTS
AT SMA N 2 SEMARANG**

A FINAL PROJECT

Presented as Partial Fulfillment of the Requirements
to Obtain the *Sarjana Pendidikan* Degree
in English Education



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2022**

APPROVAL

A Final Project entitled

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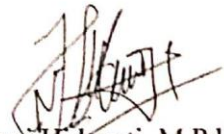
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VALIDATION

A Sarjana Pendidikan Final Project on

**CASE-BASED LEARNING IN IMPROVING CRITICAL
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On June 10th 2022
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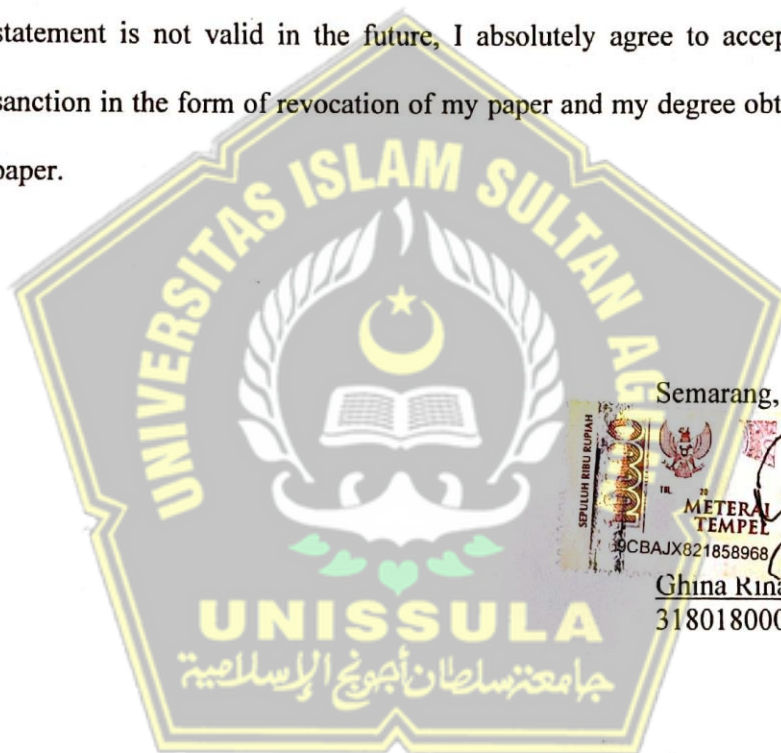
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STATEMENT OF WORK'S ORIGINALITY

Hereby, I honestly declare that the undergraduate final project I wrote does not contain the works or part of the works of other people, except those which cited in the quotations and the references, as a scientific paper should. If my statement is not valid in the future, I absolutely agree to accept an academic sanction in the form of revocation of my paper and my degree obtained from that paper.



Semarang, 27 Mei 2022



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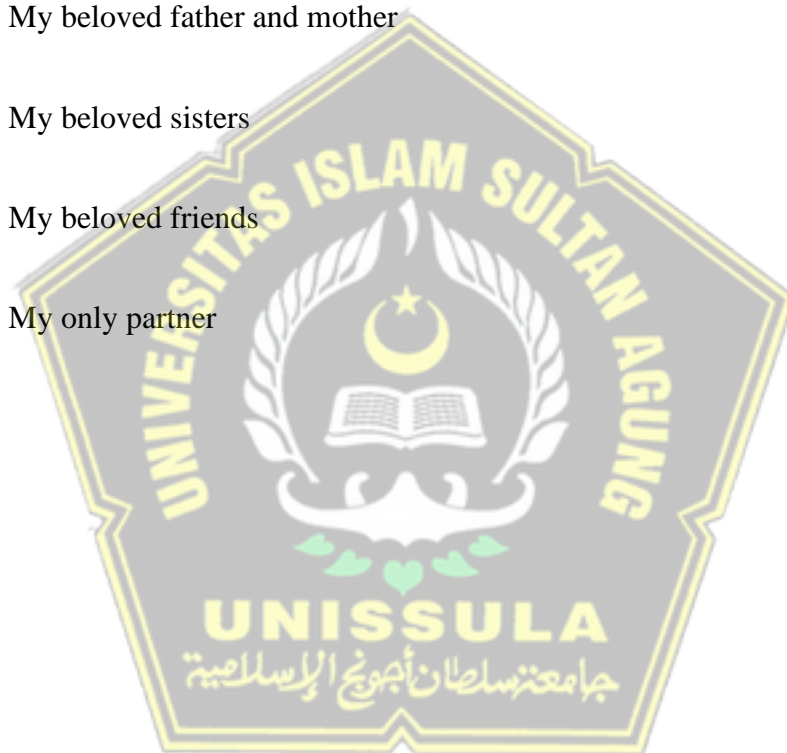
MOTTO

“Ilmu tidak akan dapat diraih kecuali dengan ketabahan”

DEDICATION

This final project is dedicated to:

- My beloved father and mother
- My beloved sisters
- My beloved friends
- My only partner



ABSTRACT

Aisy, Ghina R. 2022. “*Case-Based Learning in Improving Critical Thinking Skill on Reading Comprehension for the Eleventh Grade Students at SMA N 2 Semarang*”. A final project. English Education Study Program, Faculty of Languages and Communication Science, Sultan Agung Islamic University. Advisor: Nani Hidayati, S.Pd., M.Pd.

The aim of this study was to find out whether the use of CBL is effective in improving students' critical thinking skill of the eleventh grade students of SMA N 2 Semarang in academic year of 2021/2022. The design of this study was quasi experimental design and the method that was quantitative method. The sample of this study consisted of 36 students of XI MIPA 3 as the experimental class and 36 students of XI MIPA 4 as the control class. The try out test to XI MIPA 1 was done to know the validity and the reliability of the instrument. Pre-test and post-test was given to the experimental and control class. The result was analyzed by using SPSS 26 version. The result of the pre-test of experimental and control class were 64.17 and 57.89. While the result of post-test of experimental and control class were 75.11 and 72.22. The post-test result from both classes were analyzed by using t-test. The result of the analysis shows that sig (2-tailed) $0.333 \geq 0.05$ which means there was no significant difference in students' mean reading scores between experimental class which was taught by using CBL and control class which was not taught by using CBL. It was concluded that H1 was rejected and H0 was accepted. Therefore, the use of case-based learning in improving critical thinking skill on reading comprehension for the eleventh grade students at SMA N 2 Semarang was not effective.

Keywords: *Case-Based Learning, Critical Thinking, Reading Comprehension.*

INTISARI

Aisy, Ghina R. 2022. “*Case-Based Learning in Improving Critical Thinking Skill on Reading Comprehension for the Eleventh Grade Students at SMA N 2 Semarang*”. A final project. English Education Study Program, Faculty of Languages and Communication Science, Sultan Agung Islamic University. Advisor: Nani Hidayati, S.Pd., M.Pd.

Tujuan dari penelitian ini adalah untuk mengetahui apakah penggunaan CBL efektif dalam meningkatkan kemampuan berpikir kritis para murid kelas 11 di SMA N 2 Semarang pada tahun ajaran 2021/2022. Desain penelitian ini adalah kuasi eksperimental dan metode yang digunakan adalah metode kuantitatif. Sampel pada penelitian ini terdiri dari 36 murid XI MIPA 3 sebagai kelas eksperimental dan 36 murid XI MIPA 4 sebagai kelas kontrol. Tes try-out pada kelas XI MIPA 1 dilakukan untuk mengetahui validitas dan reliabilitas instrumen. Pre-tes dan post-tes diberikan pada kelas eksperimental dan control. Hasil penelitian dianalisis dengan menggunakan SPSS versi 26. Hasil pre-tes dari kelas eksperimental dan kontrol adalah 64.17 dan 57.89. sedangkan hasil post-tes dari kelas eksperimental dan kontrol adalah 75.11 dan 72.22. Hasil post-tes dari kedua kelas dihitung dengan menggunakan T-tes. Hasil dari analisis menunjukkan bahwa sig (2-tailed) $0.333 \geq 0.05$ yang mana berarti tidak adanya perbedaan yang signifikan pada skor rata-rata membaca murid antara kelas eksperimental yang diajarkan menggunakan CBL dan kelas control yang tidak diajarkan menggunakan CBL. Dari hasil analisis disimpulkan bahwa H1 ditolak dan H0 diterima. Maka dari itu, penggunaan case-based learning dalam meningkatkan kemampuan berpikir kritis pada pemahaman membaca untuk kelas 11 di SMA N 2 Semarang adalah tidak efektif.

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Alhamdulillah rabbil'alamin. Praise and gratitude we pray to Allah SWT. the one who only asks Him for help. Gratitude to Allah SWT. for all His help, mercy, and love so that this study could be done entitled "Case-Based Learning in Improving Critical Thinking Skill on Reading Comprehension for the Eleventh Grade Students at SMA N 2 Semarang" is submitted as the final requirement in completing final project in English Education study program of Language and Communication Science Faculty. Shalawat and greetings to the prophet Muhammad SAW who always been the best source of inspiration and the role model for mankind.

With great respect, I would like to express the deepest appreciation to the following people:

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2. Kurniawan Yudhi Nugroho, S.Pd., M.Pd as the dean of Faculty of Languages and Communication Science for the permission of final project.
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6. Umi Maftukhah, S.Pd as the English teacher of SMA N 2 Semarang.

7. Students of XI MIPA 3 and XI MIPA 4 of SMA N 2 Semarang.
8. All the lectures and staffs of Faculty of Languages and Communication Science.

Finally, eventhough this study is still far for being perfect, hopefully this study will be useful for the readers.

