

**TEACHERS' STRATEGIES AND CHALLENGES IN CONDUCTING
HIGHER ORDER THINKING SKILLS (HOTS) – BASED ACTIVITIES IN
ENGLISH LANGUAGE CLASSROOM**

A Thesis



By
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NPM. 20540003

**MASTER OF ENGLISH EDUCATION
POSTGRADUATE PROGRAM
UNIVERSITAS PGRI SEMARANG
2024**

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Presented as partial fulfilment of the requirements
for Master Degree in English Education



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APPROVAL

This thesis was approved by the advisors for final examination on 29 July 2024

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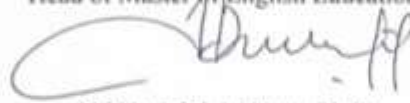
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DECLARATION OF ORIGINALITY

I affirm that this thesis entitled "Teachers' Strategies and Challenges in Conducting Higher Order Thinking Skills (HOTS) Based Activities in English Language Classroom" is entirely my own, except the words or ideas of other writers are specifically acknowledge according to accepted citation conventions. I have revised, edited, proofread, and ensured that this thesis is free of plagiarism.

CERTIFICATION OF AUTHORSHIP

I certify that I am the author of this thesis, and that any assistance I got during its production is properly recognized and mentioned in this thesis. I have also mentioned my sources (footnotes and endnotes) where I obtained statistics, thoughts, theories, or statements, whether quoted directly or paraphrased. I also admit that I created this thesis specifically to meet the requirements for the Master of English Education degree.

Semarang, August 2024



Niken Emiria Faradella
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MOTTO

"The function of education is to teach one to think intensively and to think critically. Intelligence plus character – that is the goal of true education." (Martin Luther King Jr.)

DEDICATION

This thesis is proudly dedicated to:

My great husband, Agus Khozin

My lovely daughter, Zilva Wihiba Khozin

My wonderful mother and father, Hermalia and Afif Muhammad

I can't thank you enough for always motivating me to finish this thesis.

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I would like to thank Allah SWT first and foremost for my blessing of being able to wake up and do the things I enjoy. I also would like to thank all the individuals that helped with this research.:

1. Prof.Dr. Harjito,M.Hum., as the Director of Pasca Sarjana of Universitas PGRI Semarang who gave permission to conduct this thesis.
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3. Dr. Wiyaka, M.Pd. as the first advisor who guide me patiently and wisely to finish it as soon as possible and gave me so much encouragement dealing with the research.
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Semarang,



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ABSTRACT

Niken Emiria Faradella, 2024. “Teachers’ Strategies and Challenges in Conducting Higher Order Thinking Skills (HOTS) - Based Activities in English Language Classroom”. Thesis. Advisor: Dr. Wiyaka, M.Pd., Dr. Ngasbun Egar, M.Pd.

This study investigated the strategies used by English teachers to promote Higher-Order Thinking Skills (HOTS) during the learning process, what factor that influence the teachers used the strategies, the challenges when using those strategies and how to overcome those challenges. The Indonesian government, specifically the Ministry of Education and Culture, has taken the lead in implementing the Merdeka Curriculum, a program designed to prepare students for the 5.0 era of society. The objective of this curriculum is to develop students who have the *Profil Pelajar Pancasila*, equipping them with the ability to use their knowledge and abilities effectively in practical circumstances. To achieve this, teachers must employ specific methodologies that enhance students' critical thinking abilities. The study focused on thirteen English senior high school teachers in Pekalongan Regency, with two selected for interviews and observations. Data were collected through a questionnaire, interviews, and direct observation. The data analysis involved quantifying the questionnaire responses, evaluating the open-ended questionnaire responses, and reviewing the transcripts from the interviews and classroom observation notes. Thematic analysis was used to interpret the data from interviews and classroom observation, while coding was employed to extract the transcripts and observation notes. The study revealed that the key tactics used by English teachers were project-based learning and open-ended questioning. The teachers applied those strategies because of certain factor such as the books and module that introduced by government. However, some teachers faced challenges in implementing these tactics in English classes, such as students' skill levels, teachers' expertise, and unfavourable perceptions.

Keywords: Teachers’ strategies and Challenge, Higher Order Thinking Skills (HOTS), English Language classroom.

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CHAPTER 1

INTRODUCTION

This thesis is concerned with the teachers' strategies and challenges, and factor that influence the teacher in implementing Higher-Order Thinking Skills based activity in English language classroom. The first chapter is aimed to discuss background, aim, purpose and specific research questions of the study.

1.1 Background of the Study

In the education system the key to determining the quality of graduate students is the educational curriculum, as it is always evaluated in terms of adaptation to the development of science, technology, and society needs. In the educational system in Indonesia, the curriculum that is applied is the 2013 curriculum and Merdeka Curriculum. These curriculums require teachers to develop their strategies to implement high order thinking skills or commonly called as HOTS in their teaching learning process through student-centred learning to enhance students' cognitive competence.

High Order thinking skills (HOTS) is applied in the classroom in 2013 curriculum to provide a higher level of learning in the cognitive, attitude, and psychomotor aspects. The application of the learning model become an opportunity for teachers to carry out learning activities at a higher order thinking skills level. Thus, HOTS is expected to enhance students' competence of scientific concepts to be implemented in their daily life.

In Indonesia, especially in Pekalongan, teachers are used to applying a teacher-centred approach in English class. This condition became a challenge when the 2013 curriculum was introduced, moreover when Merdeka Curriculum launched. 2013 curriculum requires teachers to develop their strategies in teaching to implement high order thinking skills (HOTS) in their classroom. However, implementing higher order thinking skills assists the students to develop their thinking quality which can also upgrade their skills values and apply their knowledge for solving problems and making the right decision (Heong et al., 2016). Thus, this challenge should be encountered to achieve the higher level of learning that can provide competence students to face the real life.

Higher Order thinking skills also can fit students' needs today's education that is required several skills called metacognitive skills. Higher order thinking skills also help the students prepare their secondary education (Setyarini & Ling, 2019) and prepare the students to compete at the international level and to face the new world of education which has been more sophisticated year by year. With these skills students are expected to have highly skilled, knowledgeable and good manners. Setyarini and Ling in their study also pointed out that students who have their own higher-order thinking skills can accomplish the intellectual freedom and handle their life easily without burdening other people.

Integrating students' higher-order thinking skill prevent students from making assumptions and easily explaining certain content without thinking. In contrast, a critical thinker students have the ability or skill to evaluate each statement (Rezaei et al., 2011). Rezaei and Derakhshan also emphasized that

critical thinking also prevents students from receiving wrong or incorrect information. Students with higher-order thinking skills are trained to analyse whether the information they have is true facts, so they will not think unilaterally, because the ultimate goal of integrating higher-order thinking skills into classroom activities is to consider some necessary evidence to assist students make correct judgments of something.

In the field of English teaching, higher order thinking skills can assist students to learn English more easily, for instance in speaking and writing skills (Setyarini et al., 2018). HOTS is the skills of analysing, applying, evaluating, creating, interpreting and integrating them with some concepts and information they have and making it a good conclusion, and expressing these ideas through language or oral explanation. According to the report of Farager and Huijser in their research (Faragher & Huijser, 2014) HOTS helps students with metacognition and awareness, enabling them to express their thoughts as words, which will also automatically improve students' writing skills. They also admitted that if students can evaluate their writing skills, they might take a positive attitude and benefit from education. Purnama and Nurdianingsih also emphasize that HOTS provides students with guidance on ideas about what they want to write. Through HOTS, students can also be trained to improve their speaking skills by explaining their ideas and trying to state their ideas to friends (Purnama & Nurdianingsih, 2019). Setyarini and Ling (2019) found that students with critical thinking skills are willing to express their ideas freely before class without worrying about their friends' judgement or mistakes. When students combine

their advanced thinking skills with English production skills, these advantages will belong to the students.

In Indonesia, Ministry of education and culture, recently has launched “Merdeka Belajar” (Freedom to Learn) that employ higher order thinking skills in the process and the outcome. Moreover, the new curriculum called “Merdeka Curriculum” with project-based learning as the method of learning process and assessment strengthen that teachers should apply HOTS activities in teaching learning process. In Merdeka Curriculum, there is one unique characteristic which is “Proyek Penguatan Profil Pelajar Pancasila”. The aim of this project is to strengthen the student’s characters that are included in “Profil Pelajar Pancasila”. The learning process to conduct this project uses Project Based Learning method. In this process, teacher should involve students in every step of the project. It means, students are required to be able to think critically and creatively. They have to be capable to solve the problems and to give contribution to the environment problems around them. Thus, Students should apply HOTS in those process.

However, In Indonesia, especially in rural area of Central Java, the condition of the students, teachers, environment, facilities and infrastructure are still limited and become challenges for teachers applying higher order thinking skill in English language classroom especially after the pandemic era which teacher finally used to teach from home that often use only worksheet and textbook. Moreover, when Merdeka Curriculum should be applied by the schools and there is a project that should be done as a part of students’ learning process, It

makes the research gap because the pervious researches have been done before pandemic era and before new paradigm of education in Indonesia is launched.

For those reasons above, it is admitted that teachers need to conduct HOTS activities in their classroom by using certain strategies in order to make their students obtain those advantages from HOTS and to find the way to overcome the challenges.

1.2 Problem Statement

Since English is an international language and one of the required subjects in Indonesia, all schools, from elementary school to university, must teach their students about it. However, since the government launched Merdeka Curriculum, and the teacher should develop students' higher-order thinking skills (HOTS) more than in the previous curriculum. Many teachers got the training from "*Pendidikan Guru Penggerak*" in teaching and learning process and they have to be able to guide the students to improve their thinking skills.

Akinyemi on Pasutri stated that a change in the curriculum can make teachers feel afraid, especially if the new curriculum includes technology in the teaching and learning process. In another case, the teachers wouldn't know what to do with the new curriculum if they didn't get good training about it (Pasutri, 2020). It means that teachers, especially in rural areas, experience culture shock. They must deal with two sets of students at the same time, a changing curriculum, and the growth of their students' thinking skills. So, it's important to know what the teachers do and how they challenge the students to improve their higher-order thinking skills.

There have been several earlier studies that have been conducted on teaching with HOTS. One of these studies, conducted by Retnawati et al. (2018), discovered that teachers' knowledge about HOTS, as well as their ability to improve students' HOTS, solve HOTS-based problems, and measure students' HOTS, is still low. However, the instructor is already aware of the significance of HOTS and incorporating a wide variety of creative teaching models into their lessons (Heri Retnawati, Hasan Djidu, Kartianom Kartianom, Ezi Apino, 2018). Abkary and Purnawarman in their research "Indonesian EFL Teachers' Challenge in Assessing Students' Higher-Order Thinking Skills (HOTS)" found that the teachers never made HOTS questions because of a lack of understanding of HOTS assessment (Abkary & Purnawarman, 2020). Teachers made various types of assessments, and most of teachers faced challenges in assessing students' HOTS. This research only solicited the challenges and the failures that were faced when assessing students HOTS, however, it did not reveal how the activities should be done by the students in order to face or to do all the HOTS assessments. To be success in conducting the HOTS assessment teachers required several activities applied in the classroom before the HOTS assessment conducted.

Sing and Marrapan stated several activities and the role of teachers in conducting HOTS activities in English classroom before the teachers applying the HOTS assessment to the students. In their research, Singh and Marrapan revealed that teachers in Malaysia are only qualified to ask HOTS questions, and the majority of them have little knowledge of pedagogical skills (Singh & Marappan, 2020). When teachers in schools have good pedagogical skills and knowledge of

HOTS, the best way to ensure students are able to use HOTS in their daily lives is to transfuse this knowledge in everyday lessons to make it easier to see changes in students' thinking skills. Singh and Marrapan also found that the teachers faced difficulties when applying HOTS activities in their classroom. Some teachers, in their research were Malaysian, only applied three level of HOTS namely applying, analyzing, and evaluation in communication component or in certain subjects, however, those teachers did not applied HOTS in their English classroom.

According to Kurniawati and Mursyid in their research “Higher Order thinking Skills among English Teachers Across Generation in EFL Classroom”, teachers from generation x are more knowledgeable about HOTS than teachers from generation y because they have more experience. Teachers from Generations X and Y were able to create comprehensive lesson plans and materials. Teachers from generation x, on the other hand, engaged students in class activities, whereas teachers from generation y admitted that they did not use HOTS in their classroom but instead focused on the level of understanding. However, both generations of teachers have used multimedia in their classrooms. Teachers from both generations faced challenges due to a lack of knowledge, a lack of experience in developing lesson plans, a lack of ability to infuse creativity, and a focus on transferring knowledge rather than practicing students' thinking skills (Kurniawati & Mursyid, 2019).

Teachers' knowledge become big issue when applying HOTS based activity in the classroom. However, it is not the only one that has to be

considered. Thamrin and Agustin revealed in their research that students' vocabulary become the next issue after teachers' knowledge in applying HOTS based activities in English language classroom especially when doing reading comprehension. Students were able to predict the additional information from the text but sometimes they stopped in between the tasks due to the lack of mastery in vocabulary (Thamrin & Agustin, 2019).

From those research above, teachers need to be considered about improving their knowledge about HOTS before they plan to apply HOTS based activities in their classroom. Fakhomah and Utami founded that teachers were still lack of clear explanation and guidance about HOTS, and teachers also have to consider about student's background knowledge because students background knowledge can become an important factor in conducting HOTS based activities in English language classroom (Fakhomah & Utami, 2019).

From those researches, it can be concluded that applying HOTS in English language classroom is not an easy task for teachers. Teachers need certain strategies however, applying strategies for applying HOTS needs knowledge about HOTS itself and those researches shown that teachers still lack of knowledge about HOTS.

This research will be conducted in Merdeka Curriculum era which HOTS is supposed to be used in almost all learning process. This condition makes this research different from those previous researches. Therefore, it is hoped that teachers who use Merdeka Curriculum will have more knowledge and certain strategies of HOTS compared from teachers who use Curriculum 2013.

1.3 Limitation of the Problem

It is necessary to determine the scope of this research to have clear guidance on what was explored. Because the curriculum is comprised of several components, including objectives, resources, methods, and assessments. Therefore, the scope of this study is limited to the approaches taken by teachers and the difficulties they face when implementing higher-order thinking skills (HOTS) as a component of the curriculum 2013 and the Merdeka Curriculum. The researcher is not discussing other aspects of Curriculum 2013 and Merdeka Curriculum, which present as the foundation of education in Indonesia, such as the material, the methods, the strategy, or the evaluation.

1.4 Specific Research Questions

The main problem of this research is to find out teachers' strategies and challenges in conducting HOTS based activities in English language classroom. There are several research questions as a guide to solve the main problem which are:

1. What strategies are used by English teachers in conducting higher-order thinking skills activities during the learning process?
2. What factors that influence the teachers' strategy in conducting HOTS activities in the English language classroom?
3. What are the challenges faced by English teachers when conducting higher-order thinking skills (HOTS) activities during the learning process in their classroom?
4. How do the teachers overcome those challenges?

1.5 Objectives of the Study

Based on the formulation of the problems, the objectives of this study are as follow:

1. To investigate English teachers' strategies in implementing HOTS activities during the learning process in English language classroom.
2. To analyse the challenges that are faced by the teacher during the teaching and learning process when applying the strategies.
3. To find out the factors influence the teachers' strategies in conducting HOTS activities in the English language classroom.
4. To find out the way the teachers overcome the challenges.

1.6 Significance of the Study

This study focuses on the description of English teachers' strategies and challenges in conducting Higher-order thinking skills (HOTS) activities of senior high school students and the significance of the research can be theoretically, practically and pedagogically.

1.1.1 Theoretically

The result of this study can be used as input in understanding the teachers' strategy in applying higher-order thinking skills and the result of the study can also be used as the reference for those who want to conduct research in strategy of conducting HOTS activity in an English language classroom.

1.1.2 Practically

Besides theoretically, the result of this study has practically significance in making the teacher be a creative teacher in applying HOTS by using various

strategies. For the students, this result of this study is expected to make them more excited and motivated to improve their critical thinking skills in the next future learning process.

1.1.3 Pedagogically

The researcher hopes that the result of this study can be used by the teachers in teaching learning process to enhance critical thinking skills and moreover metacognitive skills of the students.

1.7 Definition of Key Term

In this study, the researcher defines some key terms that are used:

1. Strategies in this study are generalized plans for lesson behaviour; in terms of the goals of instruction and an outline of tactics necessary to implement the strategy.
2. Challenge in this study are the obstacle and problem that faced during teaching learning process that should be overcome by using the certain strategies.
3. Applying HOTS in this study is not define as an activity for making a difficult or HOTS questions but a method in learning teaching process that is nurtured by teaching to achieve the students' competencies.

1.8 Outline of the Thesis

This thesis contains of five chapters that indicate the main arguments for the research as well as the subtopics under each main point.

Chapter 1 is the Introduction of the research. The writer states background of the study, focus of the study, aim of the study, specific research questions, purpose of the study, and significance of the research.

Chapter 2 of the research is literature review and conceptual framework. In this chapter the writer states about literature review, conceptual framework and review of previous studies.

Chapter 3 discusses about the research methodology that consists of research design, technique of data analyses and research instruments. This research proposal contains of bibliography and appendix as well.

Chapter 4 discusses about the finding and analysis that consists of sub conclusion of the research.

Chapter 5 consists of summary of the finding and the conclusion of the research.

CHAPTER II

REVIEW OF RELATED LITERATURE

2.1 Review of Previous Literature

There are many studies previously done that became consideration by the researcher in conducting this research. This research is referenced from other researchers related with this research; however, it has conducted different study.

Abkary and Purnawarman (Abkary & Purnawarman, 2020) in their research “Indonesian EFL Teachers’ Challenge in Assessing Students’ Higher-Order Thinking Skills (HOTS)” found that the teachers never made HOTS questions because of a lack of understanding of HOTS assessment. Teachers made various types of assessments, and most of teachers faced challenges in assessing students’ HOTS. This research only solicited the challenges and the failures that were faced when assessing students HOTS, however, it did not reveal how the activities should be done by the students in order to face or to do all the HOTS assessments. To be success in conducting the HOTS assessment teachers required several activities applied in the classroom before the HOTS assessment conducted.

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knowledge of HOTS, the best way to ensure students are able to use HOTS in their daily lives is to transfuse this knowledge in everyday lessons to make it easier to see changes in students' thinking skills. Singh and Marrapan also found that the teachers faced difficulties when applying HOTS activities in their classroom. Some teachers, in their research were Malaysian, only applied three level of HOTS namely applying, analyzing, and evaluation in communication component or in certain subjects, however, those teachers did not applied HOTS in their English classroom.

Conducting HOTS based activities is not an easy task for the teachers especially in Indonesia that English is taught as foreign language. The teacher knowledge about HOTS as Abkary and Purnawarman (2020) stated in their research is not the only component which influence the applying HOTS in English classroom. Retnawati, H. et al (Heri Retnawati, Hasan Djidu, Kartianom Kartianom, Ezi Apino, 2018) conducted a study to evaluate teachers' knowledge about HOTS. They examined teachers' knowledge and importance of HOTS, students' improvement in HOTS, how HOTS can be assessed, and teachers' ability to solve HOTS-related problems throughout the study. The Bogdan and Biklen' (1982) model was used by the researchers to determine the outcome. Despite the fact that the majority of teachers were aware of the importance of HOTS, they had limited knowledge of the functions of HOTS.

According to (Kurniawati & Mursyid, 2019) in their research "Higher Order thinking Skills among English Teachers Across Generation in EFL Classroom", teachers from generation x are more knowledgeable about HOTS

than teachers from generation y because they have more experience. Teachers from Generations X and Y were able to create comprehensive lesson plans and materials. Teachers from generation x, on the other hand, engaged students in class activities, whereas teachers from generation y admitted that they did not use HOTS in their classroom but instead focused on the level of understanding. However, both generations of teachers have used multimedia in their classrooms. Teachers from both generations faced challenges due to a lack of knowledge, a lack of experience in developing lesson plans, a lack of ability to infuse creativity, and a focus on transferring knowledge rather than practicing students' thinking skills.

Teachers' knowledge become big issue when applying HOTS based activity in the classroom. However, it is not the only one that has to be considered. (Thamrin & Agustin, 2019) revealed in their research that students' vocabulary become the next issue after teachers' knowledge in applying HOTS based activities in English language classroom especially when doing reading comprehension. Students were able to predict the additional information from the text but sometimes they stopped in between the tasks due to the lack of mastery in vocabulary.

Those above studies show that applying HOTS has a lot of challenges. To overcome those challenges teachers need strategies. Marina et al. (2015) in Indriyana&Kuswandono (2019) in their studies provide strategies to cultivate students' HOTS which is to ask divergent questions, to inform students of learning goals through group discussions, to provide feedback to invite students to

review, improve their understanding of learning materials, and to motivate students to think critically. At the beginning of the course, the teacher will inform the students of the learning goals. Teachers use this step to apply HOTS in teaching reading skills to develop their critical thinking in brainstorming, analyzing and creating texts.

Indriyana & Kuswando (2019) also showed in their study, “Developing Students’ Higher Order Thinking Skills (HOTS) in Reading: English Teachers’ strategies in Selected Junior High Schools”, that the questioning process requires readers to ask themselves some questions to develop meaning, enhance understanding, find answers, solve problems, find information and discover new information (Harvey & Goudvis, 2017 in Indriyana & Kuswando, 2019). In this study, the teacher used divergent questions to enable students to analyze and create. In addition, group discussions can improve students' critical thinking. Samelian (Samelian, 2017) (used discussion techniques, the students discuss with their peers. Another previous finding in Nuary (Nuary, 2015) shows that teachers use discussion techniques and the discussion process as follows: pre-discussion activities, talk while activities, and publish discussion activities. The type of discussion is divided into three parts: discussion-based teaching, group discussion and classroom discussion. After the teaching and learning process, the teacher will use the remaining time to provide feedback and assess learning, and ask students to review, and improve their understanding of the materials. Moreover, giving motivation to the students are needed. Bhushan (Bhushan, 2014) pointed out that motivation is the main important factor that stimulates critical thinking and

creativity. On the other hand, Hung, Durcikova, Lai and Lin (Hung et al., 2011) pointed out that critical thinking activities can enhance students who are motivated to learn when facing tasks. Difficulties in work will motivate students to learn how to participate more. This strategy can inspire students to think critically in their studies.

Inrdiyana & Kuswando in their research's finding also concluded that English teachers should also have available strategies in the teaching process, especially when implementing HOTS. Most teachers adopt the following steps when teaching reading skills: (1) Inform students of their learning goals; (2) Encourage divergent questions; (3) Conduct group discussions; (4) Give feedback to students; (5) Inspire students to think critically.