Semarang, 27 Juli 2020



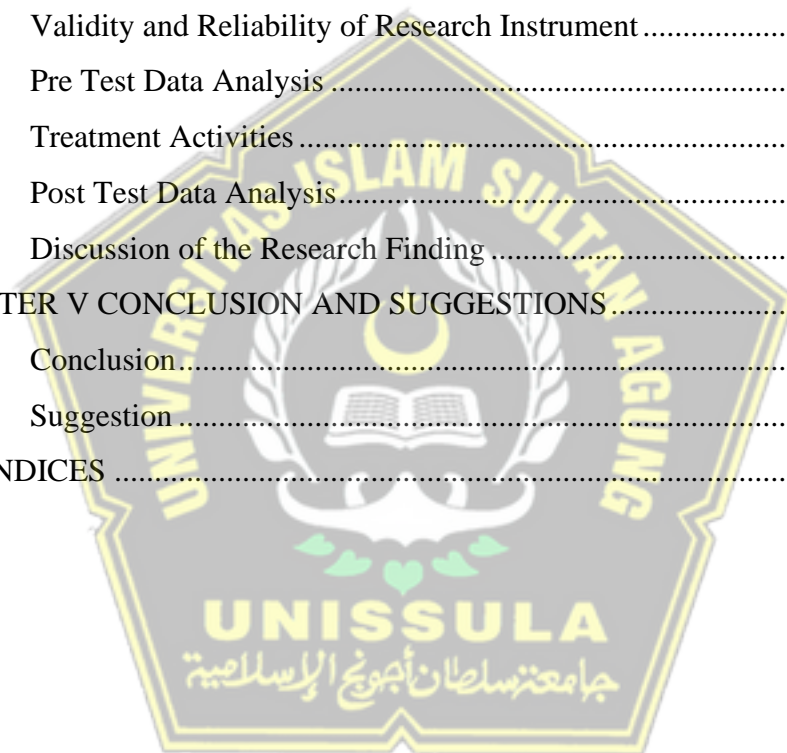
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TABLE OF CONTENTS

COVER	i
VALIDATION	Error! Bookmark not defined.
STATEMENT OF WORK'S ORIGINALITY	Error! Bookmark not defined.
MOTTO	v
DEDICATION	v
ABSTRACT	vi
INTISARI.....	vii
ACKNOWLEDGEMENTS	viii
TABLE OF CONTENTS	x
LIST OF TABLES	xii
CHAPTER I INTRODUCTION	1
1.1. Background of the Study	1
1.2. Reasons for Choosing the Topic	5
1.3. Question of the Study	6
1.4. Objective of the Study	6
1.5. Hypotheses of the Study.....	6
1.6. Limitation of the Study.....	7
1.7. Significance of the Study	7
1.8. Definition of Key Terms	8
1.9. Organization of the Study.....	10
CHAPTER II REVIEW OF RELATED LITERATURE	12
2.1 Reading Teaching.....	12
2.2 Critical Thinking Skill.....	14
2.3 Case-Based Learning.....	16
2.4 Genre	18
2.5 Previous Studies	19
CHAPTER III METHOD OF THE STUDY	24
3.1 Design of the Study	24

3.2	Subject of the Study	26
3.3	Data of the Study	28
3.4	Instrument of the Study	30
3.5	Data Collecting Procedure.....	33
3.6	Data Analysis	34
CHAPTER IV ANALYSIS OF RESULT AND DISCUSION		36
4.1	Description of the School	36
4.2	Description of the Respondents.....	37
4.3	Validity and Reliability of Research Instrument	38
4.4	Pre Test Data Analysis	40
4.5	Treatment Activities	45
4.6	Post Test Data Analysis.....	49
4.7	Discussion of the Research Finding	51
CHAPTER V CONCLUSION AND SUGGESTIONS.....		54
5.1	Conclusion.....	54
5.2	Suggestion	55
APPENDICES		60



LIST OF TABLES

Table 3.1 Design of Quasi-Experimental Research	25
Table 3.2 Sample of the Study	28



CHAPTER I

INTRODUCTION

This chapter presents the Background of the Study, Reasons for Choosing the Topic, Question of the Study, Objective of the Study, Hypotheses of the Study, Limitation of the Study, Significance of the Study, Definition of Key Terms, and Organization of the Study.

1.1. Background of the Study

Conventional learning is considered incompatible with the progress of the world of education in the era of globalization because it tends to be ineffective and causes low student motivation to learn. Therefore, a learning model is needed that can make students able to survive and compete globally which can also follow the developments and changes of the times, especially in the learning process. Rahabav (2016) in Hasan et al (2019) stated that the quality of education in Indonesia, is still far behind the rest of the world, including the ASEAN countries. According to Schleicher (2018) in Hasan et al (2019) Indonesia ranked 62nd out of 70 countries in terms of science literacy with score of 402 based on the results of a survey by the Organization for Economic Cooperation and Development (OECD) through the ranking of world education related to the Program for International Student Assessment (PISA). Besides that, the 2015 Program for International Student Assessment (PISA) result shows that Indonesia was

one of the lowest students' literacy levels in English in the world (Ganie, Deliana, & Sinar, 2020).

Improving the quality of learning and teaching programs will make students be able to compete and face globalization with their abilities and other factors. According to Bellaca et al (2010); Dwyer, Hogan, and Stewart (2014) in Hasan et al (2019) 21st-century learning framework includes three skills as a result of the learning process consisting of (1) life and career skills, (2) learning and innovation skills, and (3) information media and technology skills. For learning and innovation skills, learning practices in schools today must be able to equip students with four abilities: creativity, critical thinking, collaboration, and communication which are commonly referred to as 4Cs.

In Bloom's taxonomy, this 4C ability is in the realm of higher-order thinking skills (HOTS). This effort can be seen in policies in the field of education where there is the term HOTS (Higher Order Thinking Skills). Learning development oriented to Higher Order Thinking Skills (HOTS) is a program developed as an effort of the Ministry of Education and Culture to improve the quality of learning and improve the quality of graduates. Therefore, there are things that are different from usual which students are required to be able to solve problems and find solutions to problems at a higher level than before. In this case, students will be invited to think critically (Hasan, Lukitasari, Utami, & Anizar, 2019). Based on Critical Thinking Cooperation (2006) the ability that is beyond memorization can

be called critical thinking. Students with critical thinking are encouraged to think for themselves, question hypotheses, analyze and synthesize events and go further by developing new hypotheses and testing them against facts (Iyer, 2019).

Critical thinking requires students to be active in learning activities. Surely, without great activity and participation, it is unlikely that students themselves will solve problems and find solutions. According to Niemi (2002), Rotgans and Schmidt (2011), Niemi and Nevgi (2014) in Demirci (2017) active learning is the impact of active students on learning and student participation in the learning process that allows students to focus on creating knowledge by focusing on skills such as analytical thinking, solving problems and meta-cognitive activities that develop students' thinking. Student's activity, problem-solving efforts with a certain level, and the placement of students when facing a problem will lead them to different learning outcomes for each child. Indicators of achieving the success of an academic program are learning outcomes that provide a clear picture of what has been achieved (Singh, 2017).

One of the learning models in the 2013 curriculum that is oriented to HOTS is Case-Based Learning (CBL). CBL is an instructional learning method that is oriented to a problem-solving approach (Wospakrik, Sundari, & Musharyanti, 2020). CBL is an instructional learning method that is oriented to a problem-solving approach. According to Carder, Willingham, & Bibb (2001) and Snavely (2004) in Diao (2020), CBL is considered a

variation or part of Problem Based Learning (PBL). PBL provides a guide to the curriculum and tends to be unclear, complex, or unclear for a good reason where students are left in charge of their own learning while the teacher only acts as a facilitator. While CBL tends to be short, controversial, contemporary and involves interesting characters; they are planned to stimulate dialogue and force decisions (Diao, 2020).

Reading is not only a matter of interpreting words, but also an important activity in language education and a means of integrating and expanding language skills. According to Sheeba and Ahmad (2012) reading is a purposeful activity where one can read to obtain information or verify existing knowledge, or to criticize the author's ideas or writing style. In addition, one can also read for pleasure, or to increase knowledge about the language being read. The purpose of reading also determines the right approach to reading comprehension. Reading comprehension is an active cognitive process that involves reasoning to form the meaning of a text and understand it effectively and comprehensively (Abdelhalim, 2017). In this school, the students' cognitive abilities in English lessons on average are the same in each class.

The thing that becomes an obstacle for most students is when they read and understand English readings. Difficulties in understanding a reading are experienced by students due to limited vocabulary and even in pronunciation there are also many mistakes, lack of motivation in reading and understanding reading English texts, and especially if they have to look

for implied meanings in the text. This obstacle is also felt by teachers who teach English subjects because when the lesson takes place when discussing material related to texts and questions and answers, the students are less enthusiastic in following the lesson.

Based on the statements it can be questioned about the method applied to students can support and improve the quality of students as well as other subjects that connect theory and practice and as we know that this method is also gradually adopted by other disciplines, one of which is language learning. Based on the above background, this study entitled “*Case-Based Learning in Improving Critical Thinking Skill on Reading Comprehension for the Eleventh Grade Students at SMA N 2 Semarang*” is conducted to determine the effectiveness of Case-Based Learning (CBL) in improving students' critical thinking in reading skills.

1.2. Reasons for Choosing the Topic

As mentioned above, the reasons for choosing the topic are as follows:

1. Many students are not used to reading critically. Difficulties in understanding a reading are experienced by students due to limited vocabulary and even in pronunciation there are also many mistakes, lack of motivation in reading and understanding reading English texts, and especially if they have to look for implied meanings in the text. Hence, many students are trapped when asked to reveal things that are implied in a text because they are used to things that are explicit and are not trained much by looking for things that are implied in English.

2. Case-based learning (CBL) has not been widely applied in language teaching.

1.3. Question of the Study

The question of the study is formulated as:

Is the use of CBL effective in improving students' critical thinking skill in the eleventh grade students at SMA N 2 Semarang?