Besides those strategies, Technology can also become the best way to help teachers conduct HOTS activities in the English language classroom. Daud in his research (Daud, 2017) concluded that in order to ensure that the learning objectives of the course are achieved, teachers should not only focus on the syllabus. They need to clear the objectives of the course and be aware of methods that suit the student's learning style. There are many strategies that can be used to train students who are proficient in both language and critical language. Technology can be used to enhance teaching and learning. The finding of this research also showed that discussion using a blended approach in teaching can be used as a strategy to apply HOTS in an English classroom. It is a student-centered approach where students and teachers interact in both online and face-to-face environments. However, teachers need to invest time and creativity to realize

these potentials. Innovative teachers can develop engaging blended lessons by embedding online resources into existing courses (Charles & Rice, 2012). Such a move can help these teachers revitalize their courses and improve the delivery of content.

Further, Daud (2017) described that in order for students to participate, more time needs to be spent on discussions and other activities that require them to think, decide, take action, and react. In this case, different teaching strategies can be used. Flipped classroom is an option for online delivery of teaching content before the class session.

Besides questions and using technology, another strategy that teachers can use is to guide students to infer knowledge as real problems. Teachers can bring the latest or popular problems to the classroom, and ask students to write an essay on solving the problem based on the questions given by the teacher. At this stage, students are trained to enable them to apply their knowledge in real situations. According to a report by Johnson and Thomas (1992), a successful learning strategy is to help students use visual media and auxiliary maps to classify their knowledge that can intuitively reflect the students' concept and their relationships (in Singh Et al., 2018).

From those researches above, teachers need to be considered about improving their knowledge about HOTS before they plan to apply HOTS based activities in their classroom. (Fakhomah & Utami, 2019), teachers were still lack of clear explanation and guidance about HOTS, and teachers also have to consider about student's background knowledge because students background knowledge

can become an important factor in conducting HOTS based activities in English language classroom.

From above research, it can be concluded that applying HOTS in English language classroom is not an easy task for teachers. Teachers need certain strategies however, applying strategies for applying HOTS needs knowledge about HOTS itself and those research shown that teachers still lack of knowledge about HOTS.

This research will be conducted in Merdeka Curriculum era which HOTS is supposed to be used in almost all learning process. Djami & Kuswandono in their research stated that applying HOTS in Curriculum 2013 is a mandatory for teachers, however, even though according to their research 75% of English teachers almost regularly implemented HOTS activities during their teaching process, some teachers only apply difficult questions instead of HOTS questions and the implementation of HOTS was equivalent to the implementation of the “scientific approach” (Djami & Kuswandono, 2020). In Merdeka Curriculum, HOTS placed different position. Government do not mandate the teachers to apply HOTS officially. However, teachers know from Learning Achievement (*Capaian Pembelajaran*) that they have to relate their teaching with the students’ context and students must use their knowledge to solve the problem from their surroundings. Moreover, there are *Projek Penguatan Profil Pelajar Pancasila (P5)* that the objective is to emerge characters that one of the characters is critical thinking. This condition makes this research different from that previous research. Therefore, it is hoped that teachers who use Merdeka Curriculum will have more

knowledge and certain strategies of HOTS compared from teachers who use Curriculum 2013.

2.2 Higher Order Thinking Skills

2.2.1 Definition of HOTS

In recent years, English teachers have placed a strong emphasis on developing critical thinking skills. The goal of teaching thinking skills in the English language classroom is to prepare students to compete creatively and critically at the international level. To accomplish this goal, schools were introduced with Higher Order Thinking Skills, which allow students to apply, analyze, evaluate, and think creatively (Kum Yoke et al, 2015 in (Ginting & Kuswandono, 2020).

Brookhart (2010) defined High Order Thinking Skills (HOTS) into three categories which are in terms of transfer, in term of critical thinking and in term of problem solving.

Transfer necessitates students to retain, comprehend, and effectively apply their acquired knowledge (Anderson & Krathwohl, as cited in (Brookhart, 2010)). Critical thinking is a rational and contemplative process that determines what to believe or do. Norris & Ennis (1989) as cited in Brookhart (2010) describe issue-solving as the cognitive activity of thinking . The learner needs help to determine the best method to attain the desired objective instinctively by employing one or more cognitive processes involving advanced thinking. According to (Parimaladevi & Anuar, 2019) High Order Thinking Skills

(HOTS) are the capacity to apply knowledge, skills, and values in reasoning and reflecting while solving issues, deciding, innovating, and creating. According to Onosko and Newmann (1994) as stated in Parimaladevi & Ahmad (2019), High Order Thinking Skills (HOTS) is the ability to utilize the mind's capability to overcome new challenges. Higher-order thinking is the mental process of analyzing, putting together, and judging. It is often used when solving problems, reasoning, thinking, evaluating, and coming to a conclusion (Bloom, 1956). King, Goodson, and Rohani (2004) defined high-level thinking skills (HOTS) as critical thinking skills that are consequential, reflective, meta-cognitive, and creative. These skills will help people when they are faced with new problems, uncertainties, or new phenomena that require solutions that have never been tried before. Higher-order thinking for a person depends on that person's ability to use, develop, and improve knowledge while thinking (King et al., 1998) .

Furthermore, Resnick stated that the definition of higher-order thinking skills is a set of mental activities that include describing, analysing, representing, coming to a conclusion, and making connections (Resnick, 1987). These are the fundamental methods of cognition. Based on the preceding statements, it is evident that possessing a high level of thinking ability is distinct from other modes of thinking. To have advanced cognitive skills, one must have the capacity to engage in logical reasoning and critical analysis and draw well-founded conclusions based on observations. The objective of high-level thinking skills (HOTS) is perpetual knowledge acquisition. Sulaiman et al. defined in Singh and Marappan (2020) that high-order thinking skills are ideas that use

thinking extensively to construct unique things. Advanced thinking skills enable people to apply new knowledge and use it in new situations to obtain potential answers. Higher-order thinking ability is about thinking at a higher level, not just remembering facts and accurately telling other people's information. HOTS has been implemented in schools to allow students to apply, analyze, evaluate and think creatively (Singh & Marappan, 2020).

2.2.2 Purposes of HOTS

Heong et al. (2011) say that teachers should help their students develop the higher-order thinking skills they need to think broadly and find a new challenges. HOTS lets someone use further information and knowledge to respond to a unique situation. Brookhart (2010) says that HOTS is considered the highest level of Bloom's cognitive taxonomy.

Benjamin Bloom, in his book, 1956 Bloom's taxonomy, introduced higher order thinking skills with six levels, which are knowledge, comprehension, application, analysis, synthesis and evaluation. However, now the stages of taxonomy have been updated as remembering, understanding, applying, analyzing, revising, and creating (Singh & Marappan, 2020). Today, schools teach students not only to remember facts and ideas but also to make decisions, set priorities, come up with plans, and work together to solve problems. Higher-order thinking skills are needed to use these skills, which makes sense. Students won't get better at these skills and won't learn them if they only use lower-order thinking, which is the level of knowing, understanding, and application.

After graduation, students will need these life skills, especially when they fall sharply in the era of global competitive employment (Ramdiah, 2019). High-order thinking skills (HOTS) encompass the necessary skills for students, including metacognitive skills, critical thinking, creative thinking, and self-regulation. Furthermore, possessing social skills and communication abilities is necessary, including collaborating effectively with others. Enhancing scientific processing skills is crucial in the learning process, and the perception of teachers and parents holds significant importance. Therefore, improving the proficiency of higher-order thinking skills (HOTS) has emerged as a critical objective in the educational process of the 21st century.

HOTS is very important in the education process, because people's thoughts will affect the ability, speed and effect of learning. Therefore, HOTS is related to students' learning. Students who are trained to think will have a positive impact on their educational development (Heong et al., 2016). Therefore, HOTS is considered necessary for both teachers and students.

2.2.3 Characteristic of HOTS

Critical thinking, according to Conklin (2021), is characterized by careful analysis and judgment. The National Council for Excellence in Critical Thinking Instruction says, "Critical thinking is self-guided, self-disciplined thinking which attempts to reason at the highest level of quality in a fair-minded way. People who think critically consistently attempt to live rationally, reasonably, empathically"(Scriven and Paul (1987) cited (Conklin, 2012)).

John Dewey advocated for reflective thinking. Dewey (1916) defines reflective thought as a thorough and systematic analysis of an active, persistent, and rigorous notion. The actively engaged student does not merely receive information passively. The individual searches for corroborating proof to corroborate the provided facts. In the absence of evidence, the veracity of the information cannot be accepted. Reflective thinking is synonymous with critical thinking.

Creative thinking is classified as a higher-order cognitive skill. Creating and combining are fundamental aspects of innovative thinking. Creation involves bringing something into existence with the requirement that it possesses value. Creative thinking involves the generation of an original and innovative idea. Active cognition is inherently generative.

Critical and creative thinking capabilities are encompassed within the realm of cognitive abilities based on foundational cognitive processes. Comprehending a topic is necessary for engaging in more advanced cognitive processes. Students should be able to deconstruct a subject matter via careful examination, arrive at a conclusion, or create something innovative based on the underlying idea. Students need to comprehend the precise meaning of a tale's setting. For example, if they are tasked with creating a new setting for a story and explaining how this will impact the storyline.

The concept of Bloom's Taxonomy, also known simply as Bloom's Taxonomy, is one that most educators are already aware of. Bloom's taxonomy, in a nutshell, categorizes intellectual conduct into six different levels of thought.

Simple recognition or recall is required at the most fundamental level of thought. Critical thinking and creative thinking are prerequisites for higher levels of thinking.

In his book "How to Assess Higher Order Thinking Skills in Your Classroom," Brookhart (2010: 14) identified five distinct categories of higher-level thinking skills: HOTS. The three cognitive processes involved are analysis, assessment, and production. The following are the most advanced stages of cognitive knowledge according to the Bloom Revision's edition (2001): 2) logical reasoning, 3) thoughtfulness and critical thinking, and 4) problem solving and creativity. Cognitive capacity is typically categorized based on the specific type of learning that is intended to be accomplished. The Bloom categorization is the most utilized. Bloom (1956) delineated four fundamental criteria for formulating his taxonomy, as outlined: the student's behavior should adhere to specific standards or norms, a coherent and rational connection between the different categories within a taxonomy should exist, descriptions of value judgments are necessary, it should accurately depict the psychological process.

Bloom's original classification comprises three educational activities (Bloom et al., 1956). These activities are cognitive processes involving mental capacities (a domain grounded on knowledge) and acquiring information regarding emotions or emotional states. Emotion attitude refers to the knowledge-based aspect of a discipline, whereas psychomotor refers to the skill-based aspect involving physical skills. According to Bloom's taxonomy, the critical thinking stage consists of six stages: evaluation, synthesis, analysis, application,

understanding, and knowledge. Now, enhance it by augmenting memory, comprehension, and implementation (Ghanizadeh et al., 2020).

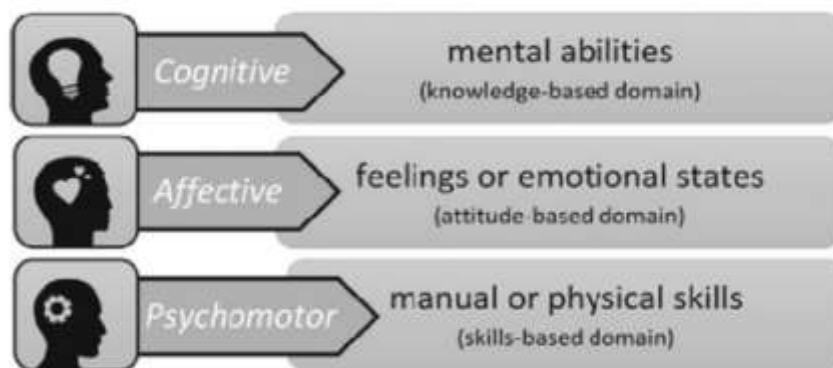


Figure 1 Three domains of Bloom taxonomy (Ganizadeh, et.al, 2020)

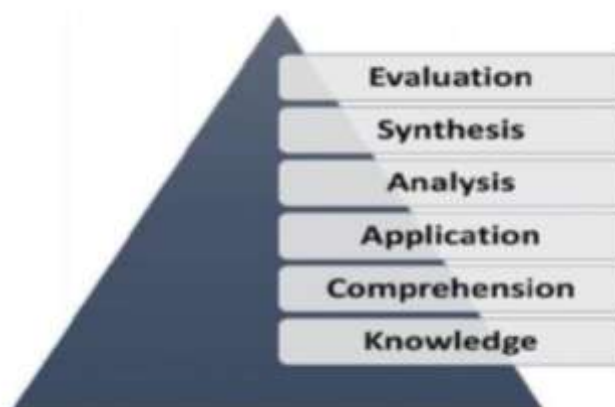


Figure 2 Graphic representation of cognitive domain of Bloom Taxonomy (Ganizadeh, et al., 2020)

Lorin Anderson then revised the original Bloom's taxonomy as seen in figure 3 below:

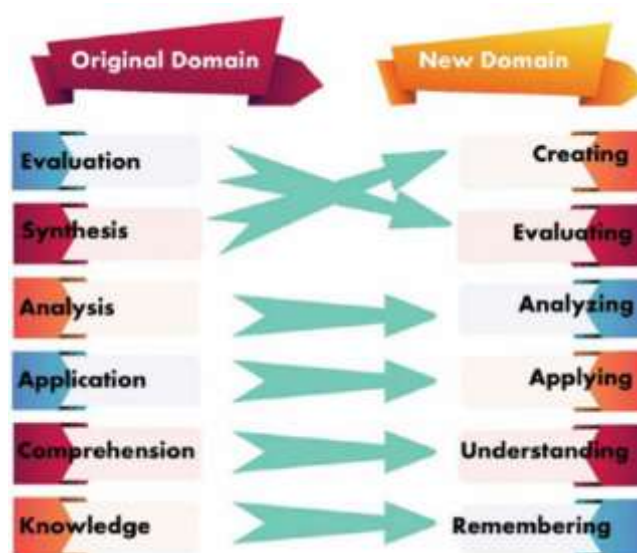


Figure 3 Bloom's revised taxonomy (Ganizadeh, et al., 2020)

According to Bloom's taxonomy, knowledge is the lowest level in the cognitive domain. It includes the ability to remember, recall or recognize ideas, materials or phenomena. During the learning process, students are required to store information in their minds and remember the information. Comprehension ability is the ability to classify, describe, discuss, explain, express, identify, report and translate. Application means that learners can apply their knowledge. They are also expected to solve and use appropriate solutions. Analysis is higher than understanding and application. Analysis means that students are able to break down materials into their component parts and identify or classify certain materials. In synthesis, it is emphasized that students should draw elements from

many sources and combine them into sentences or patterns. Evaluation refers to making judgments about certain purposes or materials (Dawenan, 2020).

Figure 6 below shows the more detail of Bloom's revised taxonomy.

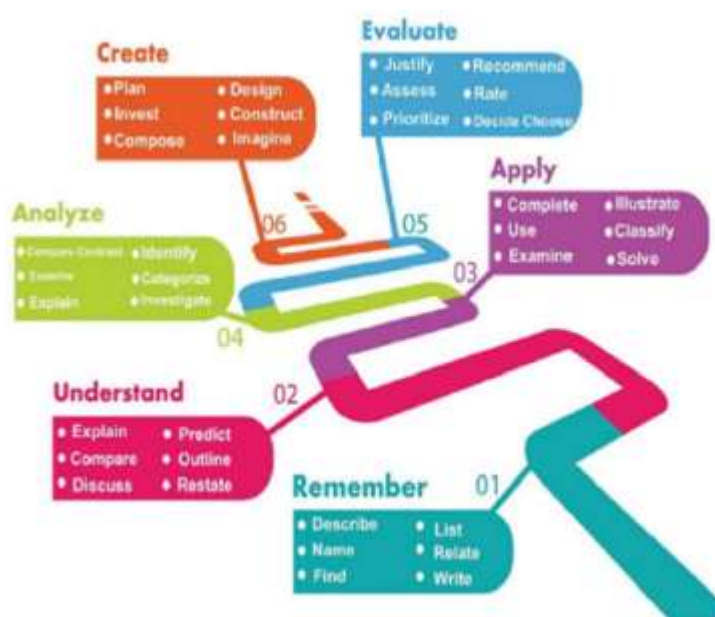


Figure 4 Bloom's revised taxonomy

Anderson and Krathwohl (2001) cited by Harris et al. (2014) also stated new cognitive domains, including memory, understanding, application, analysis, evaluation, and creation. Remembering means to recognize and recall a concept. Understanding includes explanation, illustration, classification, summary, inference, comparison and explanation. Application means executing and executing programs. Analysis means decomposing information into parts, determining the relationship between the parts and the relationship between the whole. The analysis process needs to distinguish, organize, attribute and respond to multiple concepts. Evaluation methods are judged based on guidelines and standards. Evaluation involves inspection and criticism, put different elements

together to form a new whole when creating, or reorganize existing elements to form a new structure. The creation process involves generation, planning and production (Dawenan, 2020). Thinking skills are not only classified based on cognitive domains, but also based on cognitive level. Basically, the cognitive level is divided into three categories, including LOTS, MODS and HOTS. Memory is classified as low-order thinking skills (LOTS); understanding and application belong to intermediate thinking skills (MODS); and the next cognitive ability of assessment, analysis and creation is classified as high-order thinking skills (HOTS) (Mursyd & Kurniawati, 2019).

2.2.4 Significance of HOTS

HOTS is the higher stage of cognitive ability. Adnan et al. (2017) pointed out that HOTS is one of the main components of creative and critical thinking skills and is the highest stage of the cognitive process. In addition, they pointed out that HOTS will occur when students obtain new information, store them, arrange them, and establish connections between their existing knowledge and extended information to achieve goals and solve problems (Jadallah et al., 2023).

According to Reid (2014) (as referenced in Kurniawati & Mursyd, 2019), critical thinking abilities are urgently required. This entails students becoming self-aware and self-monitoring their problem-solving processes. Self-awareness refers to the state in which students consciously understand the knowledge they are acquiring. Self-monitoring, on the other hand, involves students engaging in introspection to evaluate their own problem-solving skills

and identify any challenges they may encounter. Problem-solving is a crucial cognitive capacity required in the present circumstances.

2.3 The History of HOTS in Indonesian Curriculum

The development of Indonesia's educational curriculum offers insight into the advancement of the country's educational system. To bolster education, the government has implemented several distinct curricula. The curriculum has undergone multiple revisions since 1947, with significant changes occurring in 1952, 1968, 1975, 1984, 1994, 2004, 2006, and 2013. A revision was also implemented in 2016, and the most recent one is the Merdeka Curriculum 2022. While many curricula may have distinct objectives and methods of implementation, they all share a common foundation in Pancasila and the Constitution of 1945.

The objectives of thinking development in Indonesian schools shift yearly to the evolution of the country's educational canon, which determines those objectives. The following table provides a historical overview of the progression of students' levels of critical thinking:

Table 1 The history of HOTS in Indonesian Curriculum

No	Name of curriculum	Learning Material	Level thinking
1.	Curriculum 1947	Emphasize the cultivation of autonomous persons, including the student's character and social consciousness.	Did not prioritize the cultivation of students' cognitive abilities.
2.	Curriculum 1952	Each educational resource ought to be pertinent to one's	LOTS, as a result of the students'

		daily existence..	exclusive focus on the practical application of the learning material.
3.	Curriculum 1964	Pancawardhana program (the development of creativity, taste, intention, work, and morals)	LOTS, on applying level.
4.	Curriculum 1968	Learning material focus on the theory	LOTS (applying)
5.	Curriculum 1975	Emphasize enhancing the efficiency and effectiveness of the instruction and learning process. Therefore, the lesson plan specifies the learning objectives, material, and methodology.	LOTS (applying)
6.	Curriculum 1984	The students are the subject of the learning. They resolved to acquire knowledge by observing, classifying, deliberating, and reporting on the subject.	HOTS in a high level of school (analysing)
7.	Curriculum 1994	The changing system from 'caturwulan' to semester.	HOTS in a high level of school (analysing)
8.	Curriculum 2004 (Competence Based Curriculum of CBC)	Education by developing abilities based on competency targets.	HOTS in a high level of school.
9.	Curriculum 2006 (School-Based Curriculum or SBC)	Simplifying the fundamental framework of the curriculum unit and alleviating the learning burden, allowing the teacher to connect the learning material to daily life.	HOTS in a high level of school
10.	Curriculum 2013	Thematic learning model	HOTS at senior high school up to the university.

11.	Curriculum revise 2015/2016	2013 on	Adding HOTS as a goal of the curriculum	HOTS not only at senior high school and university level but also for elementary and junior high school students.
12.	Curriculum revise on 2019	2013	Including ICT in the teaching and learning process.	HOTS from elementary students up to the university.
13.	Merdeka Curriculum 2022		Introducing “Profil Pelajar Pancasila” and inserting “Proyek Penguatan Profil Pelajar Pancasila” and employ Project-Based Learning.	HOTS from elementary students up to the university.

2.4 Teaching Higher-Order Thinking Skills

Most teachers agree that increasing students' capacity for higher-order thinking should be a priority. However, instructing and being instructed must belong to the higher trick class; if it does not, it is being worked on at a low level of thinking. The students only wanted to learn new information from the textbook; they tried to avoid challenging themselves. Four barriers need to be overcome before high-order thinking can be developed in students: the curriculum, pedagogy, school organization, and culture.

It is more complex than understanding a theory to help someone develop their skills. To set the skills, we must first create that individual's knowledge. According to Piaget (1964), cognitive development is synonymous

with knowledge acquisition. However, the issue is that the story was influenced by the following:

1. Maturation, which involves carrying on with the process daily.
2. The environment in which human life is affects an individual's intelligence level.
3. The transmission of human genes through social. It includes linguistic transitions, educations, culture, etc.
4. Equilibration or emotional balances.

The curriculum offers a narrow range of educational opportunities. Every stage of this process must be based on the curriculum guidelines. The modifications implemented in the curriculum have posed many difficulties for teachers, notwithstanding the possible enhancements that may arise from these alterations. They are required to adapt to the revised curriculum. The teacher needs to show more satisfaction with the ongoing procrastination in finishing the course material. Most of the time spent in instruction is devoted to transmitting knowledge. The constrained time frame for contemplation presents a difficulty in enabling pupils' capacities to understand, analyze, and manage acquired knowledge.

The second challenge is the acquisition of pedagogical knowledge. In this segment, the teacher presents a series of inquiries to assist the student in acquiring information. Students who actively participate in this element exhibit their capacity for engaging in critical thinking. The activity includes both spoken and written elements. The students express their thoughts through spoken words or by

writing them down. In this specific task, teachers can use pedagogical tactics to showcase the learners' ability to engage in higher-order cognitive processes. The pedagogical method is mainly based on a curriculum that focuses on transmitting or spreading knowledge rather than actively engaging with it. Assessing the cognitive capacity of students becomes complicated when they display inactivity.

The third category consists of school organizations. For students to develop the capacity to comprehend, assess, and manipulate information proficiently, they must be provided with constructive and sufficiently comprehensive feedback about their problem-solving approaches. This input should be given at two stages: throughout the problem-solving process and after solutions have been devised. The instructor must give feedback to every student during a single educational session. Delivering comprehensive feedback to every student in a large class can be difficult when students share their viewpoints on course materials. The limitation imposed by educational institutions that confine students to classrooms may hinder their ability to participate in higher-level cognitive activities. The arrangement of educational settings in schools can pose substantial challenges, including factors such as the number of students in a class, the amount of work teachers have, the scheduling of classes, and the restrictions of the physical classroom space. It is imperative that the culture surrounding education, including students, teachers, and parents, provide ample support for the advancement of higher-order thinking skills. The chance to demonstrate advanced cognitive skills in problem-solving is essential for fostering and enhancing one's

critical thinking abilities. Given the opportunity, students may employ innovative approaches to address the problem effectively.

According to Limbach and Waugh (2010), Mainali (2012), and Kusuma et al. (2017), there exist a series of procedures to enhance students' high-order thinking abilities.

The initial step involves identifying the learning objective. It is imperative for teachers to meticulously identify significant learning objectives that acknowledge the knowledge that students are expected to acquire upon course completion when drafting the lesson plan. The learning objectives must be formulated with a clear and specific behavioral target in mind to facilitate advanced cognitive processes within the educational setting. Furthermore, the desired behavior is recommended to be introduced and practiced, culminating in the learner's demonstration of the intended behavioral response. According to Limbach and Waugh (2010), creating clearly defined objectives has facilitated learners' progression toward more advanced cognitive activities.

According to Helmawati's (2019) research, the fundamental principles of the lesson plan are based on the 2013 curriculum, which underwent revision in 2016:

1. It is imperative to consider various attributes of students, including their foundational knowledge, intellectual aptitude, talents, potential, interests, learning tendencies, motivational factors, social skills, emotional disposition, special needs learning styles, the pace of learning, cultural background, norms, values, and environmental factors.

2. The participation of the students.
3. The student center is a facility designed to cater to the needs of students.
4. The cultivation of students' inclination towards reading and writing.
5. Providing students with feedback on their work.
6. The interrelationship between basic competencies, learning material, learning activities, indicators of competency achievement, assessment, and sources should be emphasized.
7. The concept of thematically integrated learning was implemented.
8. The utilization of technology in the realm of pedagogy and educational acquisition.

The lesson plan's principles are designed to enhance the higher-order thinking abilities of the students. Likewise applies to the Merdeka Curriculum. “Buku Saku” Merdeka Curriculum (Kemdikbud, 2022) outlines the learning process using teaching modules created by teachers, which are tailored to the specific conditions of the school and the students. These modules employ project-based learning, inquiry-based learning, or other models that aim to enhance students' problem-solving abilities, critical thinking skills, and capacity for innovation within their surrounding environment.

The role of the teacher holds significant importance in facilitating the realization of the desired outcome. According to Helmawati, 2019 the efficacy of a lesson plan is contingent upon the teachers' proficiency and dedication to implementing the program in the classroom.

The second step involves teaching through the use of questioning. During the process of teaching and learning, the teacher can enhance the student's higher-order thinking skills through the use of questioning techniques. When educators present a query to their pupils, it can prompt cognitive engagement and elicit inventive responses from the students. According to Mainali (2012), using questioning techniques can significantly impact the development of high-order thinking skills among students. The varying responses provided by students can be indicative of their advanced cognitive abilities.

Step three involves engaging in practice sessions before the assessment. The acquisition of skills requires consistent practice. To enhance the pedagogical process, educators must incorporate experiential learning and foster opportunities for reflective discourse. Conversely, to facilitate student engagement in the learning process, an option is provided for students to apply and demonstrate their mastery of the evaluated knowledge, skills, attitudes, and behaviors. The capacity of educators to select instructional exercises that facilitate opportunities for practice is a crucial factor. According to Limbach and Waugh (2010), the learning activities provided to students must encourage their engagement in advanced cognitive processes, such as formulating arguments, expressing opinions, seeking evidence, evaluating evidence, and demonstrating impartiality in their thinking.

The fourth step involves critically evaluating, enhancing, and advancing the subject matter. In the context of pedagogy, it is imperative for educators to consistently enhance their instructional materials and methodologies to facilitate the development of students' critical thinking skills effectively. It is recommended

that educators establish a classroom environment that fosters a sense of ease and encourages students to engage in critical thinking and active participation in the educational experience. Gathering feedback from students regarding their acquired knowledge and areas that require improvement is essential to identify their learning needs. The utilization of students' feedback is considered a valuable instrument for enhancing their higher-order cognitive abilities. Establishing a classroom atmosphere that fosters positive participation from all students is a crucial measure in cultivating the advanced cognitive abilities of students (Limbach, B., & Waugh, 2010).

The fifth step involves offering evaluation and constructive criticism to the assessed individual or group. To assess the quality of work produced by students, teachers may employ feedback or assessment methods, which involve comparing established criteria and standards to students' performance. The pupils must know and comprehend the requirements to evaluate their performance. Subsequently, educators must provide pertinent feedback to learners by assessing their performance and addressing their individual needs.

To cultivate the higher-order cognitive abilities of learners, teachers must possess a comprehensive comprehension of the knowledge domain's framework as delineated in Bloom's taxonomy. The guideline serves as a tool for educators to assess the cognitive abilities of their pupils within the learning environment. Krathwohl (2002) identified the structures of the knowledge dimension.

1. The acquisition of knowledge based on facts.

In this section, students must receive disciplinary measures or problem-solving techniques instruction. This segment encompasses a comprehension of specialized vocabulary and an understanding of precise particulars and components.

2. Theoretical understanding or conceptual knowledge.

The topic pertains to providing feedback from one variable to another. Conceptual knowledge encompasses understanding classifications and categories, participation and generalization, as well as theories, models, and structures.

3. Procedural knowledge is a type of knowledge that pertains to the ability to perform a task or carry out a specific procedure.

This pertains to the methodologies or guidelines for utilizing various skills, algorithms, techniques, and methods. The different types of procedural knowledge include knowledge related to subject-specific skills and algorithms, knowledge regarding subject-specific techniques and practices, and the criteria for determining the appropriate use of procedures.

4. The fourth topic of discussion pertains to metacognitive knowledge.

Problem-solving proficiency is the capacity to resolve issues. Metacognitive knowledge encompasses various types, including knowledge of strategies, understanding of appropriate contextual and conditional factors related to cognitive tasks, and self-knowledge.

2.5 Teachers' Strategies

In the past two decades, the results of research on HOTS have shown that HOTS does not happen automatically in most students' learning. Therefore, HOTS should be taught directly and clearly to them during the learning process (Snyder & Snyder, 2008) and this process needs strategies.

2.5.1 Definition of teachers' strategy

One of the components of an instructional system is the teaching strategy. The components of an instructional system include the objective, the teacher, the students, the instructional material, the instructional strategy, the instructional media, the administration, and the financial factor. Strategy refers to the precise planning of activities to achieve a specific goal. While learning refers to an effort to gain knowledge and skills, teaching refers to the act of instructing (Balai Pustaka, 2001)

In another reference (Sofan & Ahmadi, 2010), Ahmadi (2005) stated that strategy refers to the primary step taken to achieve the determined goal. In the context of teaching and learning, strategy refers to the overall plan of teacher and student activities in the teaching learning process to achieve the desired outcome.

Stone and Morris (as cited in Issac, 2010) stated that teaching strategy is a broad plan for a lesson that includes structure, instructional objectives, and an outline of planned tactics that will be used to carry out the strategies.

2.5.2 Teachers' strategies in applying HOTS

Higher-order thinking skills have always been a hot issue in education (Latief, Pajabbah and Karim, 2016 in Kurniawati & Mursyid, 2019). Decades ago,

people realized the importance of thinking ability. Therefore, it can be assumed that for teachers of all ages, including HOTS in their classrooms should not be a problem. However, teaching HOTS is not easy and requires a lot of preparation in advance.

Mursyid & Kurniawati (2019) found in their research "Higher-order Thinking Skills among Intergenerational English Teachers in EFL Classrooms" that it is not easy to implement HOT in English classes. Teachers from three generations admit that they often encounter some limitations because many of them lack the understanding and experience to develop lesson plans based on thinking skills suitable for basic abilities (Kurniawati, 2019).

When implementing HOTS in the classroom, teachers need to adopt certain strategies and design their learning goals according to the classification method. LOTS is the first three aspects of the taxonomy, namely C1 (remember), C2 (understanding) and C3 (application). HOTS occurs in C3 (analysis), C4 (assessment) and C6 (create). This shows that HOTS is the higher part of the taxonomy bloom.

Applying HOT in the classroom is not an easy task for a teacher. Some research has been conducted to find how far teachers can apply HOTS in the English classroom. Some findings show that the teacher didn't apply the six-level of higher order thinking skills.

Nachiappan et al., 2018 in their research "Application of Higher Order Thinking Skills (HOTS) in Teaching and Learning through Communication Component and Spiritual, Attitudes and Values Component in Preschool" found

that teacher only applied three-level of HOTS namely application, analysis and evaluation in teaching communication component subject while additional creating skills is moral subject.

Another research about “Exploring Teaching Learning Process in Developing Higher Order Thinking Skills (HOTS) to Higher Secondary School (SMA) students in Pontianak” (2019) conducted by Sada showed that the outcome is failure because the teachers possessed a lack of knowledge. Some teachers do not have knowledge of the teaching models.

There are some strategies that can be applied in the classroom by English teacher to apply Higher-Order Thinking Skills in their classroom, which are questioning strategies and problem solving strategies (Conklin, 2012).

1. Questioning Strategies

a) Revised Bloom Taxonomy

Many teachers employ Bloom's taxonomy to facilitate attaining higher-order thinking skills (HOTS) within their instructional settings. They perceive Bloom's Taxonomy as a hierarchical structure. They believe that students should begin by memorizing questions and then advance to generating their own. Alternatively, gifted children should respond to more complex and advanced questions. At the same time, pupils at grade level should tackle topics of moderate difficulty, and struggling students should focus on more straightforward and fundamental questions. (Conklin, 2012). Conklin further asserted that numerous teachers believed that Bloom's higher-order inquiries are more external than lower-order ones. This notion perpetuates the fallacy that students do not

require factual information. In contrast, several educators impart factual knowledge in their classrooms due to the simplicity and convenience of posing basic inquiries and assigning elementary tasks.

All these actions are undertaken with the aim of students obtaining essential information. Instead of simply memorizing and repeating information, thinkers in the twenty-first century must know how to retrieve and utilize knowledge to enhance their thinking. However, this does not imply that imparting factual knowledge in the classroom is unimportant to engaging in more advanced activities. The goal is not to hinder students from acquiring knowledge; instead, the focus should be redirected from rote memorization of information to developing the ability to retrieve and apply it as needed. In the twenty-first century, every intellectual must have access to accurate and verifiable information. Students need to be able to discern and organize the most crucial information, as not all data hold the same level of significance (Conklin, 2012).

In her book, Conklin (2012, 72) asserts that the primary objective of classroom instruction is to promote higher-order thinking among students. This is not because it is superior to lower order thinking but because it embraces and builds upon it. Higher-order thinking is highly beneficial since it engages and utilizes all cognitive processes. Students must initially study and fully grasp the information before analyzing it. Higher-order thinking equips students with the skills necessary for practical application in the real world outside the confines of the classroom. It involves committing to memory a series of interconnected

pieces of information. These exercises will facilitate the development of students into adults and enable them to make informed decisions.

Teachers may employ Bloom's Taxonomy as a framework when assigning tasks or deliberately posing inquiries to foster higher-level cognitive processes. There is no universally applicable method for incorporating the updated Bloom's Taxonomy into every lecture. The crucial aspect is having a clear understanding of the pupils' requirements. At times, students must start with basic questions to provide the foundation for more advanced thinking.

According to Conklin (2012,73) in her research Bloom's Taxonomy has endured the test of time as a dependable framework for inquiring. Simultaneously, it has been strengthened by the modifications brought about by extensive research. Teachers frequently find it to be both simple to grasp and user-friendly. For these and other reasons, Bloom's Taxonomy is an effective questioning method that can help students develop higher-order thinking skills in the classroom.

b) The Williams Model

There are three dimensions in the William model. Subject matter such as mathematics, language, science, social science, and the arts are all included in this section. The following 18 teaching methods are displayed in the second dimension. Tolerance for ambiguity, the ability to write creatively, and the ability to use analogies are all examples of this and students' behavior are the focus of the final dimension (Conklin, 2012).

The Williams model can be an effective tool for instilling creative behaviors in our students and thus transforming them into more creative individuals. Students can think more creatively as a result of the Williams model. The Williams Model produces several outcomes in students, including fluency, flexibility, elaboration, originality, curiosity, risk-taking, complexity, and imagination (Conklin, 2012).

2. Problem-Solving Strategies

a) Problem-Based Learning

According Conklin (2012), Problem-based learning is a strategy for problem solving in which students are engaged in the resolution of real-world or lifelike problems. These issues can range from students violating the dress code to developing safe evacuation routes in the event of a hurricane warning. This strategy is well-known for its collaborative efforts in addition to independent investigations and inquiry (2012, 81). James Rhem (1998) defines students are oriented toward meaning-making rather than fact-gathering through problem-based learning. They acquire knowledge through contextualized problem sets and scenarios. Even though problem-based learning is used today as a higher-order thinking activities, it had been introduced by John Dewey in the 1930s. Dewey stated that school should be lifelike instead of preparing students for life. Furthermore, Conklin (2012) in her book concluded that teachers who employ a problem-solving approach in the classroom not only assist students in grasping specific concepts, but also lay the groundwork for future learning. In problem-

based learning, students have an opportunity to collaborate with their classmates to solve the problem that relate with their real life.

The teacher's role in problem-based learning is as a facilitator or coach. The instruction is limited; therefore, students have to think creatively and take responsibility for their own learning.

There are many benefits in applying problem-based learning. First, students think about a complex situation, which promote higher-level thinking skills. It can develop their intellect and ability to think productively (Caine and Caine, 1997; Diamond and Hopson, 1998). Students should think creatively and critically to solve the problems.

Problem-based learning increases students' motivation. When students solved the problems in problem-based learning, students can see that their work can give a benefit to the society. It makes the students realized that what they do in school give an impact to their environment, and this can build their confidence.

Problem based learning has many steps. The steps are the following:

1. Find the problem that is connected to the real-life problem.
2. Assign facts and locate the way for students to enter the problem. Hook it to something that they are interested in.
3. Students find the facts of the problem by discussing it in a group.
4. Students analyze and brainstorm the problem and create an exact statement of the problem.
5. Students identify information and resources that will used in solving the problem.

6. Students find information by interviewing, collecting data and conducting research
7. Students finding the solution by studying the information.
8. Students present their solution of the problem and publish it for others to see.

b) Creative Problem-Solving Model

Those are 6 steps in Creative Problem-Solving Model (CPS) which are Mess finding, fact finding, problem finding, idea finding, solution finding, and acceptance finding (Conklin, 2012). Those steps then revised into three simple steps that are flexible to apply namely understanding the problem, generating for ideas and planning for action.

c) Strategic Thinking Activities

Conklin in her book “Higher-Order Thinking Skills to Develop 21st Century Learner” states that there are some steps than can be apply Strategic Thinking activities such as:

1. Begin with question that provoke thought.
2. Let students list their idea and share the idea aloud.
3. Ask ‘why’ questions continuously.

In strategic thinking activities students are asked to make decision, share their decision to other students therefore students can see different decision and they learn the consequences of the decision that they take.

d) Simulation

The simulation simulates a situation where participants must make decisions influencing the outcome. When used effectively, simulations can be

practical teaching tools that provide students with opportunities to make decisions. Since the situation is not accurate, mistakes have minimal consequences. Students may take risks and learn from their mistakes. Students understand that there are numerous approaches to situations. It also provides them with a decision-making context, and the acquired knowledge can be applied to other situations involving decision-making opportunities (Conklin, 2012)

There some steps that can be applied in simulation, which are:

1. Students recognize the necessity of making a decision. This can be accomplished by presenting a scenario to students. This must include a hook or catch to be engaging. There are numerous methods for engaging students, and teachers should be inventive when presenting a situation to their classes.
2. Students then provide their definitions of the situation or issue at hand. Before making a decision, they must fully comprehend the issue at hand and the ultimate objective. Depending on the simulation, this step may involve generating various potential solutions.
3. After that, the students evaluate their options and conclude what actions are necessary. Which is the most beneficial class to enrol in?
4. Next, students develop an action plan. They determine how they will carry out their decision. They can create a timeline of their decision to demonstrate precisely what they will do.
5. Students evaluate the outcomes of their decisions and consider the following questions: Would they change anything for the future, and what did they learn from the activity? Students can either write or discuss their reflections.

e) Games

Games are an excellent method for motivating students. Students can develop important decision-making strategies in a safe environment when teachers use games with the appropriate difficulty level. The environment is protected because these games are irrelevant to the real world. Whether through board games, card games, or virtual games, students can practice making decisions in a "real-world setting" without consequences and repercussions.

It is essential to distinguish between games designed for review and games that encourage higher-order thinking. Numerous teachers use games to help students review necessary test-taking concepts. These types of games are beneficial, but they do not necessarily foster higher-order thought (Conklin, 2012)

The characteristics of games that promote higher-order thinking are varied. Students are required to evaluate, create, and analyse. Students must engage in critical thought rather than merely searching for facts to answer questions. This game should cover new information or, at the very least, information that students have had limited exposure to previously. They should involve some problem-solving and stimulate creative thought. These games also facilitate the transfer of knowledge to novel contexts.

Consider the following when planning games that promote higher-order thinking:

1. Determine the skills and objectives the games will teach.
2. Select a game that can teach these abilities and goals.

3. Determine the game's objective and consider the following: what are the students striving for? How will they know when they have attained this objective?
4. Plan the rules that players must follow to achieve the objective. Determine if students will compete against the clock, against themselves, or other players.
5. Evaluate the created games to ensure that the activities are challenging without overly difficult or too simple. If students respond quickly and without consideration, the game is too simple. Students are intellectually engaged in decision-making when they must consider their next steps and the consequences. They should stretch their minds and experience some difficulty. Critical thinking must be an integral component of this.

(Conklin, 2012)

3. Idea Generating Strategies and Activities

A. Brainstorming and Brainwriting

Some steps to promote brainstorm are:

1. Invite students to brainstorm by starting with an open-ended question. Share this in advance so that students can start formulating answers.
2. Give the brainstorming session a specific length of time. The ideal duration is between five and fifteen minutes.
3. During the workshop, no one is permitted to critique or evaluate ideas.

4. Encourage students to offer contributions that build on earlier ideas—no need to make them from scratch.

2. After the lesson, ask the students to choose the top three concepts.

They should discuss why these concepts were their favourites.

Brainwriting is another type of brainstorming. The following are the general rules for brainwriting:

1. Explain the problem to the students. Each student's paper may have a unique question or problem, or they may all contain the same question or problem.
2. Have each student take out one sheet of paper and something to write. On their paper, each student will jot down three suggestions. Allow students three minutes to compose their ideas.
3. When the timer goes off, have each student pass their paper to the person to their left. Allow students to read the new papers' concepts.
4. Give students three minutes to compose their best three new ideas on fresh sheets of paper. Ideas cannot be duplicated, yet, the ideas they have just read can inspire them to write new ones.
5. Repeated a predetermined number of times.
6. After the lessons, summarize the concepts and assess their value.

The teacher has to demonstrate how to do it, observe pupils while they generate ideas, and refrain from offering negative feedback. When these are executed effectively, brainstorming sessions are more likely to yield fruitful results.

Activities involving vocabulary, such as identifying antonyms, synonyms, and meanings, and employing the words in sentences, effectively apply three forms of brainstorming in the classroom.

4. Thinking organizer

Thinking organizers are tools that help us visually organize our thoughts. They can demonstrate how your ideas regarding numerous concepts are interconnected. They might give a collection of ideas or problems new significance. Because individuals think differently, each student's thinking organizer will have a unique appearance. It will reflect their beliefs.

Even though thinking organizers are individualistic, there are stages to follow when making them.

1. Create a picture for your group. Begin by jotting down your ideas using circles, bubbles, squares, or any other shape as a form of graphic organizer.
2. Ask pupils to free-associate concepts relating to the initial concept. Arrows can illustrate how one notion is related to or leads to another. These ideas need not be in whole sentences. In reality, using words, images, or phrases is preferable.
3. As thoughts are added to the thinking organizers, associations between the listed ideas should be created.
4. Creative strategies
 - a) Creative Dramatic

Creative dramatics is a form of imaginative play in which no written dialogue is used. Students construct their acts and words to demonstrate their

knowledge of a subject. It depends on the willingness of the students to act out scenarios. It is frequently described as goal-oriented, organized play. For instance, smaller pupils may act out the butterfly's life cycle, while older students may act out how molecules respond to cold or heat. When pupils perform them, the teacher can evaluate how well students understand the topic. It also reinforces the concepts of participation and observing classmates (Conklin, 2012).

Students completely engage higher-order thinking skills in creative dramatics because they interpret, arrange, and synthesize concepts. It involves imaginatively engaging and stimulating active learning experiences for pupils (Block, 1997; Cox, 1983; Froese, 1996; Harp, 1988; Miller&Mason, 1983, in Conklin, 2012).

b) Creative Writing

Creative writing allows pupils to articulate their thoughts and ideas. It can allow kids to explore language while demonstrating their knowledge and understanding of a topic. As a form of evaluation, teachers can effectively apply creative writing across all subject areas. There are numerous advantages to creative writing. Because it is an open-ended exercise, it fosters creativity. Students imaginations take control, allowing them to incorporate their ideas into their writing. Second, writing creatively requires higher-order thought. Most teachers give research papers so students can demonstrate what they have learned after researching a topic. Thirdly, creative writing allows for the employment of both humorous and rigorous language. The inventive concepts must be compatible with the written material. This requires ability and craft on the part of the author.

c) Project-Based Learning

Project-based learning engages students in a topic by requiring them to create projects to demonstrate their knowledge. These tedious worksheets are replaced by project-based learning, which employs higher-order thinking skills. However, the transformation of a worksheet into a project does not necessarily include higher-order thinking skills.