1.4. Objective of the Study

In accordance with the research question, the objective of this study:

to find out whether the use of CBL is effective in improving students' critical thinking skill in the eleventh grade students at SMA N 2 Semarang

1.5. Hypotheses of the Study

A hypothesis is a temporary answer to a problem that still has the nature of presumption because the problem still has to be proven true or not. Hypotheses can be divided into two types, namely the alternative hypothesis (H_a or H_1) and the null hypothesis (H_0). This alternative hypothesis serves to state the relationship between variables X and Y. This hypothesis can also show differences between the two groups. This hypothesis explains the relationship between variables with other variables. In contrast to the alternative hypothesis, the null hypothesis explains that there is no relationship or influence between variables with other variables. The following is the hypotheses in this study

1. H0: There is no significant difference in students' mean reading scores between experimental class which is taught by using CBL and control class which is taught not by using CBL.
2. H1: There is a significant difference in students' mean reading scores between experimental class which is taught by using CBL and control class which is taught not by using CBL.

1.6. Limitation of the Study

This study is conducted to determine the results of using one of the 2013 curriculum learning methods, namely Case-Based Learning (CBL) in 11th graders at SMA N 2 Semarang. Aspects that are seen are critical thinking on reading achievement. The readings presented are also readings that can support the students' critical reading learning process. The kind of reading in this study is reading comprehension which focuses on analytical exposition reading.

1.7. Significance of the Study

The results of this study are expected to be useful practically and pedagogically described in the following section:

1.7.1. Practical Significance

Some parties likely can gain practical significance from this research as follows:

1. For teachers:
 - a. The results of this study are expected to report teachers that CBL can be used as a learning method.

- b. The results of this study are expected to report teachers that CBL can be used to teach other skills.
2. For students:
 - a. The results of this study are expected to give information to students that CBL can be implemented independently.
 - b. The results of this study are expected to give information to students that CBL can train critical thinking in activities.
3. For future researchers :
 - a. The results of this study are expected to deliver that CBL can be a supporting reference.
 - b. The results of this study are expected to deliver that CBL can be developed by teaching other skills.

1.7.2 Pedagogical Significance

There are three pedagogical significances from this research as follows:

1. The results of this study are expected to advise teachers that CBL can be a reference teaching method.
2. The results of this study are expected to advise student that CBL can make student thinks critically.
3. The results of this study are expected to advise schools that CBL can make the school rank better.

1.8. Definition of Key Terms

To clarify the key terms used in this study, several definitions are put forward.

1. Case Based Learning (CBL)

According to Carder, Willingham, & Bibb (2001) and Snavely (2004) in Diao (2020), CBL is considered a variation or part of Problem Based Learning (PBL). Herreid (1998) in Diao (2020) said that PBL and CBL presented storytelling as an emerging and recognized teaching pedagogy. PBL provides a guide to the curriculum and tends to be unclear, complex, or unclear for a good reason where students are left in charge of their own learning while the teacher only acts as a facilitator. While CBL tends to be short, controversial, contemporary and involves interesting characters; they are planned to stimulate dialogue and force decisions.

2. Critical Thinking

Willingham (2008) in Hasan et al (2019) stated that critical thinking is seeing both sides of a problem, being open to new evidence that contradicts one's ideas, reasoning without feeling, demanding statements that are supported by evidence, concluding, and inferring conclusions from available facts, and solve the problem. Critical thinking is the ability to think at a complex level with the process of analysis and evaluation which inductively looks at connections, analyzes the unsolved problem, determines causes and consequences, draws conclusions, and calculates relevant data. Meanwhile, deductively the ability to solve spatial problems, draw logical conclusions, and distinguish between facts and opinions (Erma, Dewi, & Giarti, 2019).

3. Reading Comprehension

Reading comprehension is the ability to process text, understand the meaning of the text, and integrate it with what the reader knows, influenced by the skill and ability to process the information. The basic skills required to read efficiently are knowledge of the meaning of the word, the ability to understand the meaning of the word from the context of the conversation, the ability to see those references, and the ability to infer from the passage to derive its content, the main idea of the passage, the ability to answer the questions answered in the passage, the ability to recognize the literary device or sentence structure used in the passage and set its tone, ability to identify reference points, retraining accidental and intentional phrases, and finally, to determine the author's goals, intentions, perspectives, and to draw inferences about the author (Tang, Asrifan, Chen, Haedar, & Agussalim, 2019).

1.9. Organization of the Study

Chapter I: Introduction

This chapter presents the research background, reason for choosing the topic, statement of problems, objectives of the study, research limitations, and research significance. At the end of this chapter, the researcher provides clarification on the main terms and organization of the paper.

Chapter II: Reviews of Related Literature

This chapter presents the results of research by researchers on related theories or studies in similar fields. It provides the theories that the reader needs to understand this research.

Chapter III: Method of Study

This chapter presents the research design, sample, data collection, data instruments, and data analysis. Much of the data needed by researchers is collected and analyzed in this section. The sample contribution provides many objective views in obtaining the required data. Existing sub-chapters include the design of the study, the subject of the study, the data of the study including types of data and variables, an instrument of the study, the technique for collecting data, data collecting procedure, and data analysis.

Chapter IV: Analysis of Result and Discussion

This chapter presents description of the school, description of the respondents, validity and reliability of the instrument, pre-test data analysis, treatment activities, post-test data analysis, and discussion of research finding.

Chapter V: Conclusion and Suggestions

This chapter presents the conclusion about study that had been discussed in the previous chapters and suggestions that are proposed to support teaching and learning process especially in reading comprehension.

CHAPTER II

REVIEW OF RELATED LITERATURE

This chapter includes the review of related literature which is found to have a direct relationship with this investigation that the researcher has read carefully to explain the topic being studied.

2.1 Reading Teaching

Language educator in teaching English has long used the concepts of four basic language skill, they are listening, speaking, reading, and writing. These four language skills are sometimes called the “macro-skill”. This is in contrast to the “micro-skill”, which are things like grammar, vocabulary, pronunciation, and spelling. Reading is one of the four basic skills that learners must acquire if they want to learn a foreign language. Teaching is a combination of two activities, namely teaching activities and learning activities. Teaching requires good communication so that it will run well. Good communication lies in the language used which can be understood. This harmonious communication network is an indicator that an activity or teaching process is going well. Language is an important communication tool. English is an international language that is used by almost all people in the world to carry out an activity. Teaching English as a foreign language, teaching English as a second language, or teaching English to speakers of other languages are terms that refer to teaching English to students whose first language is not English. Based on that explanation, this chapter will

contain the sub-chapter which is one of the four macro skills in English. Thus, this sub chapter presents about Reading Comprehension.

2.1.1 Reading Comprehension

Reading is not only a matter of interpreting words, but also an important activity in language education and a means of integrating and expanding language skills. Reading English can raise the readers' awareness to help a lot in improving listening, speaking, and writing (Nugroho, Anggani, & Hartono, 2019). The purpose of reading also determines the right approach to reading comprehension. Reading comprehension is an active cognitive process that involves reasoning to form meaning from a text and understand it effectively also comprehensively (Abdelhalim, 2017). The reader's background knowledge is required in building a coherent representation of the text. Prior content knowledge supports relevant understanding and learning also can help predict text memory for students as well as support the ability to make inferences and learn new words. Vocabulary is a strong predictor of reading comprehension across development. Students acquire vocabulary at an astonishing rate, averaging 2 to 8 basic words per day (Oslund, 2019).

Based on the explanation above, it can be concluded that reading is an important activity to do and almost always done by someone based on the goals they want to achieve from reading. Reading in daily activities is already a comprehensive activity if it is followed by easy-to-understand language and good communication.

2.2 Critical Thinking Skill

According to Willingham (2008) in Hasan et al (2019) critical thinking is seeing both sides of a problem, being open to new evidence that contradicts one's ideas, reasoning without feeling, demanding statements that are supported by evidence, concluding, and inferring conclusions from available facts, and solve the problem. Bellaca et al (2010); Dwyer, Hogan, and Stewart (2014) in Hasan et al (2019) state that 21st-century learning framework includes three skills as a result of the learning process. For learning and innovation skills, learning practices in schools today must be able to equip students with four abilities: creativity, critical thinking, collaboration, and communication which are commonly referred to as 4Cs.

In Bloom's taxonomy, this 4C ability is in the realm of higher-order thinking skills (HOTS). This effort can be seen in policies in the field of education where there is the term HOTS (Higher Order Thinking Skills). Students with critical thinking are encouraged to think for themselves, question hypotheses, analyze and synthesize events and go further by developing new hypotheses and testing them against facts (Iyer, 2019).

Student's activity, problem-solving efforts with a certain level, and the placement of students when facing a problem will lead them to different learning outcomes for each child. Indicators of achieving the success of an academic program are learning outcomes that provide a clear picture of what has been achieved (Singh, 2017). Based on that explanation, this chapter will

contain the sub-chapter about Reading in Connection with Critical Thinking Skill.

2.2.1 Reading in Connection with Critical Thinking Skill

All classes have students who are at various levels of proficiency in a variety of reading skills. Reading is an activity to obtain information or verify existing knowledge, criticizing the author's ideas or writing style, also for pleasure, or to increase knowledge of the language read. The ability that a person has to understand what is read is called reading comprehension. It can also be referred to as the main pillar in reading activities where a reader builds understanding of a text. Reading activities can stimulate critical thinking skills. This is because reading activities are learning activities to build understanding from reading which is one of the foundations for higher-order thinking, for example, critical thinking. According to Kuswana (2012) in Erma, Dewi, & Giarti (2019) indicators of critical thinking skills include 1) problem focus, question and conclusion identification, 2) discussion analysis, 3) question and answer, 4) decision identification and reason, 5) observe and evaluate observation reports, 6) making decisions and evaluate 7) considering the reason without admitting any uncertainty or suspicion, 8) involve other dominant skills in decision making and defense.

Based on the explanation above, it can be concluded that everyone has a different level of proficiency in reading skills. Everyone's ability to understand reading is also different. The ability to understand reading is

called comprehension. In the activity of understanding a reading can stimulate critical thinking skills.

2.3 Case-Based Learning

This subchapter consists of the Definition of Case-Based Learning and Case-Based Learning Procedure.