Larmer and Mergendoller (2010), cited in Conklin (2012), present several crucial qualities that any successful project must have. The first is a captivating introduction to the topic. This experience could consist of a movie, a discussion, a guest speaker, a field trip, or a scenario. The objective is to motivate students to care about the topic and embrace the difficulty of the assignment. Second, the project should be framed by a motivating question. Thirdly, students should be provided options for completing projects.

2.6 Challenge in Improving Students' Thinking Skills

The pedagogy of teaching thinking skills necessitates the teacher's comprehension of the cognitive faculty of thinking. According to Sathasivan's (2016) findings, there exists a disparity between the knowledge teachers possess and their practical implementation of effective teaching strategies for cultivating critical thinking skills. The researcher discovered that the teachers needed their proficient in skillful thinking and could not integrate and imbue the components of agile thinking.

According to Yulia's (2013) research on the obstacles encountered by teachers in enhancing students' critical thinking skills, the teachers reported that

the student's lack of motivation was a significant factor. However, the student's receptiveness to the teachers' guidance as exemplars of English language proficiency was commendable. To foster integrative motivation among students, teachers must enhance their teaching methodology and oral proficiency in English. This is because English language proficiency holds significant value for students and can be a crucial driver for their academic success. Seman et al. (2017) asserted that the difficulties associated with instructing thinking skills are multifaceted, encompassing teacher-related issues, pedagogical and curricular preparations and procedures, and student-related factors.

According to Seman et al.'s research, as cited by Abkari (2015), specific challenges exist in enhancing students' thinking abilities.

1. Challenges faced by students.

The identification of challenges faced by students during the process of learning English is of significant importance. The primary hindrance to acquiring proficiency in the English language is the lack of an immersive environment that fosters familiarity with the authentic language. Stated differently, English only has a practical application beyond the confines of an educational setting. Consequently, there is no pressing incentive for them to acquire proficiency in the English language. The educational system should facilitate the fulfillment of this requirement.

2. Challenge faced by the teachers

The apprehension experienced by teachers and the resultant emotions of guilt, shame, or embarrassment due to unsatisfactory outcomes of their students in

public examinations may prompt them to focus solely on teaching English for testing.

3. Issues related to textbooks.

The book uses unappealing, monotonous, antiquated, and inconsistent language.

- a. The pictures in the books need to be corrected, appropriate, and attractive.
- b. There needs to be coherence and relevance between the lessons and texts in the subsequent books.
- c. There appears to be a discrepancy between the size of the content and the allocated time for it, indicating a need for coordination.
- d. The lack of diverse activities and poor grammar usage are areas of concern.
- e. Comprising of non-conventional inquiries.
- f. The presentation of grammar points needs a more logical manner and order of difficulty.
- g. The book's general purpose needs to be more transparent.

4. Issues related to teaching methodologies.

This issue pertains to the teaching methodology, wherein teachers primarily concentrate on rectifying grammatical errors but allocate less emphasis on instilling in their students the significance of learning the subject matter.

5. Things related to language assessment or evaluation.

Despite the prevalence of discrete point tests and summative assessments in evaluating students' learning, many teachers prioritize summative assessments. They may need more expertise to implement alternative assessment methods effectively. The emphasis remains on students' academic performance on examinations, as opposed to their performance in practical, real-world scenarios. Consequently, the wash-back effect of testing may impede the adjustment of instruction to facilitate students' learning.

6. Challenges about the curriculum

Despite efforts by authorities and curriculum developers to implement a communicative syllabus in public schools, the overall approach remains traditional course that primarily emphasizes reading comprehension (Razmjoo & Riazi, 2006). Additionally, the sub-skills of grammar and vocabulary, which are crucial for developing reading skills, are given significant attention. Although reading-oriented programs may not effectively develop oral communication skills in learners, they can be justified in English as a Foreign Language (EFL) contexts. This is particularly relevant considering that many learners in these contexts intend to utilize the language primarily for academic purposes, such as advancing their subject areas at university, rather than engaging in face-to-face interactions with native speakers. The current curriculum in Indonesia has addressed the existing issues, although teachers still require additional training to comprehend the curriculum content fully.

7. Political problems are complex and multifaceted issue that has garnered significant attention and analysis in academic circles.

Students do not commonly utilize English for everyday communication within the educational setting. The prevailing educational system adheres to traditional methods, and teachers and learners possess beliefs and attitudes that occasionally impede the adoption of innovative approaches.

CHAPTER III

RESEARCH METHODOLOGY

3.1 Research design

This study was conducted using mixed method to analyse the data. A mixed method study is a study that collects, analyses, and integrates quantitative and qualitative data to answer research questions. Case study qualitative method was needed to achieve the goal through in-depth interviews and observation, this type of research can reveal potential motivations and desires. Research related to attitudes and opinions aims to discover how people feel or think about a particular subject or organization. Therefore, a qualitative approach must be implemented. For qualitative researchers, the purpose of phenomena can be understood carefully if conducted through interaction with the subject deep interview. Besides, it can be done through observation to the location of phenomena. Qualitative research needs to be conducted from the perspective of distance education students and the central phenomenon is a key concept, idea, or process in qualitative research (Creswell, 2003). Meanwhile, Quantitative process was needed to collect numeric data for group's comparison. The numeric data in this study is in the form of average percentage based on questionnaire. The questionnaire consist of Likert questions and open-ended questions.

3.2 Subjects of the Study

The research subject came from thirteen English teachers of senior high school in Pekalongan Regency of whom two were interviewed and observed. One

from SMA 1 Kajen and one from SMK Karangdadap Kabupaten Pekalongan. High schools in Pekalongan Regency were chosen because these school are accessible to conduct research The selection of two observed teachers was based on the inclusion of teachers from a school that implemented both the Curriculum 2013 and the Merdeka Curriculum. Hence, both parties possess knowledge regarding the contrasting learning processes in the Curriculum 2013 and the Merdeka Curriculum. The kind of sampling that is used in this research is purposive sampling. Purposive sampling is the deliberate choice of a participant due to the qualities the participant possesses. It is typically used in qualitative research in order to identify and select the information-rich cases for the most proper utilization of available resources (Etikan et al., 2016). This kind of sampling technique has been chosen, since the intention is to investigate a specific group of individuals -teachers. This focus is on the subjects since they will be best enabling the researcher to answer the research questions.

3.3 Data Collection Methods and Research Instruments

The data were collected using a combination of questionnaires, semi-structured interviews, and direct observation methods. The questionnaire was selected to acquire a comprehensive assessment of the attitudes and opinions held by the participants. The questionnaire comprises 18 Likert scales and ten open-ended questions (refer to the Appendix A). A semi-structured interview was used to gather the perspectives and emotions of two teachers before and after class observation since it provides a suitable platform for the interviewees to express themselves. The advantage of this sort of interview is widely recognized. This

strategy can effectively promote unrestricted and uninhibited responses from the interviews. Nunan (1992), as referenced in (Yusuf, 2015), asserts that the semi-structured interview empowers the interviewee by allowing them to influence the interview process while also providing the interviewer a high level of freedom. The purpose of interviews is to gather more comprehensive data, receive tailored responses, and seek greater clarification on teachers' teaching methods during the teaching and learning process.

In addition, the researcher employed direct observation. A qualitative observation refers to the process in which the researcher records detailed field notes regarding the behavior and activities of individuals at the research site. Within these field notes, the researcher documents information obtained through a semi-structured interview. Meticulous and laborious tasks frequently characterize field study observation. This study aims to observe actual teaching practices in the English language classroom of senior high school students.

In addition to such methods, the researcher also gathers qualitative records. Public records, such as newspapers, minutes of meetings, and government reports, as well as private documents like notebooks, diaries, letters, and emails, can serve as examples (Creswell, 2003). This study will utilize lesson plans and select public and private documents. Subsequently, a non-participant observation method was employed to minimize potential interference with the students under observation.

Collecting data involves multiple sequential steps. Initially, the English teachers completed the questionnaire to gather general information. Next, a subset

of two teachers out of thirteen were selected as representatives and subsequently questioned to ascertain their methodologies for implementing higher-order thinking Skills (HOTS) in the educational process. Furthermore, during the interview, the teachers were monitored to confirm the accuracy of their answers. The observation can provide corroborating evidence and potentially contribute more information to the interview data. The observation can be utilized to authenticate the responses provided during the interview.

3.4 Data Analysis

After collecting data, the researcher needs to analyse them. Qualitative data analysis is a process of searching and arranging the data taken from the questionnaire result, observation, interview and documentation. Qualitative data analysis consists of three current flows of activity: data reduction, display, and data verification (Miles, 1994). The data in this study will be analysed and discussed empirically and objectively in those methods, with the aid of the result from collecting data.

The data analysis quantitative data entailed counting the percentage for the questionnaire by means of descriptive statistics and evaluating the transcripts and field notes derived from observation. The interview transcripts and observation notes were collected and organized into categories. The objective was to ascertain the methodologies employed by teachers and the difficulties encountered when implementing higher-order thinking Skills (HOTS) activities in the English learning process. The study employed thematic analysis due to its versatility in deriving conclusions from the research.

CHAPTER IV

FINDINGS AND DISCUSSION

This study was conducted at a state senior high school and a state vocational school in Pekalongan Regency. The research participants comprised thirteen English teachers two of whom were observed which are Teacher A from SMA Negeri 1 Kajen Pekalongan Regency and Teacher B from SMK Negeri 1 Karangdadap Pekalongan Regency. According to the problem statement outlined in the initial chapter, the outcomes of this study encompass the following: (1) an examination of the strategies employed by teachers when implementing activities that promote higher-order thinking skills (HOTS), (2) an exploration of the factors that impact teachers' decision-making regarding HOTS-based activities, (3) an investigation into the challenges encountered by teachers during the implementation of HOTS-based activities, and (4) an analysis of the solutions devised by teachers to address these challenges.

4.1 Findings

4.1.1 Teachers' strategies in conducting HOTS-based Activities in English Language Classroom.

The data from the questionnaire showed that one out of thirteen teachers do not use HOTS in their learning process and do not understand HOTS, therefore, He is no longer used in the analysis. There are twelve teachers who used HOTS in their learning process. Nevertheless, the frequency and the strategies of using HOTS activities in their classroom vary.

The table below shows teachers' perception of using HOTS in their English lesson.

Table 2 The percentage of teachers who implement HOTS in English classroom

IMPLEMENT HOTS IN TEACHING											
Statement	Always (1)	%	Often (2)	%	Sometimes (3)	%	Seldom (4)	%	Never (5)	%	
1	0	0	8	67%	4	33%	0	0%	0	0%	
2	2	17%	6	50%	4	33%	0	0%	0	0%	
3	5	42%	5	42%	2	17%	0	0%	1	8%	
4	1	8%	5	42%	5	42%	1	8%	0	0%	
5	4	33%	7	58%	1	8%	0	0%	0	0%	
6	2	17%	6	50%	4	33%	0	0%	0	0%	
7	1	8%	7	58%	3	25%	1	8%	0	0%	
AVERAGE	2,14	18%	6,29	52%	3,29	27%	0,29	2%	0,14	1%	

The Figure 5 below shows the average of teachers who implement HOTS in English language classroom (the statements can be seen in Appendix A).

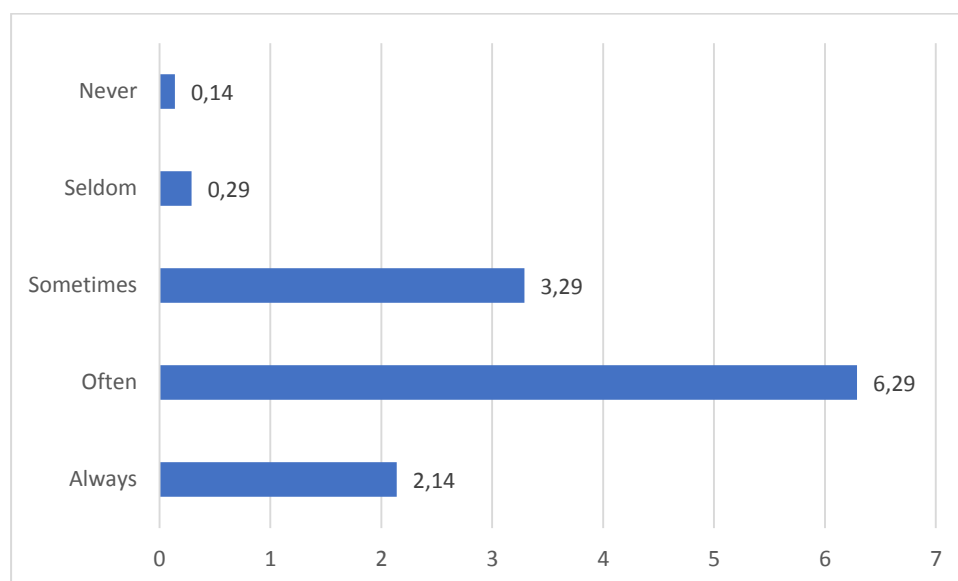


Figure 5 Teachers' perception of using HOTS

According to the survey, 52% of English teachers reported frequently incorporating higher-order thinking Skills (HOTS) into their teaching methods. However, Teachers A and B only sometimes consistently apply higher-order

thinking Skills (HOTS) in every lesson or content. In fact, during the class observation, Teacher A did not utilize the HOTS approach.

Meanwhile, 27% of English teachers occasionally utilized higher-order thinking Skills (HOTS). They utilized open-ended questions to engage students with a moderate to advanced level of English proficiency. These questions were mainly employed for enrichment purposes and were designed to stimulate higher-order thinking skills (HOTS). This condition aligns with the interview conducted with Teacher A.

Excerpt from Teacher A interview:

“I rarely use HOTS in my teaching because my students’ English proficiency level is low. I use HOTS when there are students with high English proficiency level. When I am dealing with my low students, I ask the students with higher English proficiency level to do an enrichment. This enrichment usually in HOTS questions form, they answer the HOTS and more difficult questions from their workbook. I think for me, with my students’ condition, it is difficult to apply HOTS. I tend to use this workbook, and I focus on my students target language”

Teacher A assume that gave students difficult questions or HOTS questions were equal to HOTS. Different from Teacher A condition, Teacher B try to use HOTS in her teaching process because she wants to give her students experiences and to connect their knowledge with real world.

Excerpt from Teacher B interview:

“Yes, I use HOTS in my teaching process. Even though not all steps of HOTS I applied in every meeting or lesson, but I use to try one strategi or one activity that encourage HOTS in every meeting. I know my students’ English proficiency level is low, and sometimes it is hard for me to apply HOTS if my students even can differentiate between His and He. But, I also want to give my students best experience that can be used to solve their life problem. And to connect the knowledge with the context”.

Even though Teacher B stated that she used HOTS in her teaching process, she did not think that her HOTS activities were correct. She even realizes that when she applied HOTS and at the end, she still found that her students' English proficiency was still low.

Excerpt from Teacher B interview:

“When I ask my students to present their project, I still disappointed with their English. Their English did not improve much, but for now I don't really care because learning is not about the language, I think learning also give students the best experience to use their knowledge in the context”

Teacher B teaching module also showed that her students' activities in HOTS form. However, in the observation, the students were passive. The students could not answer her questions, so they had to open their books and use Google translate to answer, and even though they used Google translate, they still struggle with their pronunciation when read the translator.

From the questionnaire, the researcher found the frequency of HOTS based activity implementation in the classroom that shown in table 3 and figure 6 below.

Table 3 The Frequency of HOTS based activity implementation

HOTS ACTIVITIES											
1	1	8%	6	50%	4	33%	1	8%	0	0%	
2	4	33%	4	33%	4	33%	0	0%	0	0%	
3	3	25%	9	75%	0	0%	0	0%	0	0%	
4	0	0%	8	67%	4	33%	0	0%	0	0%	
5	1	8%	9	75%	2	17%	0	0%	0	0%	
6	1	8%	6	50%	4	33%	1	8%	0	0%	
7	5	42%	5	42%	2	17%	0	0%	1	8%	
8	4	33%	6	50%	2	17%	0	0%	0	0%	
9	4	33%	6	50%	2	17%	0	0%	0	0%	
10	2	17%	8	67%	1	8%	1	8%	0	0%	
11	6	50%	5	42%	1	8%	0	0%	0	0%	
AVERAGE	2,82	23%	6,55	55%	2,36	20%	0,27	2%	0,091	1%	

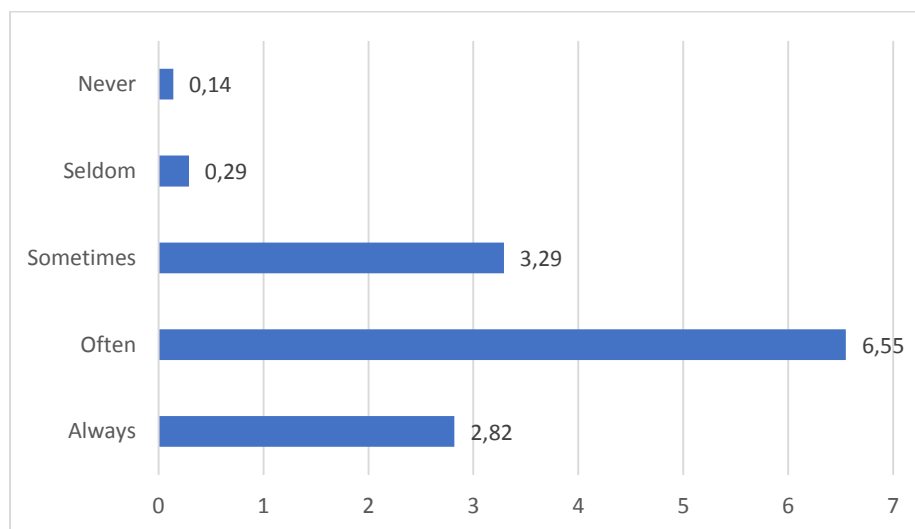


Figure 6 The frequency of HOTS-based activity implementation

Based on the questionnaire, 55% of English teachers often used HOTS activities in the classroom. The HOTS activities were activities that promoted critical thinking exercises, for example, giving problem-solving activity, making reflection, asking open-ended questions, and conducting presentations (Abdul Aziz et al., 2017) and implemented through project-based learning, problem-based learning, inquiry by posing open-ended questions (conklin, 2012). Even though 55% of English teachers claimed that they implement HOTS during the teaching process, however, when they were asked about HOTS activities, using open-ended questions questionnaire (Appendix 2), only 2 teachers or about 2% of the teachers who really use HOTS activity using project-based learning as they strategy. The other teachers stated that they used difficult questions or open-ended questions that they consider as HOTS activity.

Based on the questionnaire in the form of open-ended questions, the strategies to apply HOTS activities in the classroom vary from twelve teachers. Seven teachers stated used project-based learning as their strategy, however, they

seldom used it in their teaching process, they used it only in certain material. Three teachers stated that the strategy they used is problem-based learning. From the interview Teacher B stated that she used this often and almost every meeting. Teacher B also stated that she used discussion, video analysis, text analysis, inquiry, genre-based learning, presentation, and reflection almost in every meeting even though those strategies did not apply maximally.

The finding from questionnaire above, in line with the observation from Teacher A and Teacher B. The researchers observed the classroom activities of Class X E 3 in SMAN 1 Kajen and Class XI TKR 2 in SMKN 1 Karangdadap. Teacher A was responsible for teaching English in class X E 3, whereas Teacher B was assigned to teach English to students in class XI TKR 2. Teacher A and Teacher B also did the questionnaire before the observation. The empirical findings derived from the observation indicate that the teachers employed specific pedagogical approaches to effectively incorporate higher order thinking skills (HOTS) into their English instructional sessions.

From classroom observation of Teacher A, the researcher found that even though Teacher A used Merdeka Curriculum, Teacher A used more lower order thinking skill than higher order thinking skill. Teacher A taught Exposition Text about Actual Issues. There are four meeting that had been conducted. In the first meeting, at the beginning of the lesson the teacher gave a question that from his teaching module called trigger question.

Excerpt from the Teacher's A lesson

Teacher : *Have you heard about exposition text?*

(Level 1 : remembering)

Students : *No, I haven't*

Teacher : Okay, now please open your book on page 10, and read it.

From that excerpt, the question that the teacher gave is level 1 which is knowledge from Bloom Taxonomy. Teacher A also gave the same questions in meeting two, three, and four which are still in the level 1: remembering and level 2: understanding.

After Teacher A gave the trigger questions, Teacher A asked the students to read and answer the questions based on the text given and completing worksheets. However, there were analysis process when the student did the worksheet, which was 'analyze the structure and generic structure'. Students had to find which paragraph that belong to certain generic structure. According to Anderson and Krathwohl (2001), the analysis process involves deconstructing a given material or concept into its constituent parts, followed by examining how these parts interrelate and contribute to the overall structure.

The interview with Teacher A revealed that Teacher A taught low-proficiency students, therefore the strategies used were more on question answer session and completing worksheets and the students must send it to Google classroom. Teacher A would assess the students' task from Google classroom, and He would know whether the students could do the task or no. If he found the students could not do the task, he would call the students to the front of the class and had them drill one by one as shown in Figure 3. He drilled those students on the target language. While he drilled those students, He asked the students with medium to high level proficiency students to do an enrichment, answering more difficult questions, he considered it as HOTS activities.



Picture 1 question answer for students who could not do the task



Picture 2 High level students did HOTS questions

Teacher A, in his teaching used group discussion as well to improve students critical thinking skills. In the last meeting (meeting four) He asked his students in the group to answer the questions and analyze the text according to its language feature.

Excerpt from Teacher's A lesson meeting 4

Teacher : *Okay students, after you read the exposition text in the worksheet, and understanding the content, do you know why the writer wrote the text?*

(Level 5: evaluation)

Student 1: *Untuk menginformasikan*

Teacher: *Yes, to inform. Another please?*

Student 2: *Untuk meyakinkan pembaca Pak.*

Teacher: *Yes, that's correct, to convince the reader. Now, in your group do some analysis about what kind of tenses that is used in exposition text and make a conclusion that you got from the text.*

(level 4 : analysis and level 5: evaluation)

Based on the interview data with Teacher A, group discussions have been found to enhance student engagement. During these discussions, students actively participate by discussing answers and conducting minor research on the content

using Google. It is worth noting that most meetings are conducted in Bahasa. Nevertheless, Teacher A let the students utilize Google Translate. Subsequently, they were required to provide their discussion outcomes in English. Additionally, the students were free to compose their results beforehand and recite them during their presentation to their peers.

Teacher A's teaching approach revealed that although He used Merdeka Curriculum, He found that it is difficult to implement higher-order thinking - based activities in the classroom. Consequently, they opted to employ lower order thinking skills to enhance the student's competence. Even, during the observation conducted, the class was passive. Students with high level could not answer the questions, they struggled with their vocabularies, however when Teacher A allowed them to used Bahasa they became active. Therefore, Teacher A still use teacher centered strategy to solve this problem. Almost all the time during observation Teacher A stood in front of the class and talked while the students did the task from the workbook.



Picture 3 Teacher A explaining the lesson



Picture 4 Students did the task from workbook

Teacher B's classroom observation yields contrasting results compared to Teacher A. Teacher B implements many ways to foster the development of higher-order thinking skills in her classroom. She instructed eleventh-grade students in Descriptive Text. Nevertheless, after the researcher analyzing her teaching module, she concluded the course by instructing the students to apply their proficiency in comprehending descriptive writing to real-life situations which is the student should use their descriptive text to review product, make a video and post it in marketplace to get money as an affiliate. The students must be able to employ descriptive text to resolve problems about their immediate surroundings and environment as well. From Teacher A's teaching module, the researcher also found that teacher A used Project Based Learning to enhance students' critical thinking skills (HOTS).

In the first meeting, Teacher B used games to deliver the content. According to Conklin (2012), games are an excellent method for motivating students. Students can develop important decision-making strategies in a safe environment when teachers use games with the appropriate difficulty level. However, the games that used by Teacher B was the reviewed games, it was not game that involved higher-order thinking skills.

Excerpt from Teacher's B lesson: first meeting.

Teacher: *okay students, because most of you cannot count until 100, today we are going to play a game about number. I will divide you into groups consist of 7 students. Okay, please count one to five.*

Students: *count one to five.*

Teacher: *now, students who say number 1 will become one group together, and the others number as well. Satu dengan satu, dua dengan dua, okay, am I clear? Now, Let's go, chop, chop.*

Teacher : *okay, thank you. Now listen to the rules, but before that, I would like you to write a number on your note book, big one, and each member will write different number, the numbers must be between 1 to 7. Jadi, setiap anak di dalam grup akan menuliskan satu angka antara satu sampai tujuh, tidak boleh sama. Okay, finish? Now, I will tell you how we play the game. If I said a number, then, you have to short the number starting the first number to the last one, for example, if I said seven thousand five hundred and twenty four, so the student in each group with the number on the note book must come to the front of the class as soon as possible and short it correctly. The faster group will win the game.*

(level 1 : remembering)

Teacher B continued to instruct the students on numbers by reviewing multiplication, division, addition, and subtraction with them after the game concluded. (level 1: remembering)

Based on the researcher's interview with Teacher B following the lesson, it was determined that Teacher B administered the game to her students because there were four lesson hours in a day (one lesson hour equals 45 minutes). Moreover, Teacher B stated that he taught low-proficiency students. Consequently, to maintain the student's interest in learning English, Teacher B should strive to incorporate enjoyable learning activities. Teacher B posits that implementing higher-order thinking skills activities, even diversions, would decrease her students' motivation.

At the second meeting, the objective of the lesson was the students understand and can use the adjectives as a part of descriptive text. Even though, it was about knowledge, Teacher B had strategies to make the learning process become the process that involved higher-order thinking skills.

Excerpt from Teacher B's lesson : second meeting.

Teacher : *What part of speech is needed when we want to describe something or someone?* (Level 1 :

remembering)

Student : *adjective Miss*

Teacher : *That's correct. Know, please make a group of 4, and do a research about adjective. What is adjective? What kind of adjective that you will need or use to describe someone or something? Is it the same adjective? If it is different, what is the difference? Find the answer by searching in the internet dan do a research from some descriptive text about person or thing.*

(level 1: remembering ; level 3: applying; level 4: analysing)

Students: *Miss, do we have to present the result?*

Teacher: *Yes, you will present the result using window shopping, every group will shop to the other groups, and one member of the group will stay at the shop to explain and present the result. The members who shop have to give evaluation, or feedback to the group or shop that you visit ya.*

(level 5 : evaluating)

Students: *Can we use google translate Miss?*

Teacher: *Yes, but you have to present in English*

Student: *Can we read?*

Teacher: *Read what?*

Student: *mmm...baca tulisan hasil diskusi saat presentasi Miss.*

Teacher: *Yeah, you can.*

From the excerpt above, it was discovered that Teacher B employed higher-order thinking skills (HOTS) questions to urge students to engage in critical thinking during their group discussion. In addition, Teacher B needed to provide the students with the material or impart knowledge directly. Instead, Teacher B instructed the students to seek information and independently draw conclusions. In addition, Teacher B instructed her students to apply the "Window Shopping Model" for their presentations, which requires them to engage in higher-order thinking skills by providing feedback and evaluation to their peers.

At the third meeting from Teacher B class observation, the researcher found that Teacher B still did the same strategy to employ higher order thinking skills in her classroom, which are class discussion and questions. Teacher B also used

game; “Guess Who” to review the adjective that the students had learnt before (level 3: applying).

Excerpt from Teacher B’s lesson: third meeting.

Teacher : *What are the important parts of a good descriptive text?*
(level 1: remembering)

Students : *silent, no one answer the question.*

Teacher : *okay, if there is no one answer the question, please open your book, and also you can search from the internet the answer about the structure of descriptive text.*

Students: *Okay Miss.*

Teacher: *next question, what verb that is use in the text? 1, 2, or 3?*
(Level 4: analyzing)

Student: *one Miss.*

Teacher: *okay students, now, in your group answer the following questions: what is the function of descriptive text? Where do we see descriptive text in real life? How can we use descriptive text in real life? You can still use the text that I’ve given you before.*

(Level 4: analysing)

After Teacher B gave the instruction, the students did the task, and presented in front of the class until the class was over.

The exercises at Teacher B’s third meeting did not include specific tasks requiring higher-order thinking skills, only answering questions in groups. Nevertheless, the questions provided by the teacher required advanced cognitive abilities at level 4, specifically in the analysis area.

Teacher B’s fourth, fifth, sixth, seventh, and eighth meetings have begun demonstrating activities requiring higher-order thinking skills. Teacher B employed Project Based Learning in those activities. In addition, she attempted to establish a connection between the knowledge acquired by the students during the initial, second, and third sessions on descriptive text and its application in real-world scenarios. The students would use descriptive language to create a product

review in a video and establish a connection with the marketplace. In addition, the student must also do a comparative analysis between several marketplaces. This would enable her students to determine the most suitable platform for showcasing their videos and selling their products..

Excerpt from Teacher B's lesson : fourth meeting.

Teacher : *have you ever watch a product review? Where did you watch it?*

Student: *yes Miss, on You Tube,*

Student: *on Tik Tok miss*

Student: *Instagram Miss.*

Teacher: *What information should be included in a product review?*

Student: *informasi produknya Miss, kelebihan dan kekurangannya.*

Teacher: *Yes, good, product description, the weaknesses, the strengths.*

Now, Which form of product review you liked the most? Written or video?

Students: *video Miss (almost all students answer this)*

Teacher: *alright then. You will make a video product review, but before that you have to make a story board, but don't worry I've prepared the story board template, you only have to fill it in a group of three. You can choose any things around you as a product or something that you have ever bought.*

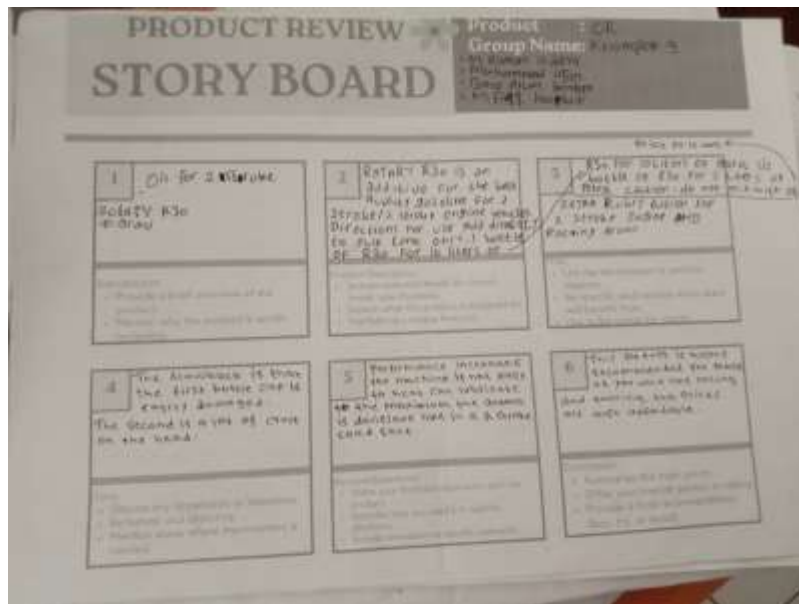
Students : *Okay Miss.*

PRODUCT REVIEW STORY BOARD

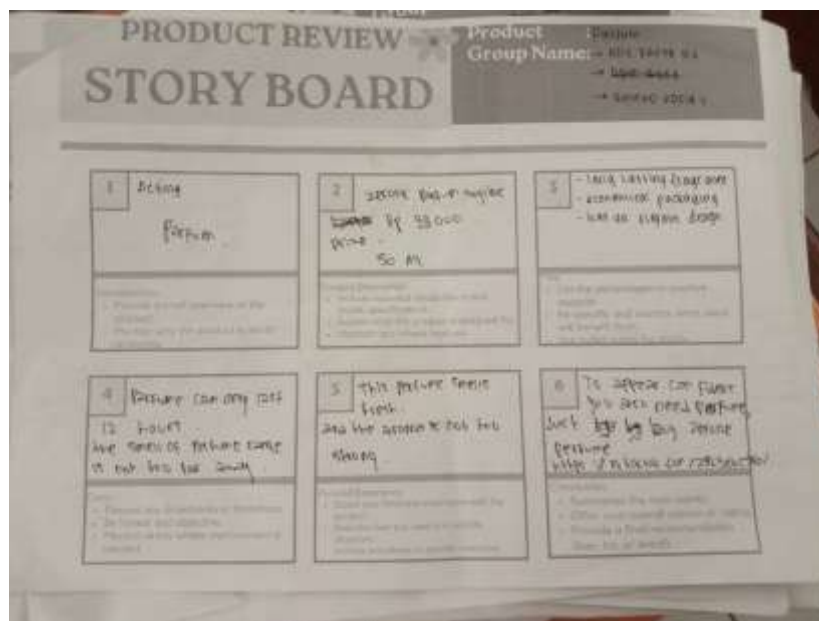
Product: [Blank]
Group Name: [Blank]

<p>1. Product good (5 stars) Using quality materials but at affordable prices</p> <p>Pros: - Provides a great experience of the product - Affordable price for the product's quality</p>	<p>2. 100% cotton canvas Backpack & durable screen printing Anatomical design, stitching Complete accessories & aesthetic Evenly padded straps or straps/ back bag</p> <p>Pros: - Durable material from the canvas - Good quality stitching - Equipped with a variety of compartments, pockets, and other features</p>	<p>3. The model is not and up to date Guaranteed quality The price is very cheap Advised and neat Affordable price</p> <p>Pros: - Get the advantages of quality materials - Get quality and durable when used with quality brand</p>
<p>4. Not suitable for use in hot weather Susceptible to mold if stored in a damp place The cloth is easily damaged if soaked for too long</p> <p>Cons: - Requires deep knowledge on stitching - The fabric used is not strong - Requires good sewing equipment to complete</p>	<p>5. When I use the material is about stretch easily, although great, the material is even not hot when used I've used it a few times so quality is guaranteed</p> <p>Cons: - When you finished your work with the product, you have to wash it in cold water - It's not so good when it's used in hot weather</p>	<p>6. Not a great suitable for people who are looking for a good quality, you can immediately check them out at the reputation store</p> <p>Cons: - Sometimes the price is high - Only a few people are interested in it - Provides a bad experience when they use it</p>

Picture 5 Student's story board



Picture 6 Student's story board



Picture 7 Student's story board

Based on the provided storyboard, Teacher B effectively engaged students in developing their critical thinking abilities by having them complete product reviews. This activity required students to analyse the products' merits and drawbacks, corresponding to the advanced cognitive skill level 5: evaluation.

Students were required to draw a conclusion based on all the points, which also required them to utilise advanced thinking skills at level 5: evaluation. The fourth meeting of the Teacher's B lesson incorporated Higher-Order Thinking Skills tasks throughout the entire session.

During the fifth session, Teacher B directed the students to create a video product review using the storyboard they had already made. This task necessitated the utilization of highly developed cognitive abilities at level 6, notably in the domain of creation.

Additionally, the students were responsible for writing the script and committing it to memory. This approach required great imagination as the students were free to select any product, regardless of its quality, from their surroundings or something that they have ever bought. They had to enhance the product's aesthetic appeal beyond that of the actual one. In addition, they had to devise techniques to ensure their video was as captivating as possible. After the video had finished, they had to post it in their social media.



Picture 8 Processing of making video product review

Students attempted to think critically and creatively to make their videos fascinating even though their final products were subpar, as evidenced by the images above. They were also tasked with determining how to increase the number of viewers of their recordings so that they could eventually resolve their financial issues.

In the sixth session of Teacher B's lecture, it was evident that she tried to establish a connection between her students and the real world, particularly the business sector. This project required higher-order thinking skills as students were tasked with solving problems related to how their videos might generate income and assist with their financial difficulties.

Excerpt from Teacher B's lesson: sixth meeting

Teacher : *Class, have you ever done online shopping?*

Students : *Yes, Miss.*

Teacher : *What product do you usually buy?*

Student 1 : *cloths*

Student 2 : *skincare Miss*

Student 3 : *Shoes*

Teacher : *okay...okay, what platform do you use often?*

Student 1: *Shopee*

Student 2 : *Tokopedia*

Teacher : *have you ever used international platform?*

Students : *No miss*

Student : *pernah sekali Miss, beli spare part karena tidak ada di Indonesia.*

Teacher: *Okay students, now, I want you to have a small research about marketplace platform. Make a list of marketplace platforms in the world, and find the top six from those marketplace platforms, why those become top 6?*

(level 5 : evaluating)

During the sixth meeting, students exclusively engaged in that particular activity for about four hours of instructional time. Nevertheless, the students were required to assess the six platforms and determine why they selected them as the

top six and what factors contributed to their selection as the top six. This practice is another method Teacher B employs to consistently enhance her classroom's critical thinking and engage students by utilising Higher-Order Thinking Skills despite their limited English ability.



Picture 9 Mini research to prepare the presentation.

During the seventh session, Teacher B instructed her students to provide presentations on the work they had completed in the previous session. Teacher B employed the "Two Stay Four Stray" technique. This implies that two group

members will remain in their original group while the other members will join a different group to listen, provide feedback, and ask questions. Afterwards, they will return to their group and discuss what they have learned from the other groups. This activity served as another strategy Teacher B employed to incorporate higher-order thinking skills in her English class. However, this activity was unsuccessful because most pupils had low level of English ability. Students with advanced proficiency find it effortless to provide feedback and evaluation to the group they visited. Conversely, lower-proficiency students need help with their limited English skills. They utilised Bahasa. Teacher B resolved this issue by permitting the students to utilise Google Translate. However, this approach consumed more time for them to articulate their thoughts. Consequently, four instructional hours were expended on visiting each group, leaving little opportunity for them to interact with their respective groups.

Teacher B's eighth meeting utilized advanced cognitive skills encompassing the highest level of Bloom's taxonomy: creativity. Teacher B instructed the students to provide a detailed description of their videos. Before providing the description, Teacher B sparked the students' enthusiasm by discussing the aim of their videos. To effectively promote their products and achieve successful sales in the market, students must ensure that they offer their items in the appropriate marketplace. In this section, Teacher B utilized the Higher-Order Thinking Skills method at the evaluation level by requiring students to compare different marketplaces.

Excerpt from Teacher B's lesson : eighth meeting

Teacher : *Okay students, last week you have made your video review and I asked you to take a picture of the product from PKK subject, right, now, I would like to ask you, why you made that video and the picture? What is it for?*

Student 1: *Memperkenalkan produk yang akan kita jual.*

Student 2: *Agar orang tertarik and want to buy the product Miss.*

Teacher : *So, what should you do?*

Student : *post our video on marketplace, Miss.*

Teacher: *okay.. what should you do first, so you can post your video on the marketplace?*

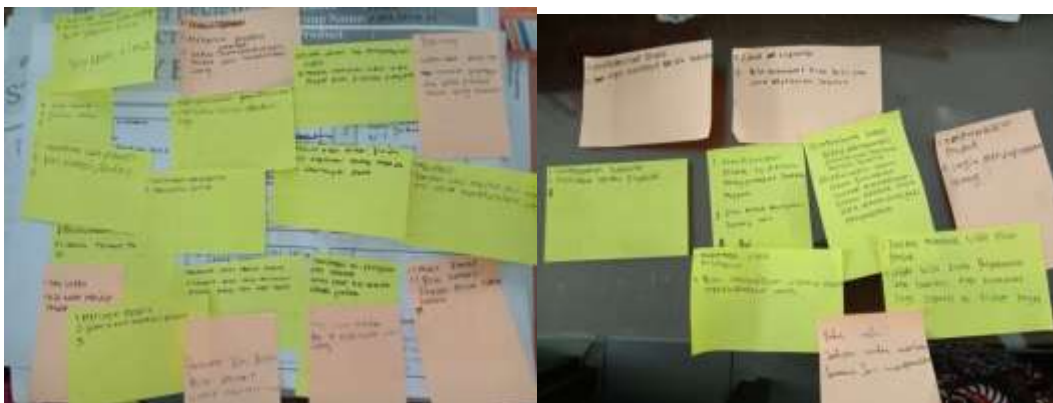
Student: *daftar*

Teacher: *what else?*

Student: *make an account.*

Teacher: *yes, correct. Which marketplace the most appropriate with your product? If your product is a wooden product, which marketplace is the most appropriate to sell it? Okay, students, now you have to check the correct marketplace for your product, then, you have to make an account, and post your video and picture there, but don't forget to make a description of your video and picture so the viewers will know what kind of product that you try to sell.*

Upon completing the assigned tasks, the students engaged in a reflective exercise. It was discovered that creating a product review can yield additional income for the students. By becoming affiliates of products on specific marketplaces, they can generate revenue, thereby addressing their financial concerns.



Picture 10 Critical reflection from students that come up to another ideas to solve the problems

From class observation of Teacher A and Teacher B, the researcher found that both classes consist of low English proficiency level students, therefore teachers tend to use lower order thinking skills in their lesson compared to higher order thinking skills. However, the two teachers responded in different ways.

Based on open-ended questionnaire, Project based learning also become the most chosen strategy to implement higher order thinking skills in English Language classroom. Seven teachers answered that the strategy they use to implement HOTS project-based learning, however they did not apply this strategy in every meeting or in every material, they only applied this strategy if the material was appropriate for project, they wrote that they did not apply the strategy because of their students English level proficiency.

4.1.2 The factors that influence the teachers' strategy in conducting HOTS activities in English language classroom

The objective of this research question is to investigate the factors that influence the teacher's strategies in conducting Higher-Order Thinking Skills

activities in English language classroom. The data from this were collected from semi-structured interview with Teacher A and Teacher B and open-ended questionnaire to some teachers in Pekalongan. From both interviews the researcher found that the influence factors to teacher's strategy in applying HOTS are:

4.1.2.1 Curriculum

According to the result of open-ended questionnaire there were 12 teachers stated that curriculum gives the most influence for teachers when applying the strategies of HOTS-based activities.

According to the interview with Teacher A and Teacher B, Merdeka Curriculum gives the best influence for both teacher's strategies in applying Higher-Order Thinking Skills. As stated in Buku Saku Tanya Jawab Kurikulum Merdeka (Kemdikbud, 2020) that In Merdeka Curriculum, the assessment that overlooks the curriculum is a National Assessment (AN), which this assessment differs from the National Examination. AN is designed not to test knowledge but to evaluate the students' skills. Moreover, the government also stated in this book that the Merdeka Curriculum encourages project-based learning, problem-based learning, and other methods that mainly support children's freedom of exploration. Teachers are suggested to employ these teaching methods to attain the objectives outlined in Merdeka Curriculum. This will enable students to effectively address issues about their surroundings and apply their acquired knowledge in practical situations.

Excerpt from Teacher B interview:

“Merdeka Curriculum give me more chance to apply HOTS in my teaching process. Because we are no longer have to finish the material in certain time. In curriculum 2013, we have to finish a lot of material in one semester while in Merdeka Curriculum we don't have to, we can adjust it based on our students condition, so I have more time to apply HOTS. But, for me, it still difficult, though, because my students' proficiency is low, so I still have to teach them the target language first for example pronoun, jenis kata, grammarnya, dan sebagainya, usually I need 1 meeting, which is 4 lesson hours to explain this before I apply HOTS in the next meeting”, tapi, I still want to make my teaching relate with my students' context, as stated in Capaian Pembelajaran in Merdeka Curriculum”.

Different from Teacher B, Teacher A stated that He was still influenced by curriculum 2013. Teacher A combined comprehension and problem-solving questions during his class. In Merdeka Curriculum, problem-solving questions using HOTS questions, which for Teacher A consider difficult questions, became signature, every teacher is compulsory to make HOTS questions especially for final assessment, therefore Teacher A used this as a practice for their students to do final assessment.

Excerpt from Teacher A interview:

“I think I still used difficult questions as enrichment for my students, you know, in Curriculum 2013, the government asked us to make HOTS questions and even the government hold a workshop to train teachers to make HOTS questions. These questions were difficult for student. Because of this workshop we have a lot of HOTS questions and now, sometimes, I gave my students these questions. Tapi saya berikan hanya untuk siswa yang Bahasa Inggrisnya sudah bagus. I think by using this strategy I have apply HOTS in my classroom, setidaknya.”

4.1.2.2 Guidebook and Teaching Module for English Lesson

The Ministry of Education, in order to implement Merdeka Curriculum has provided all the teachers with guidebook and teaching module which contains a lot of interesting activities for the teachers to use and adopt in English language

classroom. Higher Order Thinking Skills were also incorporated in the suggested activities and worksheets provided. There are also a variety of activities for individual as well as group work. The level of thinking skills was also indicated in some teaching module based on the levels from Bloom's Taxonomy. Teacher A and Teacher B also stated that they adopt some teaching module to apply in their classroom, and it found that in most teaching module teachers use higher-order thinking skills in their activities because the learning achievement that stated in Keputusan Menteri Pendidikan Nasional Republik Indonesia Nomor 232/U/2000 Tentang Pedoman Penyusunan Kurikulum Pendidikan Tinggi dan Penilaian Hasil Belajar for example for phase E, "students use English to convey their wishes and feelings and discuss topics that are close to their daily lives or hot issues that match the age of the students in this phase. They read the text to learn something / get information. Implicit inference skills when understanding information in English are beginning to develop. Students produce more varied written and visual texts, with awareness of the reader's goals and goals".

Teacher A and Teacher B, at the beginning of Merdeka Curriculum used teaching modules that was prepared by government, the teaching modules were modules that were made by other teachers and were selected by the government.