2.3.1 Definition of Case-Based Learning

CBL is an instructional learning method that is oriented to a problem-solving approach (Wospakrik, Sundari, & Musharyanti, 2020). CBL is one of the learning models in the 2013 curriculum that is oriented to HOTS. CBL learning scenarios or case studies are used to develop students' reasoning knowledge and skills in solving problems. The CBL method is a *Student Centered Learning* (SCL) learning method that can be used to develop students' creativity, motivation, and knowledge skills in problem-solving which involves students being active and creative in discussions about real-life events. According to Carder, Willingham, & Bibb (2001) and Snavelly (2004) in Diao (2020) CBL is considered a variation or part of Problem Based Learning (PBL). PBL provides a guide to the curriculum and tends to be unclear, complex, or unclear for a good reason where students are left in charge of their own learning while the teacher only acts as a facilitator. While CBL tends to be short, controversial, contemporary, and involves interesting characters; they are planned to stimulate dialogue and force decisions.

Based on the explanation above, it can be concluded that the CBL learning method is oriented to a problem solving approach and also HOTS-oriented, both of which can develop students' knowledge and reasoning skills in solving the problems by thinking critically.

2.3.2 Procedure of Case-Based Learning

The Case-Based Learning generally entails the subsequent steps:

1. The teacher introduces the situation and, if necessary, applicable vocabulary.
2. Everyone reads the case and analyzes further materials.

The following steps will help students analyze the case systematically:

- a. Explain the context of the situation/problem
 - b. Explain the main problem
 - c. Explain the cause of the problem (usually more than one)
 - d. Identify possible solutions
 - e. Determine the strengths and weaknesses of each option
 - f. Determine the best solution/action
3. Students typically discuss possible solutions in small groups. Students can visually represent aspects of the case by drawing a mind map or recording the relationship between story elements and stake holders, the causes of problems, and possible solutions.
 4. Students typically come up with and justify solutions with the entire class.

5. Everyone participates in the feedback session, usually led by the teacher.

6. Students look back at the case study itself and the steps.

The duration of each steps, especially the reading and discussion phrases, depends on the length and complexity of the case study (Roell, 2019).

Based on the explanation above, it can be concluded that the steps that can be used in learning to use CBL are to focus on how students get a problem, study the problem, then find the solution to the problem which will be presented at the end of the session and accompanied by providing feedback.

2.4 Genre

Genre means many kinds of text taught to high school students in Indonesia. These texts are as follows: recount, report, discussion, explanation, analytical exposition, hortatory exposition, news item, anecdote, narrative, procedure, description, and review. Text is spoken or written text with a unified meaning. The text is influenced by the context of culture and circumstances. It can be short or long, the principle is that the text is meaningful. To whom the text is directed, and how the text is conveyed verbally or in writing. This sub chapter explains about exposition text which will be used in this investigation.

2.4.1 Exposition

The reading text that will be used in this research is analytical exposition text. Analytical exposition texts one of the genres expressed in English curriculum for second grade high school students in the first semester. It is also one of the difficult genres that students learn to understand the text because students have difficulty in compiling analytic exposition text, namely in identifying thesis statement, argument and restatement of this text (Silfia, Ansyar, & Zaim, 2013). Analytical exposition text contains the author's thoughts about things that happen around him, whether objects, events, or places. This text is included in argumentative text because it shows an opinion (argument) against something. The social function of the text is to convince the reader that the topic presented is an important topic to discuss. Even so, analytical exposition text is not meant to change the reader's point of view, but this text only contains the opinion of the author.

Based on the explanation above, it can be concluded that the analytical exposition text that will be used in this study is a genre that contains the author's thoughts about something happening around him that does not intend to change the reader's point of view. Therefore, the text can train someone's critical thinking skills towards something that is happening and can happen around someone

2.5 Previous Studies

The following are some of the studies that have been carried out regarding the problems being discussed in this study.

The title of the first research is The Effect of Case-Based Learning (CBL) on Critical Thinking Disposition, Communication Ability, Problem Solving Ability and Self-directed Learning Ability of Nursing Students in Pathophysiology Course which published in 2016 and was written by Min Hee Lee and Myung Sook Park. The aim of the research is to investigate the effect of case-based learning (CBL) on critical thinking disposition, communication ability, problem solving ability and self-directed learning ability of nursing students in a pathophysiology course. The subject of the research is nursing students of nursing faculties and clinical nurse. The method used is quasi-experimental. The instrument of the research is test. The result of the research shows that the mean score of critical thinking disposition, communication ability, and self-directed learning ability were significantly higher in intervention group than those in control group but there was no significant difference between the two groups in problem solving ability, additionally, the application of a CBL program during a pathophysiology course was effective in improving the critical thinking disposition, and the self-directed learning ability of sophomore nursing students.

The title of the second previous research is Case-Based Learning Facilities Critical Thinking in Undergraduate Nutrition Education: Students Describe the Big Picture. This research published in 2014 which was written by Tara Harman, Brenda Bertrand, Annette Greer, Arianna Pettus, Jill Jennings, Elizabeth Wall-Basset, and Oyinlola Toyin Babatunde. This

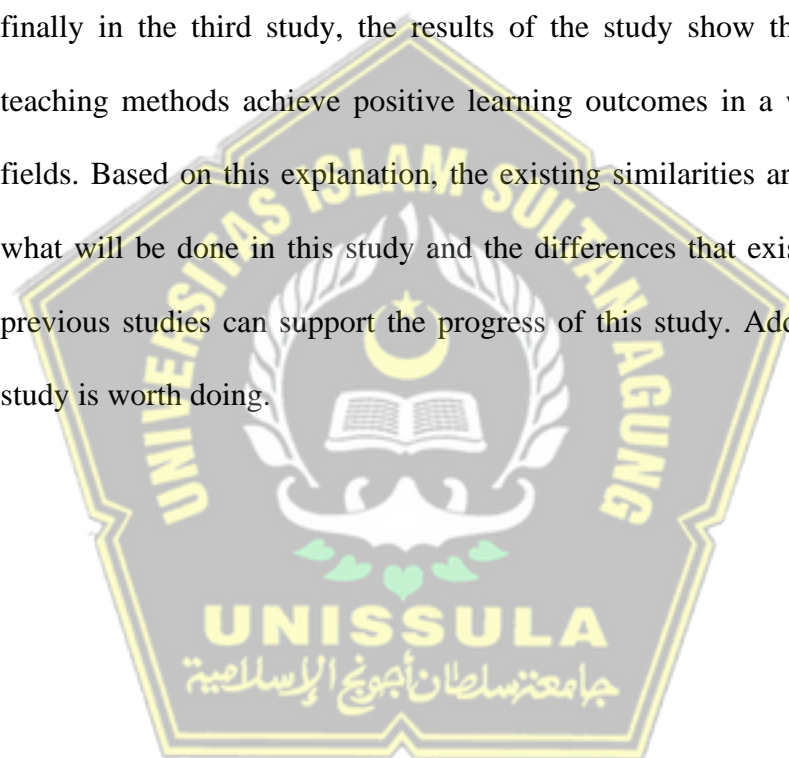
research has a purpose to examine student perspectives of their learning after immersion into case-based learning in nutrition courses. The subject of this research is students from three upper-level undergraduate nutrition courses. The method of this research is descriptive qualitative method. The instrument of this research is interview. The result of this research is scenario represents the ways that students described case-based learning, changes in student thought processes to accommodate case-based learning are illustrated in method of learning, then higher cognitive learning that was achieved from case-based learning is represented in problem solving and future details how students explained perceived professional competency gains from case-based learning. In addition, students acquired skills consistent with those identified as essential for professional practice, then the general concept of the Big Picture is repeated across themes and suggests that case-based learning prepares students for the multifaceted problems they may encounter in professional practice.

The title of the third previous research is Case-based Teaching: Using Stories for Engagement and Inclusion. This research published in 2020 which was written by Erin Rae Hoffer. This research has a purpose to verify the effectiveness of storytelling in case based teaching with a focus on engagement and inclusion, spanning traditional educational settings, online learning, and one-to-one virtual coaching models. The subject of this research is students. The method of this research is descriptive qualitative method. The instrument of this research is survey which use storytelling to

students. The result of this research is case-based teaching methods achieve positive learning outcomes in a wide range of fields. The methods are effective in on-ground and online settings, with one-to-one and group models. Cases can help students grasp concepts, develop skills, become more engaged, and satisfied in the learning process. In addition, cases can help faculty develop more inclusive learning environments.

The similarity of the 3 previous studies is that all three of them have an outline of objectives to examine the use of Case Based Learning (CBL) in teaching learning process. While the differences from the 3 previous studies include differences in the year of publication, subjects, methods, instruments, and of course the results. The first study was published in 2016, the second study in 2014, and the third study in 2020. The subjects for the first study were nursing students of nursing faculties and clinical nurse, while the subjects in the second study were students from three upper-level undergraduate courses. Teachers of English at public primary and secondary schools, and 70 3rd year students in the ELT Department of a state university who were taking the TEYL 1 course, and the subjects in the third study were students. The methods used are experimental qualitative in the first study, qualitative design in the second study, and descriptive qualitative in the third study. While the instrument used in the first study was test, the instrument used in the second study was interview, and the instrument used in the third study was a survey.

Finally, there are different results of the previous studies. In the first study, the results show that the application of a CBL program during a pathophysiology course was effective in improving the critical thinking disposition, and the self-directed learning ability of sophomore nursing students; while the second study resulted that students acquired skills consistent with those identified as essential for professional practice and finally in the third study, the results of the study show that case-based teaching methods achieve positive learning outcomes in a wide range of fields. Based on this explanation, the existing similarities are the same as what will be done in this study and the differences that exist in the three previous studies can support the progress of this study. Additionally, this study is worth doing.



CHAPTER III

METHOD OF THE STUDY

This chapter is divided into seven parts. They are Design of the Study, Subject of the Study, Data of the Study, Instrument of the Study, Technique for Collecting Data, Data Collecting Procedure, Data Analysis.