Excerpt from teacher B interview:

" Hmmm.. dulu.. I used teaching module from PMM (Platform Merdeka Mengajar), I followed all the activity just the same as the teaching module, but, I think if I apply all the activity, it was not proper for my students, so, now, I adjust it with my students condition. And recently I make my own teaching module based on government instruction "

Excerpt from Teacher A interview:

“I don’t use modul ajar. Because the activities in modul ajar are to hard for my students. They can do the activities you now, their English are really low. Mereka nggak akan bisa Bu. So I use this LKS, or workbook, sometimes I use text book from the government. In this LKS there are a lot of HOTS questions, reading comprehension, activity that employ HOTS, but I just ask my students to do the tasks and send them to google classroom.”

4.1.2.3 Students’ proficiency level

From the questionnaire 12 teachers stated that students’ proficiency level become one of the factor that influence the teachers in using the strategies of HOTS-based activities.

This result in line with the result of semi-structured interview of Teacher A and Teacher B. Teacher A instructed students with low competence levels, employing tactics focused mainly on question-and-answer sessions and completing worksheets. Teaching higher-order thinking abilities in the session was difficult due to students' limited language skills, which hindered their ability to provide detailed replies or engage in group discussions to generate ideas.

Excerpt from teacher A interview:

“Yes Bu, I used HOTS but when I think I want to try HOTS, I just think of my students English ability. Mereka rendah sekali, membedakan He and him saja tidak bisa. So, I use question and answer session. I call them one by one to the front of the class, I ask them a simple questions first, for the higher level students I give them more difficult questions. But still, it took a lot of time just to answer a question, so I rarely use HOTS in my class, I just ask them to do the task in workbook and send to google classroom, and I will give feedback by calling them one by one”.

Student’s proficiency level also become an issue for Teacher B, it also become the factor for Teacher B choose the strategies for applying HOTS based activities in her classroom. Teacher B taught low-proficiency level students as well, however she still tried to apply HOTS activities such as problem based

learning, and project based learning even though she need more time with the students, moreover when she allowed the students used Google translate to produce the language.

Excerpt from Teacher B interview:

“I think even though my students’ English proficiency level is low, but I always try to apply HOTS in every meeting, even though not full steps as Bloom taxonomy ya, but at least there is one activity in my teaching process, for example, after I explain the target language, I asked them to do a mini research, to evaluate from different source, or di lain waktu, I asked them to solve the problem related with their surroundings, ya, walaupun mereka tetap terbata-bata Bahasa Inggrisnya but at least I have given them to connect their knowledge with their real life”.

4.1.3 The challenges faced by English teachers when conducting higher-order thinking skills (HOTS) activities during the learning process in their classroom.

A Semi-structured interview was undertaken with two English teachers to explore the challenges encountered by teachers. Additionally, a written interview (open-ended questionnaire) was conducted with 12 teachers. The researcher used audio recording to document the interview session and subsequently transcribed the audio recordings for convenient reference. The results of the writing interview were meticulously recorded using a Google form. The data were subsequently analysed using descriptive methods. According to the data, three main themes emerged: the perception of teachers' knowledge, time constraints, and students' language competency. Three key topics influence the use of higher order thinking skills in the English language classroom.

4.1.3.1 Teacher's knowledge and negative perception of Higher-Order Thinking Skills.

Based on the questionnaire, 12 teachers have negative perception about HOTS-based activities. They stated that they reluctant to use HOTS – based activities in the classroom because HOTS was difficult to apply especially when the students' proficiency level is low even though they knew that HOTS is important. Teacher A and Teacher B emphasized the significance of teaching higher order thinking skills in the English language classroom. They believe these skills are crucial for promoting intellectual development and enhancing academic performance. By encouraging students to go beyond surface-level questions and apply their knowledge to real-life situations, higher-order thinking skills empower students to think independently. Below are excerpts from Teacher A and Teacher B's interview:

Excerpt from Teacher A's interview:

I think it is important to use HOTS in English classroom because it can help them to think beyond knowledge, It also help them to solve the problems around their environment or their real life.

Excerpt from Teacher B's interview:

"I think teaching HOTS or applying HOTS when teaching English is important because these skills can really help the students to solve problem, to not only understand the knowledge that they got, but also to apply the knowledge in their real life, more over if they can solve their financial problem from their knowledge, of course we have to help them to get such skills. Students also need to think on a level that is higher than just memorizing facts. You see, when we teach, it is not just for students to understand what the material is about, but also to analyze it and to use think how it can solve the environment problems. So, I often try to use Project Based Learning even though my students' English

proficiency level were very low, but I always try because I want my students have meaningful and fruitful leaning experiences.”

From those teachers’ answers, it is shown that teachers have the knowledge of higher order thinking skills and they know what is required from them when teaching higher order thinking skills in English classroom. However, teacher A and B also stated that teaching HOTS is challenging because their students have low English proficiency level. If their students have higher proficiency HOTS will be more beneficial and easier to apply.

The statements from Teacher A and Teacher B are strengthened by the statements from teachers’ data interview that were gathered using open-ended questions in questionnaire, 11 out of 12 teachers have known and have knowledge about Higher-Order Thinking Skills.

Excerpt from Teacher A’s interview:

“It is hard to teach students who have low proficiency level with involving HOTS, they can’t answer my questions. If I ask using Bahasa they can answer critically, but if I ask them to use English, they will keep silent. So, I ask them to do in writing form, I give the questions and then they answer those questions by writing in their notebook, and I asked them to do the worksheet as well to improve their English. So, I need to teach them the language first before involving higher order thinking skills. As a result my students can answer the HOTS questions but they didn’t experience HOTS activities and I think they speaking were not improve as well.”

Excerpt from Teacher B’s interview:

“For me, even though it is really hard to teach students using HOTS based activities, but I know that improving critical thinking students is also important. I also want my students have meaningful learning experience, not also about knowledge, at first, I think I have to choose whether I have to teach English first or teach using HOTS based activities, because my students cannot do both. But, then I choose to try do both, even though they have to use Google translate, and took a lot of

time to speak, but I think it is ok, but of course I cannot do it often, because it needs more time.”

From those excerpts above, Teacher A and Teacher B have already known how to implement Higher-Order Thinking Skills based activities in their classroom, they have knowledge about HOTS but the knowledge is vary between Teacher A and Teacher B, form the excerpt teacher B shown more knowledge when apply HOTS than Teacher A, however, their negative perceptions about their students make them not to choose HOTS based activities, or even though they choose it, they can use it in every material.

Teachers’ negative perceptions also shown in writing structured interviews’ result. All teachers who fill the form stated that their perception about students ability become the big challenge to apply HOTS in their classroom, they think applying HOTS become difficult because of the students ability and proficiency.

4.1.3.2 Time Constrains in preparing and conducting the lesson.

From the data gathered, whether semi structured interview and writing structured interview, teachers mentioned the time factor influenced their teaching of HOTS because the teachers do not have enough time to prepare the lessons which involve activities that can promote HOTS, and to conduct the lesson activities involving HOTS because students need time to produce the language when they have to do HOT activities as well. 10 teachers stated that they need more time to prepare the lesson plan that including HOTS-activities. Below are the excerpts from Teacher A and B:

Excerpt from Teacher A’s interview:

“Umm.. actually I almost never do much on higher order thinking skills based activities, I often ask the students to do the worksheet, and give them written assessment, because I don’t have time to prepare and my students need to learn English first, you know... even my students cannot read English properly, so I prefer to teach them reading by read aloud then I have to ask them do some activities that involving HOTS, because if they do such HOTS activities they will not use English, they forget about their English because it is hard for them. We also have to prepare another teacher’s administrations”

Excerpt from Teacher B’s interview.

“Indeed, I need more time to prepare HOTS based activities, I have to make the instruction, I have to prepare the special worksheet, I have to prepare the main activities, the project, and etc. And I also know, my students English are not really good, it is also takes a lot of time from them to learn English and it usually fails. Yeah.. at the end of the lesson, their English still not good, but I do know they have the a new skills from them to survive in the real life. For example, In teaching Descriptive text that you have observed, their language is not significantly improved, but they know that the skill of describing, and the knowledge they have got can be used to solve financial problem, they also learn about online market, marketplace and how to become affiliate of the marketplace. I think that’s also important for them, but I can apply those kind activities often, because the time is limited, and I also don’t have time to always prepared HOTS activities”

The assertions made by Teachers A and B are reinforced by the responses in teachers' written, structured interviews, which clarify that the primary obstacle encountered when implementing HOTS-based activities was time constraints. Teachers claim that they are overburdened with other responsibilities and student proficiency requirements. In addition, they must complete the material in the syllabus, which forces them to concentrate more on components that will be assessed in exams. Merdeka Curriculum has resolved this dilemma, which provides more flexible time to complete the material. Nevertheless, teachers maintain the belief that timely completion of the materials is still essential. Teachers A and B concurred that they must devote much time to reading and

explaining the text or grammar in class because the students cannot learn independently and expect the instructor to spoon-feed them.

4.1.3.3 Students' Low Language Proficiency Level

According to questionnaire 12 teachers identified students' language proficiency and learning ability as the primary obstacle in integrating higher-order thinking abilities into their lessons. The teachers said the students needed help understanding the text, and many students relied on translating from their language. To integrate higher-order thinking skills, students must be able to engage in English language cognition, enabling them to effectively analyze, differentiate, elucidate, assess, and generate diverse viewpoints. Here is an excerpt from Teacher B:

“My biggest challenge in incorporating HOTS in my class, and I think it become the biggest challenge for teachers in Pekalongan as well, is the proficiency level of students. My students..you know..have to translate almost every word from their mother tongue. Even, when they have to speak or present their discussion result, they have to write it down first and then they read that. And you know... their pronunciation is not correct, so almost in every meeting I have to correct their pronunciation. But, in some lesson, I ignore it, I give them another learning experience, yeah..in this case their English often put aside first”.

The findings indicate that English teachers face challenges implementing HOTS-based activities in the English language classroom. These challenges include the teachers' negative perception of higher-order thinking skills, time constraints in lesson preparation and conducting the lesson, and the students' low language proficiency. The teachers clearly understand the significance of imparting higher-order thinking skills to students, particularly in the Merdeka Curriculum era. Additionally, the teachers have ample knowledge regarding

higher-order thinking skills. However, they seldom or never integrate it into their classroom instruction due to the perception that it is impractical for students with low proficiency levels. The teachers said they need more time to effectively develop and implement lessons involving higher-order thinking skills (HOTS). The teachers further elaborated that using higher-order thinking Skills (HOTS) in the classroom is challenging due to the students' limited language competency and learning capacity. A study by P. Jomuad, L. Mabelle Antiquina, and E. Coricos et al. (2021) found that teachers experience a significant workload due to non-teaching tasks linked to school and teacher administration.

4.1.4 The solutions devised by teachers to address the challenges.

Based on the findings from in-class observation and teachers' interviews, teachers A and B have different solutions to the challenges of employing Higher-Order thinking-based activities in their classroom. From the questionnaire also teachers have different solutions to face the challenged when applying HOTS-based activities in English language classroom. Two teachers stated that they gave their students motivation and interesting material to foster HOTS in their classroom. Four teachers used additional exercises. One teacher tried to use proper media to increase critical thinking student. One teacher used project-based learning and four teachers gave their students formative assessment and additional homework.

Teacher A used a textbook and printed worksheet as guidance to give the students HOTS questions; however, this way does not give a good solution because students can only answer the questions; in Teacher A's case, the questions

in the textbook contain all level cognitive from Bloom Taxonomy. However, the students only answered and wrote the answers and did not engage with the lesson; some students only copy-paste the other students' answers and needed help understanding the questions. In the end, the students are directly tasked with creating a writing product, so it can be said that Teacher A does not apply HOTS-based activities. However, he gave the students HOTS tasks or questions to do. Teacher A said this is the solution for his class because the students need to improve their English proficiency level. According to him, in the interview session, the only way to introduce his students to higher thinking activities is through questions and tasks in worksheets. He also allowed the students to use Google Translate to solve the students' proficiency.

Teacher B had a different solution for her class, although she faced the same challenges as Teacher A: the Teacher's knowledge about HOTS, time constraints, and low proficiency among students. Teacher B also allowed her students to use Google Translate. However, Google Translate is for more than answering questions or creating written text. Her students used Google Translate to solve their low proficiency level during the learning activities, which were activities using Project-based learning. So, her students still have meaningful learning experiences involving activities related to her order thinking skills.

Moreover, Teacher B follows the Teacher's learning community, and one of the activities is sharing best practices in metacognitive skills. This community help her a lot in applying HOTS-based activities in her English classroom.

Learning and sharing in Teacher's learning community becomes her solution for improving her knowledge in HOTS.

Excerpt from Teacher A's interview:

“Actually, I don't have a solution for the challenges I faced in applying HOTS based activities because I rarely use such activities that involve HOTS, I only asked my students to read, and then answering the questions based on the text, and the text was from textbook or worksheet and submit it in Google Classroom. I did that activities because my students cannot read English text properly, they do not know simple grammar, most of them, so I think I just want to improve their English first, because I can't do both. I often call them one by one to move to my desk and ask them to read and give simple question as the opening of my class, and the rest of the students do the task from the textbook or worksheet. Sometimes, I asked them to create written text, or video, as a task not as a project”.

Excerpt from Teacher B's interview:

“Honestly, I don't have a solution for this, but, I join Teacher Learning Community that really improve my professional skills. I have a lot of friend teachers that always share their best practices at least one a month. Their best practice, most of them, contain HOTS activities, so I can adopt and apply in my own classroom with a modification of course. But, if you ask me how about their English, I can tell you, it is a kinda dilemma for me as an English teacher, why? Because my students' English proficiency level is very low. If I used HOTS activities, they would not use their English, I have to always teach them and make them understand English first before they engage with HOTS activities. But, one of my friend in my community said that I can do both, even though it will take time. They can use Google Translate or any machine translator. So, I try to apply HOTS activities with the help of Google Translate. As for the time constrain, I think Merdeka Curriculum has given the best solution. In Curriculum 2013, I have to finish all the material in time, but in Merdeka Curriculum, I have the flexible time, it's all depend on me to arrange the time, because I know my students so I can arrange the time according their pace of learning”.

The data from questionnaire shown that not all teachers have solution for the challenge, because they tend to avoid HOTS activities in their classroom. They used game but to review a material not to improve students' critical thinking skills. Few of them said that they used project-based learning, but they do not

emphasize how to deal with students' proficiency level that they mention as the challenge to apply HOTS.

4.2 Discussion

4.2.1 Teachers' strategies in conducting HOTS – based activities and the factor that influence the teachers in using the strategies

The findings from the observation, document analysis of the lesson plans, direct semi-structured interview, and questionnaire showed that teachers used various strategies in applying HOTS-based activity. However, they used HOTS-based activity when the students were medium to high proficiency. The teachers tend to use LOTS when they teach lower-level students. Based on the questionnaire, teachers know and apply HOTS in their teaching process. However, they use it only in certain materials and to certain students. It is in line with the observation of Teacher A. Teacher A used lower-order thinking skills in His lesson compared to higher-order thinking skills because He stated that his student could not do the activities using HOTS, this data in line with the study that conducted by Djami & Kuswandono (2020). Djami and Kuswandono found that 75% teachers who claimed they used HOTS activities in their classroom was different with the direct class observation where teachers who being observe tend to only use difficult questions or apply scientific approach that it is a mandatory from curriculum 2013, however those activities couldn't improve students' thinking skills because teacher only follow the step or gave the HOTS questions at the end of the lesson as final assessment without discussing those questions with

their students. The activity of teacher A teaching process showed that He still used the activity in Curriculum 2013 which is giving the HOTS questions as the assessment and did not discuss the result with his students because the assessment was for final exam. Teacher A in the interview session consider that giving students HOTS questions was the same as HOTS activity.

Based on the interview with Teacher A, He did the activities as a strategy For Teacher to train the students with HOTS questions and he could still focus on a target language to low level students. According to teacher A, it is challenging to teach higher order thinking skills in the lesson because the students do not have the language skills to elaborate their answers or to have a group discussion to come up with their own work. Teacher A frequently instructed the students to use their gadgets to access online translation tools, such as Google Translator, to interpret the teacher's prompts and responses to questions that need higher-order thinking skills. Nevertheless, more time allocation could have helped properly deliver the material. In addition, Teacher A stated that he had a dilemma between prioritizing the target language or using higher-order thinking skills in his classroom. This decision was challenging for his students as they struggled to integrate both aspects simultaneously. The study conducted by Ganaphaty (2010) aligns with the approach used by teachers in teaching literature to students with lower proficiency levels. The study revealed that their students' language competency level influences teachers' instructional methods since the students struggle to understand the language (Ganaphaty et al., 2017). To tackle this condition Teacher A often uses Bahasa to make his students

understand the instruction. Therefore, even though Teacher A said that he did those activities to improve his students' English skills however his students skill do not improve significantly.

Meanwhile, from direct observation of Teacher B, she tried to use higher-order thinking skills compared to lower-order thinking skill. Teacher B stated in interview session that He tried to use HOTS activities almost in every meeting even though the activities were not based on Bloom Taxonomy. Furthermore, she said that in Merdeka Curriculum teachers are free to plan and conduct the teaching learning process based on the condition and can relate the knowledge that being taught with the context that encourage students' critical thinking skill. Nevertheless, students in Teacher B's class were passive when they had to answer open-ended questions, this condition occurred because the students did not have enough vocabularies to speak. This can be proven by that the students actively answer the questions in Bahasa, and they answer HOTS questions in Bahasa as well. This discovery aligns with the research undertaken by Rashid (2010) on the instructional methods used by teachers while teaching higher-order thinking skills (HOTS) literature to students with lower proficiency levels. These findings indicate that the language competency level of students influences teachers' instructional methods due to their inability to understand the language.

The open-ended questions given to thirteen teachers showed that the strategies used by each teacher to implement higher-order thinking skills vary because of the student's proficiency level. The result of the observation is shown as well. Teacher A used HOTS only for high proficiency level students. He gave

the difficult questions that he considered as HOTS. Meanwhile, Teacher B used project-based learning, which contains several activities that are considered HOTS. Teacher B's strategy was used when class observation was in line with the result of open-ended questions in a questionnaire to 12 teachers. Seven of them stated that project-based learning became their strategy but seldom used it.

Teacher A and Teacher B used Merdeka Curriculum as the guidance for their teaching. in Merdeka Curriculum as stated in Permendikbudristek No.12 tahun 2024, the aim of teaching learning is students have competence to be used in their life and briefly stated that the students must develop their characters which called Profil Pelajar Pancasila that consist of 1). Faithful and Pious to God Almighty and of Noble Character (Beriman, bertakwa kepada Tuhan YME, dan berakhlak mulia): This characteristic emphasizes students' faith and piety towards God as per their respective beliefs and promotes the development of noble morals such as honesty, integrity, and respect for others. 2). Global Diversity (Berkebinekaan global): This trait encourages students to appreciate and engage with diverse cultures and perspectives from around the world, fostering global awareness and cooperation. 3) Mutual Cooperation (Bergotong royong): Reflects the value of collaborative effort and teamwork, essential for building community and working together towards common goals. 4). Independent (Mandiri): Highlights the importance of self-reliance and the ability to think and act independently, developing students' confidence and problem-solving skills. 5). Critical Thinking (Bernalar kritis): This aspect stresses the ability to analyze information and arguments critically, to question assumptions, and to make

reasoned decisions. 6). Creative (Kreatif): Encourages creativity in thinking and problem-solving, enabling students to innovate and think outside the traditional frameworks and solutions.

From Profil Pelajar Pancasila above, It stated clearly about critical thinking and creative in thinking and problem solving, it means in teaching, teacher should relate the material and the context, this activities need higher order thinking, because students have to analyze and to solve the problem from their surrounding or environment by using the knowledge that the students got from their learning process in the classroom.

4.2.2 The challenges faced by the teaches in conducting HOTS-based activities and the solutions.

Based on the Likert scale, there are 55% teachers who often used HOTS activities in their classroom, all teachers teach using Merdeka Curriculum. However, this data is different from the answers to open ended questions, 10 teachers out of 12 wrote that even though they used HOTS activities in their classroom, they seldom used HOTS activities because their students' proficiency level is low. This perception of their students' proficiency level toward HOTS activities become the most challenge for teachers in applying HOTS in their teaching process.

Teacher B, using Project based learning, even though she knew that her student proficiency level is low. Student proficiency level in teacher B' class become her challenge as well, however teacher B still apply HOTS activities in every meeting. She said in semi-structured interview session that she still used

Project based learning to her students to make a connection between her students' knowledge with the real life, therefore her students can solve the problem using their knowledge.

Furthermore, Teacher B said that he got the knowledge of HOTS activities from her learning community. The community encourage her to use critical thinking activities in her teaching process. The community also give the way how to apply HOTS in her classroom. Therefore, based on Teacher's B interview this community become her solution for her challenge when she applied HOTS in her English language classroom.

Based on the interview with both teachers, it is evident that Teacher A, who does not participate in any learning community and rarely learn from another teachers about higher-order thinking skills lack of knowledge about how to apply HOTS in learning teaching activities in his classroom. The research that conducted a research about the impact of learning community to teacher performance (Jadallah et al., 2023) highlights the significance of acknowledging the beneficial impacts that collaborative teaching approaches can have on students' academic accomplishments. This requires ensuring that there is enough time allocated for collaborative activities, promoting a culture of supportive leadership within educational institutions, and providing suitable resources for collaboration. Consequently, Teacher A has limited exposure to higher-order thinking skills and primarily relies on published worksheets from a specific publisher to enhance students' critical thinking abilities. However, Teacher A prioritizes students' language proficiency over using higher-order thinking skills.

Teacher A remarked that it took much work to focus on critical thinking and language knowledge simultaneously. Therefore, he prioritizes mastery of language as his primary focus. Although Teacher A strongly emphasises achieving proficiency in the target language, at the conclusion of his lesson, He employed strategies to engage students in higher-order critical thinking skills. This includes posing questions for group discussion and permitting students to utilize Google Translate to answer the questions and produce written work. These tactics had a limited impact on developing higher-order thinking skills and enhancing students' critical thinking abilities.

Teacher B is a member of a learning community where she learns and shares a great deal about higher-order thinking skills and strategies to implement them in her English classroom, also incorporates Google Translate as one of her strategies. S.Lee (2019) stated in His research, that the use of machine translator has advantage for students in learning English but it also found that students had mixed emotions about machine translator and that there are disparities in perceptions between instructors and students. Chung and Ahn stated in their research that using machine translation has advantages and disadvantages as well, machine translation must be used with much discretion for it to benefit other aspects.