3.1 Design of the Study

This study used quantitative approach. Quantitative research is an organized investigation of phenomena through the collection of numerical data and the implementation of statistical, mathematical, or computational techniques (Adedoyin, 2020). Furthermore, Williams (2011) in Apuke (2017) notes that quantitative research begins with problem definition, generation of hypothesis or research questions, review of relevant literature, and quantitative data analysis.

Sukamolson (2007) in Apuke (2017) states that there are several types of quantitative research which can be classified for instance as: survey research, correlational research, experimental research and causal-comparative research. Experimental research are often designed specifically for technology and insight, while simultaneously contributing to technological innovation and technical understanding. Thus here are a number parallels between the realization of experimental processes and processes of technological development which are often the focus of design research where experimental activities form an important part of the wider

scientific endeavour. There are three types of exploratory approaches in experimental research, they are pre-experimental, true-experimental, and quasi-experimental. Pre-experimental conforms to experimental design conventions, but no control conditions are used. The design of true-experimental where participants are randomly assigned including controls to be included the treatments. The quasi-experimental where participants are non-randomly included in the treatments or participants can experience natural experimental actions (Cash, Stanković, & Štorga, 2016). This study used experimental research which is quasi-experimental research to find out students' critical thinking on reading comprehension with use case based learning. The design of quasi-experimental research is presented as follows:

Table 3.1 Design of Quasi-Experimental Research

Experimental	O ₁	X	O ₂
Control	O ₃		O ₄
O ₁ and O ₃	: Pre-test		
X	: treatment for group of experimental using CBL		
O ₂ and O ₄	: Post-test		

(Cohen, Manion, & Morrison, 2007)

According to Adèr (2008) in Apuke (2017) there are certain things that researcher should consider when starting experimental research. That is the expected outcomes of the research, how to analyze the outcomes, the limitations associated with the research such as reachable participants and

their relevance, and the suitability to represent the research population. Experiments relate to the process of supporting, rejecting, or testing a hypothesis to gain insight into the cause and effect of something when a particular factor is manipulated.

3.2 Subject of the Study

This sub chapter discusses the population and sample of the study.

3.2.1 Population

The entire case from which a researcher's sample is extracted is called population. Population generally refers to the number of people living in a particular country. The population in statistic is the entire group that needs to find some information about it. For field research, it may be desirable to use population groups defined by administrative boundaries such as countries or a state (Taherdoost, 2016). In conclusion, the population is the group of the object which represents all of subject research to be researched.

The population of this study was the eleventh grade students of SMA N 2 Semarang in academic year of 2021/2022 which consists of around 360 students. The school is located on Jl. Sendangguwo Baru, Gemah, Semarang City.

3.2.2 Sample

Sample is any part of a fully defined population. The sample needs to be representative in order to draw accurate conclusions. A typical sample is one in which all members of the population may have equal and mutually

exclusive choices. The acquisition of data from a smaller group or subset of the total population in such a way that the knowledge obtained is representative of the total population (however defined) under study. This smaller group or subset is the sample (Cohen, Manion, & Morrison, 2007). Sampling is also the process of selecting a range of people to be surveyed. There are two types of sampling methods. First, probability sampling which means all elements in the population are equally likely to be sampled. Second, non-probability sampling which is often related to case study research and qualitative research (Taherdoost, 2016).

There were two classes as the sample of the study. One class was an experimental group and another class was a control group. In determining the experimental and control group, this study used non-probability sampling which there is no possibility to use randomization to select the sample. The types of non-probability sampling are quota sampling, snowball sampling, convenience sampling, and purposive or judgmental sampling. This study used purposive sampling to select the sample. Purposive sampling is selecting participants based on some criteria. The criteria of taking the sample are based on teacher's information and my experience during Internship III. The criteria that used both classes have the same ability.

From the data above, the writer took two classes, they were XI MIPA 3 as the experimental class and XI MIPA 4 as the control class because they have cognitive level of achievement in reading comprehension

based on the teacher's information and my experience while teaching I was there. The class samples are as follow:

Table 3.2 Sample of theStudy

SAMPLE			
Experimental group		Control Group	
XI MIPA 3	→ 36	XI MIPA 4	→ 36
Total of sample = 72			

3.3 Data of the Study

This sub chapter discusses about types of data and variable. The discussion is as follows:

3.3.1 Types of Data

The data used in this study was quantitative data. It uses research data within the type of numbers and statistical analysis (Sugiyono, 2012). According to Cohen, Manion, & Morrison (2007) quantitative data analysis is a powerful form of research which stems partly from the positivist tradition which is often associated with large-scale research, but can also carry out small-scale investigations, with case studies, action research, correlational research and experimentation. According to Leedy and Ormrod (2001) in Apuke (2017) there are three types of exploratory approaches in experimental research, they are pre-experimental, true-experimental, and quasi-experimental. Pre-experimental plans include independent variables that do not change or controls that are not randomly selected. The design of true-experimental leads to a systematic approach to

quantitative data collection that incorporates mathematical models into the analysis. The quasi-experimental design includes a non-random selection of study participants. Therefore, this study used quasi experimental research which used a quantitative data from tests instrument.

3.3.2 Variables of the Study

Variable is term often used in research project. Variables can be defined in the form of elements that can be measured throughout the operational process. Therefore, it is important to define variables so that it can accurately explain the relationship between them. There is no limit to the number of variables that can be measured, but the more variables there are, the more complex the survey and the more complex the statistical analysis. There are different types of variables and the impact on research also different (Kaur, 2013). The types of variables are as follows:

a. Independent variable

Independent variable is the leading variable and the dependent variable is the result. However, the independent variable is the active variable, manipulate the value of the variable to see how it affects another variable. In conclusion, the independent variable is variable which can influence another variable. The independent variable (X) of this study is Case-Based Learning.

b. Dependent variable

Dependent variable is the variable affected by the independent variable. The dependent variable depends on the

independent variable. In conclusion, the dependent variable is variable that can be influenced by independent variable. The dependent variable (Y) of this study is students' critical thinking skill on reading comprehension.

3.4 Instrument of the Study

Research instrument is a device which used for collecting data to make the work becomes easier to get better, complete, and systematic result in order to make the data easy to be processed by the researcher. This study used test as the instrument. According to Cohen, Manion, & Morrison (2007) the purpose of test is for answering evaluation question and ensuring is test what it is supposed to be testing. Therefore, the test is used for knowing how far the students' ability or knowledge in mastery the text.

3.4.1. Test

Furthermore, there are two tests which this study, they are pre-test and posttest. Specifically, multiple choice test items were used to measure students' critical thinking on reading comprehension of analytical exposition text. In constructing the test, the questions adapted from internet and e-books which materials are based on the curriculum. The number all of the questions were 25 items with time allocation was 60 minutes in pre test and 50 minutes in pos test. In scoring, each number is given score "4" point to the students who answer correctly and the score "0" point to the students who answer wrongly.

3.4.2. Scoring Technique

There are 4 indicators of critical thinking that have been known which include aspects of interpreting, analyzing, evaluating, and concluding. The domains of cognitive processes include in Higher Order Thinking Skills (HOTS) are the domains of analysis, evaluation, and create. The cognitive process domain is used as a reference for compiling HOTS questions (Laili, Aini, & Christanti, 2020).

The number all of the questions were 25 items with time allocation was 60 minutes in pre test and 50 minutes in post test. In scoring, each number is given score “4” point to the students who answer correctly and the score “0” point to the students who answer wrongly.

3.4.3. Instrument Validity

Validity basically means measure what should be measured (Taherdoost, 2016). It means validity can be described as how far is the accuracy and the precision of an instrument in measuring. Research is legitimate if the rationale behind it is justified and, therefore the conclusion drawn and the explanations given can withstand inferences and explanations that conflict with each other. Validity and warranty are closely related (Cohen, Manion, & Morrison, 2018). Based on the explanation, the purpose of the validity is to know how to measure whether a test result is acceptable or not.

This study used face and content validity by expert judgment to examine the validity of test items through rubric validation which can be seen in appendix. Content validity includes evaluation of new research tools

to ensure that it includes all critical elements and removes unwanted elements from specific building areas. Face validity is a subjective judgment of the operationalization of a construct to what extent a measure appears to be associated with a particular construct, in the judgment of non-expert such as test takers. It means a test has face validity if its content only appears relevant to the person taking the test. It evaluates the performance of the test in terms of appropriateness, readability, consistency of style and formatting, and clarity of the language used. (Taherdoost, 2016).

3.4.4. Instrument Reliability

According to Taherdoost (2016) reliability is defined as the extent to which the measurement of a phenomenon gives stable and consistent results that also concerned with repeatability. Reliability testing is important because it relates to the consistency between the components of the measuring device. Based on the explanation, reliability is important for research, but it is not enough unless combined with validity. In other words, for a test to be reliable, it must also be valid. This study used Cronbach's Alpha to measure the reliability of the test. The formula of the Cronbach's Alpha as follows:

$$Alpha = \frac{n \cdot r_{ii}}{1 + (n - 1)r_{ii}}$$

n : the number of items in the test

r_{ii} : the average of all the inter-items correlation

The result of measuring the test by using Cronbach's Alpha can be analyzed the coefficient of Cronbach's Alpha reliabilities formula with standard of reliability as follows:

Score	Standard
>0.90	Very high reliable
0.80-0.90	High reliable
0.70-0.79	Reliable
0.60-0.69	Minimally reliable
<0.60	Unacceptably low reliable

3.5 Data Collecting Procedure

In the data collecting procedure of the study, there are some steps for conducting the research. The steps are as follows:

1. Choosing population of the study, it was the eleventh grade students of SMA N 2 Semarang in academic year of 2021/2022.
2. Selecting two groups from the population. They were XI MIPA 3 as experimental group and XI MIPA 4 as control group.
3. Conducting the quasi experimental with some steps:
 - a. Try Out

Before conducting the study, try out was given to XI MIPA

1. The purpose of the try out result will be beneficial to gather evidence to support the validity and reliability instrument. In this try out, the material test is the reading comprehension of analytical exposition text which consist of 50 multiple choice questions in 60 minutes.