Nevertheless, Teacher B endeavoured to incorporate more higher-order reasoning skills into nearly every classroom activity. It was feasible because Teacher B utilized project-based learning as her instructional approach. According to Cocklin (2012), project-based learning engages students in a subject by

requiring them to develop initiatives that demonstrate their knowledge. Instead of these laborious workbooks, project-based learning is implemented using advanced cognitive abilities.

In Teacher B observation, it was shown that Teacher B used Project-Based learning that incorporate a lot of HOTS activities in the process. Teacher B tried to connect the students' knowledge with Her students real life. In Her eight meeting, She have included analysing, evaluating, and creating completely during her teaching process. She gave the students the knowledge of the target language at the beginning of her lesson. From the observation, the researcher also found that her students still not really active, however they learnt about how to solve the problem and how to make the language they learn is useful for their life.

CHAPTER V

CONCLUSION AND SUGGESTION

5.1 Conclusion

The study revealed that teachers employ various ways to teach higher-order thinking skills during English lessons at varying competency levels. Most teachers used questioning strategy and project-based learning when conducting HOTS-based activities in English classroom. Teacher A used questioning strategy however students still had to struggle with their language when answering the questions. Teacher B used Project-based learning to improve students' critical thinking skill. Students in Teacher's B classroom still also struggle with their English however they got valuable experience that teach them how to use higher-order critical thinking skills to face the real-life situation.

Teachers are influenced in their use of these strategies by the fact that they frequently implement what they have read about them in teaching modules and manuals. Merdeka Curriculum, an initiative by the government, grants teachers' permission to utilize and incorporate teaching modules developed by fellow teachers on the Ministry of Education's learning portal. Due to time constraints, instructors rely on the strategies presented in the learning module rather than attempting to complete the task independently. Teachers also consider the students' proficiency when implementing activities that promote higher-order thinking skills in the English language classroom. Teachers employ more advanced cognitive skills, questions, and activities when instructing highly

proficient students. In contrast, they utilize more straightforward cognitive skills questions and activities when educating students with lower proficiency levels.

According to the findings of this study, there are significant challenges to the successful implementation of higher order thinking abilities, particularly in English language classrooms in Indonesia which are students' English proficiency level and teachers' knowledge about how to apply HOTS. These challenges make teacher must decide whether they want to achieve language target or their students' critical thinking skills.

The obstacles teachers encounter while implementing higher-order thinking skills activities in an English language classroom include the teacher's unfavorable perspective and understanding of higher-order thinking abilities, limited time for lesson planning and execution.

5.2 Suggestion

The pedagogical implication of this study is that teachers should be exposed to effective teaching models that promote higher-order thinking skills. This exposure will help teachers become familiar with strategies and questioning techniques to encourage students to engage in higher-order thinking skills in the English language classroom. Therefore, providing instructors with training that includes exemplary demonstrations of teaching higher-order thinking skills is imperative. The purpose is to guarantee that teachers acquire the ability to devise innovative approaches and effectively utilize contemporary technologies in their literature instruction. Teachers should be motivated to self-reflect on their instruction of advanced cognitive abilities in their lessons. Teachers can do

independent research or engage in action research by documenting their lessons and reflecting on strategies to enhance their teaching proficiency. They can also acquire knowledge from a learning community to gain insights into the teaching practices of other teachers.

The findings also provide numerous recommendations for educators and fellow researchers to investigate further. The initial objective is to provide teachers with training and exposure to exemplary examples of incorporating activities that promote higher-order thinking skills into English lessons while enhancing students' proficiency. Teachers can then join the Teacher Learning Community to engage in action research and peer evaluation to reflect on their instructional practice regarding implementing activities that promote higher-order thinking skills. Teachers can exchange and obtain best practices regarding incorporating higher-order thinking skill activities into lessons within this community. Additionally, teachers can solicit evaluations and feedback from their colleagues regarding their instructional activities.

In conclusion, teachers should be granted additional time to develop instructional materials and strategize lessons integrating critical thinking abilities. Moreover, to conduct activities that promote higher-order thinking skills within the time constraints, teachers must acquire knowledge and comprehension of Merdeka Curriculum as a teaching guide because it has enabled instructors to complete courses at their students' rates.

Further research is warranted to ensure the generalizability of this study's findings. Future investigations should utilize larger sample sizes and encompass a

variety of schools in Indonesia, as well as pupils with varying levels of proficiency. Moreover, because all schools are required to implement Merdeka Curriculum this year, research should focus on the implementation of higher-order thinking skills in the Merdeka Curriculum era, which the government strongly recommends be implemented so that students can demonstrate their competence and apply their knowledge to solve environmental problems.

REFERENCES

- Abdul Aziz @Ahmad, A., Ismail, F., Ibrahim, N. M., & Samat, N. A. (2017). Investigating the Implementation of Higher Order Thinking Skills in Malaysian Classrooms: Insights from L2 Teaching Practices. *Sains Humanika*, 9(4–2), 65–73. <https://doi.org/10.11113/sh.v9n4-2.1361>
- Abkary, N. S., & Purnawarman, P. (2020). *Indonesian EFL Teachers' Challenges in Assessing Students' Higher-Order Thinking Skills (HOTS)*. <https://doi.org/10.2991/assehr.k.201215.076>
- Bloom, B. . (1956). *Taxonomy of Educational Objectives. Vol.1: Cognitive Domain*. McKay.
- Brookhart, S. M. (2010). *Assess Higher-Order Thinking Skills in Your Classroom*. ASCD.
- Conklin, W. (2012). Higher-Order Thinking Skills to Develop 21st Century Learners. *Shell Education*, 157.
- Creswell, J. . (2003). *Research Design: Qualitative, Quantitative and Mixed method Approaches*. Sage Publication Inc.
- Dawenan, F. A. zahra. (2020). *The Implementation of Higher Order Thinking Skills (HOTS) in English Language Teaching at Senior High Schools*. Universitas Muhammadiyah Malang.
- Djami, C. B. N., & Kuswandono, P. (2020). Teachers' Strategies to Implement Higher-Order Thinking Skills in English Instruction. *Metathesis: Journal of English Language, Literature, and Teaching*, 4(1), 25. <https://doi.org/10.31002/metathesis.v4i1.2048>
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical And Applied Statistics*, 5(1), 1–4.
- Fakhomah, D. N., & Utami, M. S. (2019). Pre-Service english teacher perception about higher order thinking skills (HOTS) in the 21st century learning. *International Journal of Indonesian Education and Teaching*, 3(1), 41–49. <http://e-journal.usd.ac.id/index.php/IJET>

- Faragher, L., & Huijser, H. (2014). Exploring evidence of higher order thinking skills in the writing of first year undergraduates. *The International Journal of the First Year in Higher Education*, 5(2), 33–44. <https://doi.org/10.5204/intjfyhe.v5i2.230>
- Ganapathy, M., Singh, M. K. M., & Kaur, S. (2017). Promoting Higher Order Thinking Skills via Teaching Practices Many educators acknowledge the importance of critical thinking in the educational curricula development of critical thinking skills. *3L: The Southeast Asian Journal of English Language Studies*, 23(1), 75–85.
- Ghanizadeh, A., Al-Hoorie, H. A., & Jahedizadeh, S. (2020). *No Title Higher Order Thinking Skills in the Language Classroom: A Concise Guide*. Springer.
- Ginting, A. A., & Kuswandono, P. (2020). Challenges Faced by English Teachers: Implementation of Higher Order Thinking Skills (HOTS) in Designing Assignments in East Indonesia. *Pedagogy: Journal of English Language Teaching*, 8(1), 13. <https://doi.org/10.32332/pedagogy.v8i1.1688>
- Helmawati. (2019). *Pembelajaran dan penilaian berbasis HOTS higher order thinking skills*.
- Heong, Y. M., Sern, L. C., Kiong, T. T., & Binti Mohamad, M. M. (2016). The Role of Higher Order Thinking Skills in Green Skill Development. *MATEC Web of Conferences*, 70. <https://doi.org/10.1051/mateconf/20167005001>
- Heri Retnawati, Hasan Djidu, Kartianom Kartianom, Ezi Apino, R. D. A. (2018). Teachers' Knowledge About Higher-Order Thinking Skills and its Learning Strategy. *Problems of Education in the 21st Century*, 76(2), 215–230.
- Issac, J. C. (2010). *Methods and Strategies of Teaching: an overview*. Pondicherry University Press.
- Jadallah, Y., Khasawneh, A., Ahmad, A., Ajlouni, A., Eyadat, H. M., Ahmad, M., & Khasawneh, S. (2023). *An examination of teacher collaboration in professional learning communities and collaborative teaching practices*. 10(3), 446–452. <https://doi.org/10.20448/jeelr.v10i3.4841>
- Kemdikbud. (2020). *Buku Saku Kurikulum Merdeka*. Kementerian Pendidikan dan Kebudayaan RI.

- King, F. J., Goodson, L., & Rohani, F. (1998). Assessment & Evaluation: Higher Order Thinking Skills. *Center for Advancement of Learning and Assessment*, 18, 176. http://www.cala.fsu.edu/files/higher_order_thinking_skills.pdf
- Kurniawati, N., & Mursyid. (2019). *Higher Order Thinking Skills Among English Teachers Across Generation in EFL Classroom*. 7(2), 119. <https://doi.org/10.25134/erjee.v7i2.1775>.Received
- Limbach, B., & Waugh, W. (2010). Developing Higher Level Thinking. *Journal of Instructional Pedagogies*, 3.
- Miles, M. B. (1994). *An Expanded Sourcebook Qualitative Data Analysis*. Sage Publication.
- Nachiappan, S., Ahmad Damahuri, A., Ganaprakasam, C., & Suffian, S. (2018). Application of Higher Order Thinking Skills (HOTS) in teaching and learning through communication component and spiritual, attitudes and values component in preschool. *Southeast Asia Early Childhood Journal*, 7(October), 24–32. <https://doi.org/10.37134/saecj.vol7.3.2018>
- Parimaladevi, & Anuar, A. (2019). The implementation of Higher-Level Thinking Skills (HOTS) in History Education. *Social Sciences, Education and Humanities (GCSSEH)*, 2.
- Pasutri, N. S. (2020). *TEACHERS' STRATEGY AND CHALLENGES IN TEACHING HIGHER-ORDER THINKINGSKILLS IN THE RURAL AREA: A CASE STUDY AT JUNIOR HIGH SCHOOL IN GAUNG DISTRICT, INHIL, RIAU*.
- Purnama, Y. I., & Nurdianingsih, F. (2019). The Impact of Higher Order Thinking Skills (HOTS) Instructions in Teaching EFL Speaking Skill from the Perspective of Students' Motivation. *Lingua Cultura*, 13(4), 313. <https://doi.org/10.21512/lc.v13i4.6105>
- Ramdiah, S. (2019). Understanding, Planning, and Implementation of HOTS by Senior High School Biology Teachers in Banjarmasin- Indonesia. *International Journal Of Instruction*, 12(1), 425–440.
- Resnick, L. (1987). The 1987 Presidential Address Learning In School and Out. *Educational Researcher*, 16, 13–54. <https://doi.org/10.3102/0013189X016009013>

- Rezaei, S., Derakhshan, A., & Bagherkazemi, M. (2011). Critical Thinking in Language Education. *Journal of Language Teaching and Research*, 2(4). <https://doi.org/10.4304/jltr.2.4.769-777>
- S.Lee. (2019). The Impact of Using Machine Translation on EFL Students' Writing. *Computer Assisted Language Learning*.
- Setyarini, S., & Ling, M. A. (2019). Promoting Higher Order Thinking Skills in Storytelling for Teaching English to Young Adolescents in 21st Century. *KnE Social Science*.
- Setyarini, S., Muslim, A. B., Rukmini, D., Yuliasri, I., & Mujianto, Y. (2018). Thinking critically while storytelling: Improving children's HOTS and English oral competence. *Indonesian Journal of Applied Linguistics*, 8(1), 189–197. <https://doi.org/10.17509/ijal.v8i1.11480>
- Singh, C. K. S., & Marappan, P. (2020). A review of research on the importance of higher order thinking skills (HOTS) in teaching english language. *Journal of Critical Reviews*, 7(8), 740–747. <https://doi.org/10.31838/jcr.07.08.161>
- Snyder, L. G., & Snyder, M. J. (2008). teaching critical thinking and Problem solving skills. *The Journal Research of Business*, 50(2), 90.
- Sofan, A., & Ahmadi, L. K. (2010). *Konstruksi Pengembangan Pembelajaran Pengaruhnya terhadap Mekanisme dan praktik kurikulum*. Prestasi Pustaka.
- Thamrin, N. R., & Agustin, S. (2019). Conceptual Variations on Reading Comprehension Through Higher Order Thinking Skills (Hots) Strategy. *English Review: Journal of English Education*, 7(2), 93. <https://doi.org/10.25134/erjee.v7i2.1777>
- Yusuf, H. O. (2015). *Assessment of Teachers ' Attitude towards the Teaching of Reading in Primary Schools in Kaduna Metropolis Dr (Mrs) Hanna Onyi Yusuf*. 5(10), 104–109.

APPENDICES

APPENDIX A : English teachers' questionnaire on HOTS based activities

NO	STATEMENT	SCORE				
		Always (1)	Often (2)	Sometimes (3)	Seldom (4)	Never (5)
	HOTS Implementation in English Language Classroom					
1	I implement teaching activities that promotes HOTS		8	4		
2	I am using brainstorming activities during the learning process	2	6	4		
3	I am using problem solving during the learning process	5	5	2		
4	I am using project-based learning during the learning process	1	5	5	1	
5	I am using interactive lectures during the learning process	4	7	1		
6	I create the classroom into an idea exploration environment	2	6	4		
7	I stretch students' thinking beyond reading	1	7	3	1	
	HOTS Activities					
8	I discuss higher-level questions with students	1	6	4	1	

9	ask student to engage in oral presentation	4	4	4		
10	I ask students to reflect on their experience	3	9			
11	I prompt students to make hypothesis		8	4		
12	I prompt students to explain their thought processes that promotes a solution	1	9	2		
13	I facilitate student to debate analytically to challenge pre-existing beliefs	1	6	4	1	
14	encourage students to reflect on how content is related to real world knowledge.	5	5	2		
15	I encourage students to analyse functionally (to understand the purpose of something)	4	6	2		
16	I encourage students to analyse critically (to understand the consequences/implications of something)	4	6	2		
17	I encourage students to synthesize information	2	8	1	1	
18	I facilitate students to evaluate information	6	5	1		

Taken from Djami & Kuswandono (2020)

APPENDIX B

OPEN-ENDED QUESTIONNAIRE

7/18/24, 1:27 PM

Teachers' strategies and challenges in conducting HOTS based activities in English language classroom

Teachers' strategies and challenges in conducting HOTS based activities in English language classroom

Form wawancara ini adalah bagian dari instrumen penelitian yang dilaksanakan oleh Niken Emiria Faradella, mahasiswa Program Pasca Sarjana Universitas PGRI Semarang dalam rangka menyelesaikan Tugas akhir (thesis). Penelitian ini bertujuan untuk mengetahui strategi dan tantangan yang dihadapi oleh Guru Bahasa Inggris dalam menerapkan Pembelajaran berbasis HOTS (Higher-order thinking skills) di kelas bahasa Inggris. Penelitian dengan metoda kualitatif ini menggunakan Wawancara langsung, observasi kelas, dan form wawancara sebagai alat pengumpulan data. Peserta penelitian ini melibatkan guru bahasa Inggris sebagian besar di Pekalongan. Form wawancara ini terdiri dari 10 pertanyaan.

Keikutsertaan dalam penelitian ini bersifat sukarela tanpa paksaan apapun. Seluruh data yang diberikan sangat bermanfaat bagi peneliti, dijaga kerahasiaannya, dan hanya dipakai untuk kepentingan penelitian ini.

Pertanyaan terkait penelitian ini bisa diajukan melalui WhatsApp di no : 085700004976 (Niken Emiria F).

* Indicates required question

Persetujuan peserta

1. Apakah Anda bersedia berpartisipasi dalam penelitian dengan mengisi pertanyaan-pertanyaan pada form ini? *

Mark only one oval.

- Ya
 Tidak

Pertanyaan pada bagian ini untuk memetakan demografi peserta

2. Anda adalah ... *

Mark only one oval.

- Laki-laki
 Perempuan

7/18/24, 1:27 PM

Teachers' strategies and challenges in conducting HOTS based activities in English language classroom

3. Umur *

Mark only one oval.

- 25 - 30 tahun
- 30 - 35 tahun
- 35 - 40 tahun
- 40 - 45 tahun
- 45 - 50 tahun
- >50 tahun

4. Lama bekerja sebagai guru *

Mark only one oval.

- 0 - 5 tahun
- 5 - 10 tahun
- 10 - 15 tahun
- 15 - 20 tahun
- 20 - 25 tahun
- 25 - 30 tahun
- > 30 tahun

5. Daerah (kecamatan, kabupaten, kota) tempat mengajar *

Bagian ini adalah mengidentifikasi pemahaman anda tentang HOTS

6. Apakah Anda memahami tentang HOTS (Higher-Order thinking skills)? *

Mark only one oval.

- Ya *Skip to question 7*
- Tidak

Bagian ini adalah pertanyaan inti.

https://docs.google.com/forms/d/1R6D1YB7%208c3s45QDF4LB0C_jKaPYW490oRX9zKX_A/sdli

2/6

7/18/24, 1:27 PM

Teachers' strategies and challenges in conducting HOTS based activities in English language classroom

7. Apakah anda memakai HOTS dalam pembelajaran bahasa Inggris di kelas Anda? *

Mark only one oval.

- Ya
 Tidak

8. Seberapa sering and memakai aktivitas berbasis HOTS dalam pembelajaran bahasa Inggris di kelas Anda? (mempergunakan critical thinking exercises : problem solving activity, making reflection, asking open-ended questions, conducting presentation (abdul et al., 2012) *

Mark only one oval.

- Tidak pernah (never)
 Jarang (seldom)
 Kadan-kadang (sometimes)
 Sering (often)
 Selalu (always)

9. Bagaimana Anda mendefinisikan Higher Order Thinking Skill (HOTS)? *

10. Bagaimana Anda mengintegrasikannya dalam pengajaran bahasa Inggris di kelas? *

7/18/24, 1:27 PM

Teachers' strategies and challenges in conducting HOTS based activities in English language classroom

11. Apa strategi atau metode yang Anda gunakan untuk mendorong siswa mengembangkan HOTS dalam pembelajaran bahasa Inggris? *

12. Seberapa sering anda memakai strategi tersebut? *

Mark only one oval.

- Tidak pernah (never)
- Jarang (seldom)
- Kadang-kadang (sometimes)
- Sering (often)
- Selalu (always)
13. Apa tantangan utama yang Anda hadapi saat mencoba menerapkan HOTS di kelas bahasa Inggris? Dan bagaimana Anda mengatasinya? *

7/18/24, 1:27 PM

Teachers' strategies and challenges in conducting HOTS based activities in English language classroom

14. Apakah ada contoh konkret dari kegiatan pembelajaran yang melibatkan HOTS di dalamnya? Bagaimana siswa merespons dan berpartisipasi dalam kegiatan semacam itu? *

15. Faktor apa yang Anda anggap paling berpengaruh dalam mendorong perkembangan HOTS siswa dalam bahasa Inggris? *

16. Bagaimana Anda mendukung perkembangan profesional Anda sebagai guru dalam mengajar bahasa Inggris dan mengembangkan strategi HOTS yang lebih efektif? *

7/18/24, 1:27 PM

Teachers' strategies and challenges in conducting HOTS based activities in English language classroom

17. Apakah ada kerangka kerja atau model tertentu yang Anda gunakan untuk merancang rencana pembelajaran yang berfokus pada pengembangan HOTS di kelas bahasa Inggris? *

18. Bagaimana Anda mengatasi potensi hambatan dalam penerapan HOTS, seperti kurangnya sumber daya atau waktu pembelajaran yang terbatas atau hambatan yang anda sebutkan di atas? *

19. Apakah ada pengaruh yang signifikan penerapan HOTS di kelas Bahasa Inggris dalam kurikulum 2013 dan Kurikulum Merdeka? *

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Google Forms

APPENDIX C**OPEN-ENDED QUESTIONNAIRE RESPONSE**

Open-ended questionnaire response can be seen in this link:

https://s.id/HOTS_openendedresponse

APPENDIX D

FIELD NOTES (TEACHER A'S CLASS OBSERVATION)

First Meeting

Date : 20 July 2023

Time : 07.15 WIB – 08.45 WIB

Class : X E3

School : SMAN 1 Kajen

Lesson : Exposition text

Teacher A opened the class with greeting and call his students one by one. After that Teacher A asked his students about the lesson in the last meeting. He tried to connect today's lesson with previous lesson. The students answered his questions in Bahasa Indonesia. Teacher A continued the questions using Bahasa as well. Students looked active when they used Bahasa, however, when Teacher A required the students to answer in English, only one or two students can answer the question. After Teacher A gave trigger questions He gave another questions that relate with today's material which was Exposition Text.

Teacher A : Have you heard about exposition text?

Students : No, I haven't

Teacher A : Okay, now please open your book on page 10, and read it.

After Teacher A asked the students to open the book then about 15 minutes students read the book, Teacher A asked the students to read about social function of Exposition text. Teacher A continued the lesson by asking the students to answer the question on the book based on the text from the book. The questions that the students must answer were about the text that the students had read. The students answered the questions for about another 15 minutes. After the students finished all the questions on the book, Teacher A asked the students to read the answers and also asked the students to do another task about social function of the exposition text.

After finishing all the questions, The students were asked to open their Google Classroom to check the tasks from last meeting. The students who didn't do the task were called to the front of the class, and Teacher A based on the task he drilled those students one by one. While he called those students he asked the rest of the students that considered have higher proficiency level to do another tasks on the book with higher difficulties. And after all the activities had finished, he asked the higher proficiency students to read the answers and he corrected their pronunciation. Teacher A ended the lesson by giving the students homework from the book and they have to post the their works to Google Classroom.

Second Meeting

Date : 27 July 2023

Time : 07.15 WIB – 08.45 WIB

Class : X E3

School : SMAN 1 Kajen

Lesson : Exposition text

Teacher A opened the class with praying and greeting his students and called them one by one. After that he asked them about their work from the last meeting in Google Classroom. After the students confirmed that they had done the homework, Teacher A asked the students about the lesson from the last meeting.

Teacher A : students, what is the function of exposition text?

Only one students answer: untuk meyakinkan pembaca Pak.

Teacher A : Okay good. Now we're going to continue the lesson. Today we will learn the structure of exposition text. Open your book, on page 14 and read the text about The Important of Mobile Phone in Daily Live. After you read, analyse it base on its generic structure and answer the questions below the text.