- a. Pre-test

This test is used to find out the result of students' ability before they get the treatment. In the test, both of groups were asked to answer 25 multiple choice questions in 60 minutes.

c. Giving treatment

This study conducts the treatment in experimental group with the teaching activity by using Case Base Learning method, besides in control group, this study conducts the treatment by using conventional method. In the main teaching, the teacher explained the material about analytical exposition text such introducing, how to identify, kinds of generic structure and some examples. After all, the teacher began activity by using Case Based Learning method.

d. Post-test

In the post test, the students answered 25 multiple choice questions in 50 minutes. This test is used to find out the result whether the treatment is successful or not.

4. Collecting the post-test to score the test.
5. Determining the result of two groups.
6. Analyzing the data.

3.6 Data Analysis

The following are the steps in collecting and analyzing the data of this study, they are:

1. Tabulating the data (table preparation).

2. Scoring of the test. The total score was calculated by using the following formula:

$$TS = \frac{SC}{MS} \times 100$$

TS : Total Score

SC : Students' Score

MS : Maximum Score

3. Analyzing the data statistically to process the data from both of control group and experimental group. The multivariate normality in this study was analyzed by using one-sample Kolmogorov Smirnov in which the standard normality is 0.05. The distribution is normal if sig (2-tailed) > 0.05 on the contrary and the distribution is not normal if sig (2-tailed) < 0.05 (Ghozali, 2011).
4. Applying homogeneity test for knowing that the experimental and control group have the same ability.
5. Analyzing the data by using t-Test formula based on the data gathered. This study used SPSS (*Statistical Product and Service Solutions*) for windows release version 26.0. The hypothesis is accepted if sig (2-tailed) < 0.05 on the contrary and the hypothesis is rejected if sig (2-tailed) > 0.05 (Ghozali, 2011).

CHAPTER IV

ANALYSIS OF RESULT AND DISCUSION

This chapter explains about the analysis and interpretation of the data. This chapter consists of Description of the School, Description of the Respondents, Validity and Reliability of the Research Instrument, Pre Test Data Analysis, Treatment Activities, Post Test Data Analysis, and Discussion of the Research Finding.

4.1 Description of the School

This research was conducted at SMA N 2 Semarang in academic year 2021/2022. SMA N 2 Semarang is one of the state senior high schools in Semarang which is located at Jl. Sendangguwo Baru No.1 Pedurungan, Semarang. This school was established in August 1950 which is currently accredited A. There are 1402 students and 102 teachers and employees in this school. This school has 36 classes, 5 laboratories, toilets, students' organization room, worship place, canteen, field, hall, and some rooms are used for teachers and employees. The tenth grade has 12 classes which consist of 10 classes for MIPA and 2 classes for IPS. The eleventh grade has 12 classes which consist of 10 classes for MIPA and 2 classes for IPS. Additionally, the twelfth grade has 12 classes which consist of 10 classes for MIPA and 2 classes for IPS.

This school has the meaning of branding, namely “BERBUDAYA”, where each letter is an abbreviation that has meaning. The meaning of

“BERBUDAYA” is Budi pekerti luhur (noble character), Elegan (elegant), Ramah (gracious), Berintegritas (integrity), Unggul (superior), Damai (peace), Asri (beautiful), Yakin (convinced), and Akhlak mulia (noble morals). In carrying out the meaning of branding, as for the efforts made such as hone the ability and willingness of students with extracurricular activities and student organizations both in academic and non-academic and supported by adequate facilities and has won national and international achievements, provide a forum for students who excel to have the opportunity to take part in competitions, and establish relationships with several campuses, government institutions, and public or private companies.

This school uses the 2013 Curriculum in teaching and learning process. In implementing the 2013 Curriculum, this school seeks to make service strategies according to the needs of students in increasing competence in building local, national, and global competitiveness. In order to support the process, this school is supported by several facilities available in each class such as desks and chairs, whiteboards, cupboards, trash cans, hand washing stations, electric current, LCD projector, LCD projector screen, speakers, central speaker, and wifi.

4.2 Description of the Respondents

The respondents of this study were students who have the same level in grade, average age, and capability in English learning. The population of this study was all of the eleventh graders of SMA N 2 Semarang and two

classes were taken as the sample. They were XI MIPA 3 as the experimental class and XI MIPA 4 as the control class. The table below is the data of the respondents:

Class	Gender		Total
	Male	Female	
XI MIPA 3 (Experimental class)	14	22	36
XI MIPA 4 (Control class)	17	19	36
Total respondents	31	41	72

The table shows that the XI MIPA 3 as the experimental class has 36 students which consist of 14 males and 22 females. Additionally, the XI MIPA 4 as the control class has 36 students which consist of 17 males and 19 females. Therefore, the total of the respondents were 72 students.

4.3 Validity and Reliability of Research Instrument

This subchapter presents the result of Try out, Validity and Reliability.

4.3.1 Try Out

The try out was given to the XI MIPA 1 which has 36 students. The purpose of the try out result is to gather evidence to support the validity and reliability instrument. The try-out test was conducted on Wednesday, February 23rd 2022. The material test was the reading comprehension of analytical exposition text which consists of 50 multiple choice questions and the time allocation was 60 minutes.

The results of the validity and reliability based on try-out test can be used as a consideration in determining the total number of test in the instrument.

4.3.2 Validity

This study used face and content validity by expert judgment to examine the validity of test items through rubric validation which can be seen in appendix 8. The English teacher validated the test based on the material and syllabus which were being used by the teachers of the eleventh graders. Face validity is a subjective judgment of the operationalization of a construct to what extent a measure appears to be associated with a particular construct, in the judgment of non-expert such as test takers. It means a test has face validity if its content only appears relevant to the person taking the test. It evaluates the performance of the test in terms of appropriateness, readability, consistency of style and formatting, and clarity of the language used. Content validity includes evaluation of new research tools to ensure that it includes all critical elements and removes unwanted elements from specific building areas.

Level	The number of Item
Valid	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50
Invalid	-
Total	50 items

There were 50 items which were used in try-out test. Based on the result of rubric judgment of try out, there were 50 items which were valid, and there was no item which was invalid.

4.3.3 Reliability

This study used Cronbach's Alpha Reliabilities formula in SPSS 26 version. The table below is the result of reliability test:

Reliability Statistics	
Cronbach's Alpha	N of Items
0.921	50

The correlation of each item with the sum of all other items is the correlation coefficient between items given to Cronbach's Alpha. It means a measure of internal consistency between items (not for the example, the person) or the average correlation among all items in question and is used for multi-item scale. Reliability level is acceptable at 0.8, although others suggest that it is acceptable if 0.6 or more (Cohen, Manion, & Morrison, 2007). In addition, the result of reliability test shows that $0.921 > 0.6$. It can be concluded that the instrument is reliable.

4.4 Pre Test Data Analysis

This subchapter presents Pre-Test Standard Normality, Pre-Test Standard Homogeneity, and Pre-Test Mean Score.

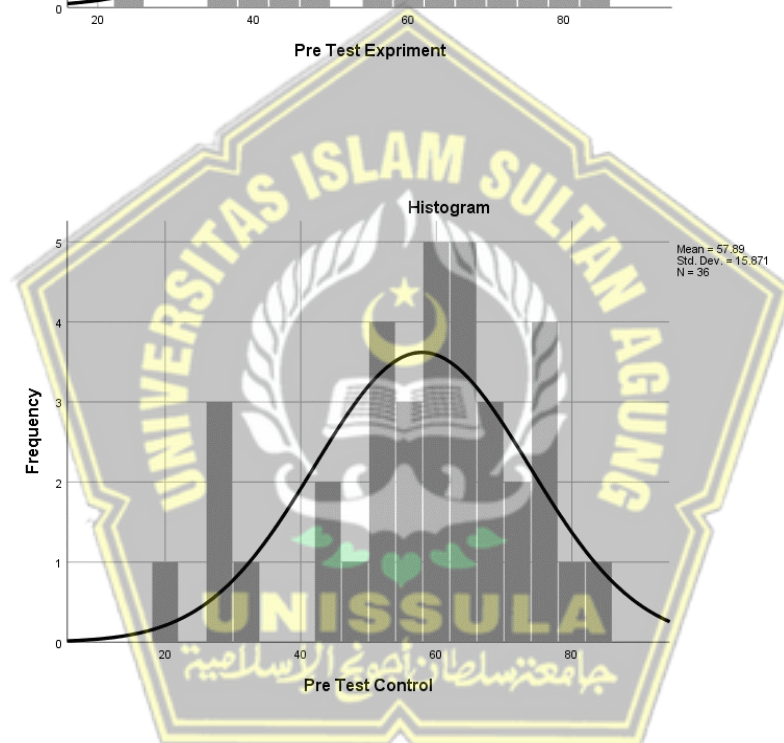
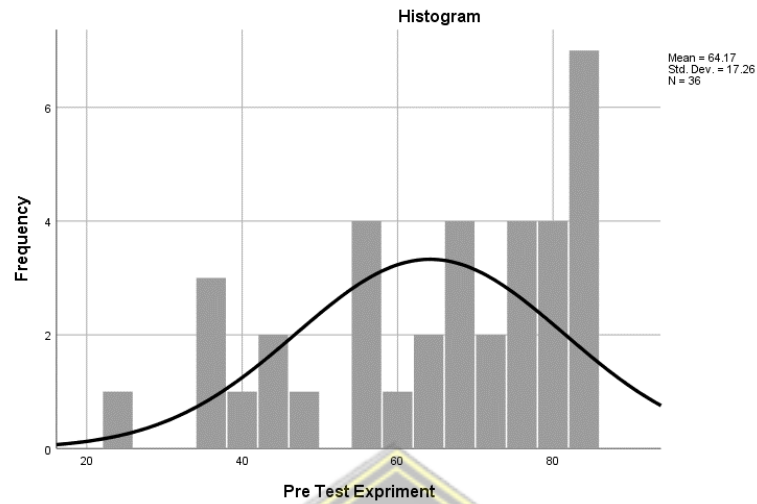
4.4.1 Pre-Test Standard Normality

Pre-test of an experimental class and a control class were conducted on March 14th 2022. The experimental class was students of XI MIPA 3 which has 36 students and the control class was students of XI MIPA 4 which has 36 students. The purpose of pre-test was to find out the result of students' ability before treatment was given. The students were given 25 multiple choice questions with time allocation was 60 minutes.

After the pre-test was completed, the next step was analyzing the normality of the data. Analyzing the multivariate normality in this study was done by using one-sample Kolmogorov Smirnov which the standard normality is 0.05. The distribution is normal if sig (2-tailed) > 0.05 on the contrary and the distribution is not normal if sig (2-tailed) < 0.05 (Ghozali, 2011). The pre-test standard normality was analyzed by using SPSS 26 version. The result can be seen in the following table:

Tests of Normality				
Kelas		Kolmogorov-Smirnov ^a		
		Statistic	df	Sig.
Hasil Belajar	Pre Test Experiment	.142	36	.063
	Pre Test Control	.136	36	.089

Based on the table, the result of pre-test experimental class normality of significant 2-tailed is 0.063 which higher than 0.05 then the result of pre-test control class normality of significant 2-tailed is 0.089 which higher than 0.05. Therefore, it can be concluded that the sample were normal. The data results curves are as follows:



4.4.2 Pre-Test Standard Homogeneity

After the standard normality test was done, it can be continued with the standard homogeneity test. The standard homogeneity test was for knowing that the experimental and control group have the same ability. The data of experimental and control class were said to be homogenous if the significance scores of the data $\geq \alpha$ (0.05). The pre-test standard homogeneity

was analyzed by using SPSS 26 version. The result can be seen in the following table:

Test of Homogeneity of Variance					
		Levene Statistic	df1	df2	Sig.
Hasil Belajar	Based on Mean	2.093	3	140	.104
	Based on Median	1.485	3	140	.221
	Based on Median and with adjusted df	1.485	3	128.040	.222
	Based on trimmed mean	1.942	3	140	.126

Based on the table, the result of homogeneity test shows that the significance score of the experimental and control class was $0.104 \geq 0.05$. Therefore, it can be concluded that all sample based on experimental and control class were equal or homogenous or have same variance.

4.4.3 Pre-Test Mean Score

The pre-test result of experimental and control class were counted by using T-test after the normality and homogeneity test were done. The result of T-test by using independent sample T-test can be seen in the following table:

Group Statistics					
	Kelas	N	Mean	Std. Deviation	Std. Error Mean
Hasil Belajar	Experimental	36	64.17	17.260	2.877
	Control	36	57.89	15.871	2.645

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Hasil Belajar	Equal variances assumed	.882	.351	1.606	70	.113	6.278	3.908	-1.516	14.072
	Equal variances not assumed			1.606	69.513	.113	6.278	3.908	-1.517	14.073

Hypothesis used in this test were:

H₀ : there is no significant difference of the mean score between experimental and control class in the pre-test

H₁ : there is a significant difference of the mean score between experimental and control class in the pre-test

Based on the table, it can be seen that the mean score of pre-test in experimental class is 64.17 and the mean score of pre-test in control class is 57.89. It can also be seen that both classes have an average score that is nearly as significant. Based on the table, it shows that Sig. (2-tailed) 0.113 \geq 0.05 which means H₀ is accepted. Therefore, it is important to do the

treatment because there is no significant difference of the mean score between experimental and control class in the pre-test.

4.5 Treatment Activities

The treatments were done after conducting the pre-test. There were two classes in which the research is conducted, namely the experimental class and the control class. The treatments that had been carried out were twice in each class. In conducting the experimental research, the experimental class was taught by using Case-Based Learning method, while the control class was taught by using conventional method.

4.5.1 Experimental Class

This study used XI MIPA 3 as the experimental class. XI MIPA 3 has 36 students which consist of 14 males and 22 females. The experimental class was taught by using Case-Based Learning method. The treatment was carried out twice with the following explanation:

1. **First Treatment**

The first treatment was conducted on March 21st, 2022 at 10.45 – 11.45. This treatment class was carried out by using Google Meet. Firstly, the students were checked for class attendance and conducted opening with greeting and interactions to activate the atmosphere. Secondly, the students were given introductory material regarding the introduction of Explanation Text such as definition, objective, characteristic, types, generic structure,

and examples. Next, the students were asked to recall the Analytical Exposition Text material that had been given.

Thirdly, the students were given the explanation about Case-Based Learning method such as definition, objectives, and procedure applied to learning. Next, it started to get into project discussion that was done in the next treatment. The students were divided into 6 groups where each group consisted of 6 members. One person from the group was appointed to be the group leader, and the others served as presentation designers and drafters of the discussion result sheet. After group formation, each group was given a case in the form of an explanation text where each group got a different case. Then, the students were given an explanation about the instructions for working on the project.

The instructions are the case in the form of an Explanation Text, all members in the group must collaborate and discuss each other to analyze a case and evaluate possible alternative solutions, all information obtained must be accompanied by references or sources, the results of the discussion are written in the form of an Analytical Exposition Text, PPT is presented per group about 10 to 15 minutes with QnA session (other groups who ask got additional points), and presented pictures or illustrations was considered very good.

After that, the students were given time to discuss all the given material beforehand and asked if there were questions about the material or

the project to convey until they understood. Lastly, the class ended by reviewing a little material and closing.

2. Second Treatment

The second treatment was conducted on March 28th 2022 at 10.45 – 11.45. This treatment class was carried out by using Google Meet. Firstly, the students were checked for class attendance and conducted opening with greeting and interactions to activate the atmosphere. Secondly, it was a presentation session. The first presentation was done by group 4 which was with case about corruption. The second presentation was done by group 6 which was with case about fast food. The third presentation was done by group 2 which was with case about obesity.

The last session of each group's presentation is a Question and Answer (QnA) session where the answers to the questioner are distributed to the class group because time is very limited. Thirdly, in recent times, the students had received responses such as comments, suggestions, and criticisms of the presentation result and also the discussion result sheet. After that, the students were given time to discuss all the the given material beforehand and asked if there were questions about the material or presentation to convey until clear. Lastly, the class ended by reviewing a little material and closing.

4.5.2 Control Class

This study used XI MIPA 4 as the control class. XI MIPA 4 has 36 students which consist of 17 males and 19 females. The control class was

taught by using conventional method. The meeting was carried out twice with the following explanation:

1. First Meeting

The first meeting was conducted on March 21st 2022 at 09.45 – 10.45. This class was carried out by using Google Meet. Firstly, the students were checked for class attendance and conducted opening with greeting and interactions to activate the atmosphere. Secondly, the students were asked to share the opinions about the content of the material to be discussed such as what can be explained, what phenomenon is, and any kind of phenomenon. Thirdly, the students were given explanation about the introduction of Explanation Text such as definition, objective, characteristic, types, generic structure, and examples. Next, the students were asked to recall the Analytical Exposition Text material that had been given.

After that, the students were asked to identify the generic structure of the presented explanation text. Then, the students were also asked to identify the generic structure of other and different explanation texts independently. The students were asked to recall the generic structure of the analytical exposition text. After all, the students were given time to discuss the material that had been given or if there were questions to be asked. Then, the students were given assignments from the student workbook that was collected that day. Then, the students were given assignments from the

student workbook that was collected next day. Lastly, the class ended by reviewing a little material and closing.

2. Second Meeting

The second meeting was conducted on March 28th 2022 at 09.45 – 10.45. This class was carried out by using Google Meet. Firstly, the students were checked for class attendance and conducted opening with greeting and interactions to activate the atmosphere. The students were asked to recall the material and learning that had been done at the previous meeting. Secondly, the students discussed the result of the correct answers to the assignments that had been given. Thirdly, the students were given the next material which was about the language features in that chapter. The students re-learned and recalled the formulas of the language features that applied to the text.

The students were asked to give an example and identified sentences that match the language features that had been discussed. Then, the students identified the language features that apply to a text. After all, the students were given time to discuss the material that had been given or if there were questions to be asked. Then, the students were given assignments from the student workbook that was collected that day. Lastly, the class ended by reviewing a little material and closing.

4.6 Post Test Data Analysis

Post-test of an experimental class and a control class were conducted on April 11th 2022. The experimental class was students of XI MIPA 3

which has 36 students and the control class was students of XI MIPA 4 which has 36 students. The purpose of post-test was to find out the result of students' ability after treatment was given or whether the treatment is successful or not. The students were given 25 multiple choice questions with time allocation was 50 minutes.

After post-test was done in experimental and control class, the post-test result of experimental and control class were analyzed by using T-test. The result of T-test by using independent sample T-test can be seen in the following table:

Group Statistics					
	Kelas	N	Mean	Std. Deviation	Std. Error Mean
Hasil Belajar	Experiment	36	75.11	13.244	2.207
	Control	36	72.22	11.864	1.977

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Hasil Belajar	Equal variances assumed	.164	.687	.975	70	.333	2.889	2.964	-3.022	8.799
	Equal variances not assumed			.975	69.168	.333	2.889	2.964	-3.023	8.801

Based on the table, it shows that the mean of the experimental class is 75.11 and the control class is 72.22 which means the ability of the control class is higher than the experimental class. In addition, the table shows that Sig. (2-tailed) $0.333 \geq 0.05$ which means that H_0 was accepted and H_1 was rejected. It can be concluded that there is no significant difference in students' mean reading scores between the experimental class which was taught by using CBL and the control class which was taught not by using CBL.

4.7 Discussion of the Research Finding

The purpose of the tests was to find out whether the use of CBL is effective or not in improving students' critical thinking skill in the eleventh grade at SMA N 2 Semarang in academic year 2021/2022. The results of the study showed that students' post-test in both the experimental and control class is lower than of the students' pre-test. It means that the treatment in the experimental class cannot influence reading comprehension on analytical exposition text and is considered not effective.

Pre-test was given to both classes to find out the result of students' ability before treatment given which means to know about students' basic ability in reading comprehension. The result showed that the mean score of pre-test in experimental class is 64.17 and the mean score of pre-test in control class is 57.89. It can also be seen that both classes have an average score that is nearly as significant. Based on the table, it shows that Sig. (2-tailed) $0.113 \geq 0.05$ which means H_0 is accepted. Therefore, it is important

to do the treatment because there is no significant difference of the mean score between experimental and control class in the pre-test. After doing the pre-test, the students got treatments for twice. After that, the students did the post-test to find out the result of students' ability after treatment was given or whether the treatment is successful or not. The result shows that the average of experimental class is 75.11 and for the control class is 72.22. The post-test result from both classes were counted by using T-test. The result shows that the mean of experimental class is 75.11 and for the control class is 72.22. In addition, it can be seen that sig (2-tailed) $0.333 \geq 0.05$ which means there was no significant difference in students' mean reading scores between experimental class which is taught by using CBL and control class which is not taught by using CBL.

The results of study shows that the use of Case-Based Learning is not effective or does not show significant change which may be due to several things or reasons including, 1) the treatment was given through online class in accordance with school rules at that time. The treatment lasted for 60 minutes which was 2 hours of learning at that time. 2) Lack of monitoring of student participation or activity during the treatment. This is evidenced when students turn on the camera when absent and during presentations but on the other hand the students turn off the camera, as a result only a few and most of the same students interact. 3) The limited interaction that was carried out in the online class so that they cannot control each other. This is evidenced that there were students who complain that

their colleagues in their group do not participate in projects outside of lesson time. 4) Treatments that were carried out online and with little time lead to a lack of properly controlling student understanding. This is evidenced by some students who asked questions about things that have been explained and discussed during online classes but are asked again outside of lesson time.

Additionally, this study has an outline of objective to examine the use of Case Based Learning in teaching English same as the previous studies but especially in reading comprehension. However, this study used quantitative design while the previous studies used qualitative design. The other different things between this study and the previous study are the subjects and the instrument. The result of this study found that Case Base Learning is not effective of using Case Based Learning while the previous studies have positive outcomes or is effective result on the variables used. Finally this study does not strengthen the previous studies on the effectiveness of using Case Based Learning.

CHAPTER V

CONCLUSION AND SUGGESTIONS

This chapter presents the conclusion about study that had been discussed in the previous chapters and suggestions that are proposed to support teaching and learning process especially in reading comprehension.

5.1 Conclusion

Based on the previous results, it could be concluded that the use of Case-Based Learning could not improve students' reading comprehension especially on Analytical Exposition text. From the result, there was not a significant difference in students' mean reading scores between experimental class which is taught by using CBL and control class which is taught not by using CBL. The calculation shows that the use of Case-Based Learning is not effective to improve the eleventh grade students' reading comprehension especially on analytical exposition text.

Based on the explanation of several things or reasons for the ineffective use of Case-Based Learning in this study, several suggestions can be made, including, 1) Giving treatment using the Case-Based Learning method is carried out directly in the classroom with real interaction so that it can be monitored as a whole how students discuss and complete the given project. 2) The treatment must be given in sufficient time in accordance with the flow of treatment carried out. 3) Giving treatment can be preceded by a motivational reference so that when the treatment takes place the students

can be active naturally because they have enjoyed it. 4) The teacher may look for another strategy which can make the students interested and enjoy in English learning, then the students have to practice the reading more frequently and learn vocabularies more which can lead to a high level of English reading ability.

5.2 Suggestion

According to the results, it hopes that this study could provide a beneficial contribution in the learning and teaching process. This study is expected to be useful for English teacher of eleventh grade students in teaching and learning reading comprehension especially on analytical exposition text.

Eventually, there are some suggestions for English teacher as well as for the students, the school, and the future research. The suggestions are as follow:

1. The students have to learn English independently and using various that can be used to understand a text in English. Dealing with reading, the students have to practice the reading more frequently and learn vocabularies that have never been obtained to improve their reading comprehension.
2. The teacher has to vary some methods or strategies to teach the students. It will reflect the students' ability and more enjoy the teaching and learning process.

3. The school could contribute to improving the classroom environment which leads to the improvement of school in teaching and learning process.
4. The future research should encourage the respondents in conducting the deeper research on the some topic research by using different target skills and genre.



REFERENCES

- Abdelhalim, S. M. (2017). Developing EFL students' reading comprehension and reading engagement: Effects of a proposed instructional strategy. *Theory and Practice in Language Studies* , 37-48.
- Adedoyin, O. B. (2020). Quantitative Research Method.
- Apuke, O. D. (2017). Quantitative research methods : A synopsis approach. *Arabian Journal of Business and Management Review (Kuwait Chapter)* , 40-47.
- Ardana, N. P. (2020). Pengaruh model pembelajaran creative problem solving berbantuan eksperimen terhadap kompetensi pengetahuan IPA siswa kelas V. *Jurnal Mimbar Ilmu* , 110-119.
- Cash, P., Stanković, T., & Štorga, M. (2016). *Experimental Design Research*. Switzerland: Springer.
- Chaudhury, A. B. (2010). Statistics without tears: Populations and samples. *Industrial Psychiatry Journal* , 60-65.
- Çimen, Ş. S. (2021). Use of the case-based method in getting prepared for young learners' EFL classes. *IJCI* , 1464-1477.
- Cohen, L., Manion, L., & Morrison, K. (2018). *Research Methods in Education 8th Edition*. New York: Routledge.
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research Methods in Education Sixth Edition*. USA: Routledge.
- Demirci, C. (2017). The effect of active learning approach on attitudes of 7th grade students. *International Journal of Instruction* , 129-144.
- Diao, J. (2020). The concept, design, implementation, and assessment of case-based learning in an information literacy classroom. *International Journal of Librarianship* , 108-127.
- englishadmin.com. (2018, November). *50 contoh soal analytical exposition dan jawaban*. Retrieved from <http://englishadmin.com/2018/11/50-contoh-soal-analytical-exposition-dan-jawaban.html>
- englishcafe.com. (2019). *ujian-nasional-analytical-exposition*. Retrieved from <https://www.englishcafe.co.id/ujian-nasional-analytical-exposition/>
- Erma, E., Dewi, H. K., & Giarti, S. (2019). Improving critical thinking skills using problem based learning on the media flash card. *International Journal for Educational and Vocational Studies* , 619-622.

- Frengki Wospakrik, S. S. (2020). The effect of implementation of learning method of case based learning on motivation and learning outcomes of student. *Journal Health of Studies* , 30-37.
- Ganie, R., Deliana, & Sinar, T. S. (2020). Identifying english text reading comprehension problems in senior high school students. *International Journal of Innovation, Creativity, and Change* , 803-817.
- Ghozali, I. (2011). *Aplikasi Multivariate : Dengan Program SPSS*. Semarang: UNDIP.
- Hasan, R., Lukitasari, M., Utami, S., & Anizar. (2019). The activeness, critical, and creative thinking skills of students in the lesson study-based inquiry and cooperative learning. *Jurnal Pendidikan Biologi Indonesia* , 77-84.
- itapuih.com. (2017, juni). *kumpulan soal analytical exposition*. Retrieved from <https://www.itapuih.com/2018/02/kumpulan-soal-analytical-exposition.html>
- Iyer, L. (2019). Critical Thinking and it's Importance in Education.
- Kaur, S. P. (2013). Variables in research. *IJRRMS* , 36-38.
- Laili, M., Aini, N., & Christanti, A. (2020). High order thinking skills (hots) dalam penilaian bahasa inggris siswa SMA. *Lintang Songo: Jurnal Pendidikan* , 18-125.
- Malupa-Kim, K. K. (2014). Implementing case studies in language teacher education and professional development. *ORTESOL Journal* , 10-18.
- Malupa-Kim, Kelch, K., & Miralynn. (2014). Implementing case studies in language teacher education and professional development. *ORTESOL Journal* , 10-18.
- Mukti, T. S., & Istiyono, E. (2018). Instrument for assessing the critical thinking ability of x grade high school students on biology learning. *BIOEDUKASI: Jurnal Pendidikan Biologi* , 107-112.
- Nae, N. (2019). Teaching english with the case method -a tentative approach. *EUROMENTOR JOURNAL* , 25-38.
- Nugroho, T., Anggani, D., & Hartono, R. (2019). English teachers' perception on strategies in teaching reading comprehension to motivate the students. *English Education Journal* , 56-61.
- Oslund, A. M. (2019). Reading comprehension research: Implications for practice and policy. *Policy Insights from the Behavioral and Brain Sciences* , 3-11.

- Roell, C. (2019). Using a case study in the EFL classroom. *ENGLISH TEACHING FORUM* , 24-33.
- Silfia, E., Ansyar, M., & Zaim, M. (2013). Students' difficulties in comprehending the analytical exposition texts at grade xi a of science program in Sman 3 Sungai Penuh. *Journal English Language Teaching (ELT)* , 102-110.
- Singh, M. K. (2017). Importance and benefits of learning outcomes. *IOSR Journal of Humanities and Social Science* , 65-67.
- Taherdoost, H. (2016). Sampling methods in research methodology; how to choose a sampling technique for research. *International Journal of Academic Research in Management* , 18-27.
- Taherdoost, H. (2016). Validity and reliability of the research instrument; how to test the validation of a questionnaire/survey in a research. *International Journal of Academic Research in Management* , 28-36.
- Tang, S., Asrifan, A., Chen, Y., Haedar, & Agussalim, M. (2019). The humor story in teaching reading comprehension. *JOURNAL OF ADVANCED ENGLISH STUDIES* , 77-87.
- Wospakrik, F., Sundari, S., & Musharyanti, L. (2020). The effect of implementation of learning method of case based learning on motivation and learning outcomes of student. *Journal Health of Studies* , 30-37.