Students did the task individually for about 45 minutes. After they finished the tasks Teacher A asked them by calling some students names to read their answers. At the end of the meeting Teacher A concluded the lesson and asked the students to do the task on the book and post it in Google Classroom.

Third Meeting

Date : 3 August 2023

Time : 07.15 WIB – 08.45 WIB

Class : X E3

School : SMAN 1 Kajen

Lesson : Exposition text

Teacher A opened the class with praying and greeting his students and called them one by one. After that he asked them about their work from the last meeting in Google Classroom. After the students confirmed that they had done the homework, Teacher A asked the students about the lesson from the last meeting.

Teacher A : students, what is the generic structure of exposition text?

Some students rose their hand and one of them answered: thesis, argumentation and conclusion or reiteration Sir

Teacher A : Okay good. Now we're going to continue the lesson. Today we will learn the language features of exposition text. Open your book, on page 20 and read the text about The Impact of Social Media in the society. After you read, analyse it base on its language features, for understand the language features you can read page 24.

Students did the task individually for about 45 minutes. After they finished the tasks Teacher A asked them by calling some students names to read their answers. At the end of the meeting Teacher A concluded the lesson and asked the students to do the task on the book and post it in Google Classroom.

Fourth Meeting

Date : 10 August 2023

Time : 07.15 WIB – 08.45 WIB

Class : X E3

School : SMAN 1 Kajen

Lesson : Exposition text

Teacher A opened the class with praying and greeting his students and called them one by one. After that he asked them about their work from the last meeting in Google translate. Teacher A also assess students' tasks, if there were a student who didn't understand the material and he thought that the students should practice more, He would call them one by one to the front of the class. He also called the students with higher proficiency level and asked them more difficult questions.

After all those opening activities, Teachers A divided the students into some groups consist of 4 students. Then he asked his students in the group to answer the questions and analyse the text according to it language features and generic structure.

Teacher : *Okay students, after you read the exposition text in the worksheet, and understanding the content, do you know why the writer wrote the text?*

Student 1: *Untuk menginformasikan*

Teacher: *Yes, to inform. Another please?*

Student 2: *Untuk meyakinkan pembaca Pak.*

Teacher: *Yes, that's correct, to convince the reader. Now, in your group do some analysis about what kind of tenses that is used in exposition text and make a conclusion that you got from the text.*

Students did the task in their group. They talked with their friends in the group using Bahasa, however Teacher A asked them to present their result in English and Teacher A also allowed them to use Google Translate in order to make them easy to speak.

After 40 minutes of discussion, Teacher A asked them to move forward and present the result of their work. Teacher A also asked the other students from the other group to asked or give a comment, however the class was passive.

Teacher A ended the class by summarize all the material and told the students that next week they will have a daily test.

FIELD NOTES (TEACHER B'S CLASS OBSERVATION)

First Meeting

Date : 28 July 2023

Time : 7.45 – 11.00 WIB

Class : XI TKR 2

School : SMKN 1 Karangdadap

Lesson : Descriptive Text

Teacher B started her class by praying, calling the students one by one, she also conveyed the agenda of today's lesson. Besides, Teachers B and the students discussed the goals of the learning objectives. Then, she gave the students the trigger question: "What things we need to know if we want to describe something or someone?"

After the pre-activities, Teacher B asked the students about numbers, students wrote the number 1-20, hundreds and thousands. Then teacher B gave the students a game related with the number.

Teacher: *okay students, because most of you cannot count until 100, today we are going to play a game about number. I will divide you into groups consist of 7 students. Okay, please count one to five.*

Students: *count one to five.*

Teacher: *now, students who say number 1 will become one group together, and the others number as well. Satu dengan satu, dua dengan dua, okay, am I clear? Now, Let's go, chop, chop.*

Teacher : *okay, thank you. Now listen to the rules, but before that, I would like you to write a number on your note book, big one, and each member will write different number, the numbers must be between 1 to 7. Jadi, setiap anak di dalam grup akan menuliskan satu angka antara satu sampai tujuh, tidak boleh sama. Okay, finish? Now, I will tell you how we play the game. If I said a number, then, you have to short the number starting the first number to the last one, for example, if I said seven thousand five hundred and twenty four, so the student in each group with the number on the note book must come to the front of the class as soon as possible and short it correctly. The faster group will win the game.*

After the game ended, Teacher B continued to instruct the students on number by review multiplication, division, and subtraction. The students looked happy and curious about this games. They engaged with the games and involved actively.

Teacher B ended the lesson by summarizing the lesson and asking the students to continue these sentences : The most interesting in the activity today is..... and I want to know more about, the last activity was Teacher B conveyed the next week activities.

Second Meeting

Date : 4 August 2023

Time : 7.45 – 11.00 WIB

Class : XI TKR 2

School : SMKN 1 Karangdadap

Lesson : Descriptive Text

Teacher B started her class by praying, calling the students one by one, she also conveyed the agenda of today's lesson. Then teacher B continued with trigger questions.

Teacher : *What part of speech is needed when we want to describe something or someone?*

Student : *adjective Miss*

Teacher : *That's correct. Know, please make a group of 4, and do a research about adjective. What is adjective? What kind of adjective that you will need or use to describe someone or something? Is it the same adjective? If it is different, what is the difference? Find the answer by searching in the internet dan do a research from some descriptive text about person or thing.*

Students: *Miss, do we have to present the result?*

Teacher: *Yes, you will present the result using window shopping, every group will shop to the other groups, and one member of the group will stay at the shop to explain and present the result. The members who shop have to give evaluation, or feedback to the group or shop that you visit ya*

Students: *Can we use google translate Miss?*

Teacher: *Yes, but you have to present in English*

Student: *Can we read?*

Teacher: *Read what?*

Student: *mmm...baca tulisan hasil diskusi saat presentasi Miss.*

Teacher: *Yeah, you can.*

Then students divided themselves into groups consist of 5-6 students for about 10 minutes. After the group formed, Teacher B asked the students to do a mini research about adjectives. This activity lasted for about 60 minutes. After that Teacher B asked each group to present their research in the form of Window Shopping. Teacher B gave an attention to each group and every students had to take a note about their finding about adjective.

Teacher B' last activity was explained about adjective word order. Students answered the questions and composed sentences based on teacher's explanation. Then Teacher B ended the activity by asking the students to do a reflection together by continuing the sentences: Something that makes me proud today is... and I find something difficulties when ...

Third Meeting

Date : 11 August 2023

Time : 7.45 – 11.00 WIB

Class : XI TKR 2

School : SMKN 1 Karangdadap

Lesson : Descriptive Text

Teacher B started the class by praying and calling her student one by one to check the attendance. The she gave the students several questions but only some students answered:

Teacher : *What are the important parts of a good descriptive text?*

Students : *silent, no one answer the question.*

Teacher : *okay, if there is no one answer the question, please open your book, and also you can search from the internet the answer about the structure of descriptive text.*

Students: *Okay Miss.*

Teacher: *next question, what verb that is use in the text? 1, 2, or 3?*

Student: *one Miss.*

Teacher: *okay students, now, in your group answer the following questions: what is the function of descriptive text? Where do we see descriptive text in real life? How can we use descriptive text in real life? You can still use the text that I've given you before.*

After Teacher B gave the instruction, the students did the task and presented it. After that, Teacher gave an ice breaking game called "Guess Who?" Most students who looked bored suddenly active and involve in the game.

The next activity was Teacher B shared a paper cut contains a paragraph to every student. The student had to find another paper cut from the other students and arrange them into good description text. Then, students analyse the text using the previous questions and students presented the result in front of the class.

The class ended with writing activity. Teacher B instructed the students to compose simple descriptive text. And at the end they did a reflection with continuing this questions: Today I learn about... and I want to know more about.....

Forth Meeting

Date : 18 August 2023

Time : 7.45 – 11.00 WIB

Class : XI TKR 2

School : SMKN 1 Karangdadap

Lesson : Descriptive Text

Teacher B started the class with praying and calling her students one by one. Then she gave the students some questions and instructed the students to do a task:

Teacher : *have you ever watch a product review? Where did you watch it?*

Student: *yes Miss, on You Tube,*

Student: *on Tik Tok miss*

Student: *Instagram Miss.*

Teacher: *What information should be included in a product review?*

Student: *informasi produknya Miss, kelebihan dan kekurangannya.*

Teacher: *Yes, good, product description, the weaknesses, the strengths. Now, Which form of product review you liked the most? Written or video?*

Students: *video Miss (almost all students answer this)*

Teacher: *alright then. You will make a video product review, but before that you have to make a story board, but don't worry I've prepared the story board template, you only have to fill it in a group of three. You can choose any things around you as a product or something that you have ever bought.*

Students : *Okay Miss.*

Before the students did the task, Teacher B explained about product review and the students wrote in their note book about what is in product review. After that in a group of three Teacher B asked the students to fill the story board that could help them to make a product review. The students did this activity until the hours ended.

Fifth Meeting

Date : 25 August 2023

Time : 7.45 – 11.00 WIB

Class : XI TKR 2

School : SMKN 1 Karangdadap

Lesson : Descriptive Text

Teacher B asked the students to pray and she called them one by one to ask their condition and to prepare them for the lesson. Then she asked them to continue the last meeting activities which was making a video product review based on the story board that they had filled. The students made the video for almost 3 lesson hours. Then they continued the activity with posting their video to their social media such as Instagram and TikTok with the certain hashtag. Teacher B assessed their works and at the end of the lesson they had a reflection together.

Along the activities, the students looked happy and engage with the lesson, it seemed the students liked to make the video even though their English when they spoke in their video was not good enough.

Sixth Meeting

Date : 1 September 2023
Time. : 7.45 – 11.00 WIB
Class : XI TKR 2
School : SMKN 1 Karangdadap
Lesson : Descriptive Text

Teacher B asked the students to pray and she called them one by one to ask their condition and to prepare them for the lesson. Then she asked some questions to them:

Teacher : *Class, have you ever done online shopping?*

Students : *Yes, Miss.*

Teacher : *What product do you usually buy?*

Student 1 : *cloths*

Student 2 : *skincare Miss*

Student 3 : *Shoes*

Teacher : *okay...okay, what platform do you use often?*

Student 1: *Shopee*

Student 2 : *Tokopedia*

Teacher : *have you ever used international platform?*

Students : *No miss*

Student : *pernah sekali Miss, beli spare part karena tidak ada di Indonesia.*

Teacher: *Okay students, now, I want you to have a small research about marketplace platform. Make a list of marketplace platforms in the world, and find the top six from those marketplace platforms, why those become top 6?*

After Teacher B gave the instruction, the students did the research. They tried to find 6 marketplace in the world. While the students did the research Teacher B distributed a piece of paper that contain a logo of every marketplace. Students then searched and matched the paper with the marketplace. Then, they continued to find out about the marketplace and made a presentation for that. At the end of the lesson they had a reflection together about the today's lesson.

Seventh Meeting

Date : 8 September 2023
Time. : 7.45 – 11.00 WIB
Class : XI TKR 2
School : SMKN 1 Karangdadap
Lesson : Descriptive Text

Teacher B started the class with praying and asking the students some questions: what did you learn from previous meeting? And only one student answered: marketplace, and Teacher B continued with another question: what is the most interesting part that you find about the marketplace? And only one student answered using Bahasa: mereka menjual apapun Miss, suka sekali kalau buka-buka marketplace, seperti window shopping.

Next activity was Teacher B asked them to present their finding from their research about marketplace. The presentation used “Two Stay Four Stray” method. Two students from each group stayed on their own while the others went to a different group to listen, give feedback, and ask questions. After that, they returned to their group and discussed what they learned from the other groups.

(It looked this method was not really worked because most students cannot speak English well, so they keep silence along the activity or else they used Bahasa). Teacher B then allowed them to use Google Translate, to translate what they want to say to their friend along the activities, it works however their pronunciation was also not good enough, so, it took more time to finished this activity).

At the end of the lesson, students summarize from the previous lesson. Teacher B gave some questions as a reflection and also gave them an assignment which the students had to take a picture the product from PKK subject and brought the picture to the next meeting.

Eighth Meeting

Date : 8 September 2023
 Time. : 7.45 – 11.00 WIB
 Class : XI TKR 2
 School : SMKN 1 Karangdadap
 Lesson : Descriptive Text

Teacher B started the class by praying together and called her students one by one to check their attendance. Then, she asked the students about the previous lesson.

Teacher : *Okay students, last week you have made your video review and I asked you to take a picture of the product from PKK subject, right, now, I would like to ask you, why you made that video and the picture? What is it for?*

Student 1: *Memperkenalkan produk yang akan kita jual.*

Student 2: *Agar orang tertarik and want to buy the product Miss.*

Teacher : *So, what should you do?*

Student : *post our video on marketplace, Miss.*

Teacher: *okay.. what should you do first, so you can post your video on the marketplace?*

Student: *daftar*

Teacher: *what else?*

Student: *make an account.*

Teacher: *yes, correct. Which marketplace the most appropriate with your product? If your product is a wooden product, which marketplace is the most appropriate to sell it? Okay, students, now you have to check the correct marketplace for your product, then, you have to make an account, and post your video and picture there, but don't forget to make a description of your video and picture so the viewers will know what kind of product that you try to sell.*

Then At the whilst activity, Teacher B asked the students to make an account at the marketplace they chose. Students prepared the picture of the product and the video that Teacher B instructed at the previous lesson and upload them to the marketplace. Then they did a reflection

APPENDIX E

SEMI-STRUCTURED INTERVIEW

1. **TEACHER A: FROM SMAN 1 KAJEN, ABOUT 40 YEARS OLD MAN, WITH 13 YEARS OF TEACHING EXPERIENCE.**

- Researcher : Hello Pak, thank you for helping me and willing to be my subject for my research.
- Teacher A : My pleasure Bu.
- Researcher : Pak, after the observation that day, I need to ask some question to you, would you mind if I asked you some questions?
- Teacher A : Of course no Bu, please
- Researcher : Would you like this interview in Bahasa or English?
- Teacher A : Can we mix it?
- Researcher : Yes. Would you mind if I write your name in my research?
- Teacher A : Yes, please don't write my name.
- Researcher : Okay. Can we start?
- Teacher A : Yes
- Researcher : I have observed your class. Can you tell me your students proficiency level?
- Teacher A : My students..mmm...actually my students ...most of them are not really good in English especially in speaking, only two or three students who really can speak English well, even most of them can't use pronoun properly, they can use he, she, her, him properly you know.. They are low.
- Researcher : How many students in your class Pak?
- Teacher A : 36 studens
- Researcher : Do you know HOTS (higher order thinking skills) Pak?
- Teacher A : Yes, of course
- Researcher : How do you define HOTS?

- :
Teacher A mmmm... HOTS is refer to the higher order of thinking
: that goes above simple information memory and recall. Rather, HOTS emphasizes the capacity to assess, evaluate, and generate new knowledge from prior knowledge.
- Researcher How do you apply HOTS in your class Pak?
:
- Teacher A Hmmm... actually I rarely use HOTS in my class,
: because my students proficiency level are very low. If I use HOTS in every material I will run out of time. And my student cannot use English when I use HOTS. If I integrate HOTS in my lesson, the students will use Bahasa, for example if I give them a difficult questions of HOTS questions they can't answer them. They even don't understand what I mean, so I have to teach them target language first, grammar first, then I use HOTS in my questions.
- Resesrcher : So, you don't use HOTS in your teaching?
Teacher A Yes Bu, I used HOTS but when I think I want to try
: HOTS, I just think of my students English ability. Mereka rendah sekali, membedakan He and him saja tidak bisa. So, I use question and answer session. I call them one by one to the front of the class, I ask them a simple questions first, for the higher level students I give them more difficult questions. But still, it took a lot of time just to answer a question, so I rarely use HOTS in my class, I just ask them to do the task in workbook and send to google classroom, and I will give feedback by calling them one by one.
- Researcher What do you think about integrating HOTS in the
: classroom then?
Teacher A I think it is important to use HOTS in English classroom
: because it can help them to think beyond knowledge, It also help them to solve the problems around their environment or their real life.
- Researcher Oh, okay, what do you know about strategies to apply or
: to incorporate HOTS in the classroom?
Teacher A I think there are a lot of strategies, for examples Project
: based learning, problem based learning, inquiry based learning.
- Researcher : Have you ever used one of them or maybe all of them?
Teacher A : No, as I said before my students can do that kind of activities along with learning target language. The goal of the learning target language can't be achieved.
- Researcher : So, what kind of strategy do you use to incorporate

- HOTS in your classroom considering that the government launched Merdeka Curriculum, that teachers should relate his teaching with real life?
- Teacher : A I think I still used difficult questions as enrichment for my students, you know, in Curriculum 2013, the government asked us to make HOTS questions and even the government hold a workshop to train teachers to make HOTS questions. These questions were difficult for student. Because of this workshop we have a lot of HOTS questions and now, sometimes, I gave my students these questions. Tapi saya berikan hanya untuk siswa yang Bahasa Inggrisnya sudah bagus. I think by using this strategy I have apply HOTS in my classroom, setidaknya.
- Researcher : Can you define HOTS questions?
Teacher A : Yeah...you give your students an assessment in the form of HOTS questions, the questions actually a bit difficult for students and need critical thinking.
- Researcher A : Is there any challenge why you rarely used HOTS in your classroom?
Teacher : A Yeah it's because my students' English proficiency level. I have no idea how to improve my students' English proficiency level while I apply HOTS in my classroom. You can imagine, every time I ask them HOTS questions they can't answer using English even they don't understand what I've asked.
It is hard to teach students who have low proficiency level with involving HOTS, they can't answer my questions. If I ask using Bahasa they can answer critically, but if I ask them to use English, they will keep silent. So, I ask them to do in writing form, I give the questions and then they answer those questions by writing in their notebook, and I asked them to do the worksheet as well to improve their English. So, I need to teach them the language first before involving higher order thinking skills. As a result my students can answer the HOTS questions but they didn't experience HOTS activities and I think they speaking were not improve as well.
- Researcher : O, I see. How do you overcome this challenges?
Teacher A : Actually, I don't have a solution for the challenges I faced in applying HOTS based activities because I rarely use such activities that involve HOTS, I only asked my students to read, and then answering the questions based on the text, and the text was from textbook or worksheet and submit it in Google Classroom. I did that activities

because my students cannot read English text properly, they do not know simple grammar, most of them, so I think I just want to improve their English first, because I can't do both. I often call them one by one to move to my desk and ask them to read and give simple question as the opening of my class, and the rest of the students do the task from the textbook or worksheet. Sometimes, I asked them to create written text, or video, as a task not as a project Umm.. actually I almost never do much on higher order thinking skills based activities, I often ask the students to do the worksheet, and give them written assessment, because I don't have time to prepare and my students need to learn English first, you know... even my students cannot read English properly, so I prefer to teach them reading by read aloud then I have to ask them do some activities that involving HOTS, because if they do such HOTS activities they will not use English, they forget about their English because it is hard for them. We also have to prepare another teacher's administrations.

- Researcher : Have you ever followed the training about HOTS Pak?
- Teacher B : The official training from government? Nope. But from school about how to make HOTS questions for assessment, yes I have. 2013 Curriculum oblige teachers to make HOTS questions right?
- Researcher : Have you ever followed such kind of Learning Community?
- Teacher : No, but in my school there is learning community but we rarely learn about teaching practice.
- Researcher : Do you think there is a relation between applying HOTS in the classroom with the curriculum?
- Teacher A : Mmmm yeah I think so, but only a little. I think applying HOTS in the classroom is not because of curriculum, but because of the teacher himself.
- Researcher : Have you use "Modul Ajar" that you can download from Kemdikbud or PMM?
- Teacher A : "I don't use modul ajar. Because the activities in modul ajar are to hard for my students. They can do the activities you now, their English are really low. Mereka nggak akan bisa Bu. So I use this LKS, or workbook, sometimes I use text book from the government. In this LKS there are a lot of HOTS questions, reading comprehension, activity that employ HOTS, but I just ask my students to do the tasks and send them to google classroom."
- Researcher : Okay Pak, thank you for your help, I really appreciate it.

- Teacher A : You're welcome Bu
- 2. TEACHER B: FROM SMKN 1 KARANGDADAP, ABOUT 40 YEARS OLD WOMAN, WITH 13 YEARS OF TEACHING EXPERIENCE.**
- Researcher : Good afternoon, Bu, how are you?
:
- Teacher B : Fine, thanks.
:
- Researcher : Thank you very much for helping me with this research and thank you for willing become my observation subject.
:
- Teacher B : You are very welcome, Bu.
Researcher : I have observed your class, and now I need your help to answer some questions.
:
- Teacher B : Of course, Bu.
:
- Researcher : Would you mind if I write your name on my research?
:
- Teacher B : Yes, don't write my name please
Researcher : Okay, would you like to speak in Bahasa or English?
:
- Teacher B : Mix will be okay hehe
Researcher : Okay Bu, can we start?
:
- Teacher B : Yes, please
Researcher : Have you ever heard about HOTS or higher order thinking skills Bu?
:
- Teacher B : Yes, of course.
:
- Researcher : Do you understand what it is?
:
- Teacher B : Yes
:
- Researcher : How do you define HOTS?
:
- Teacher B : HOT is a thinking skill that not only memorizing but it is also about analyzing, criticizing, and creating a work.
Researcher : Do you integrate HOTS in your classroom? How often?
:
- Teacher B : Yes, I try to integrate HOTS in my classroom, even though not in full steps, but I try to always at least one step of HOTS in my teaching.
Researcher : How do you integrate HOTS in your classroom?
:
- Teacher B : Sometimes I use questions that can trigger their critical

- : thinking, sometimes I use discussion, debate, project, and I also use technology or IT in my teaching process.
- Researcher : Wow, cool, now, what strategy do you use or maybe do you know to integrate HOTS in English language classroom?
- Teacher : B The strategies that I've ever used are project, discussion, inquiry, CTL, genre-based, presentation, text or video or social phenomena analysis, and reflection at the end of the lesson.
- Researcher : So, you always apply HOTS in every meeting, right?
- Teacher B : I think even though my students' English proficiency level is low, but I always try to apply HOTS in every meeting, even though not full steps as Bloom taxonomy ya, but at least there is one activity in my teaching process, for example, after I explain the target language, I asked them to do a mini research, to evaluate from different source, or di lain waktu, I asked them to solve the problem related with their surroundings, ya, walaupun mereka tetap terbata-bata Bahasa Inggrisnya but at least I have given them to connect their knowledge with their real life
- Researcher : I see. So, according to your answer that HOTS is important right?
- Teacher B : Yes, of course. I think teaching HOTS or applying HOTS when teaching English is important because these skills can really help the students to solve problem, to not only understand the knowledge that they got, but also to apply the knowledge in their real life, more over if they can solve their financial problem from their knowledge, of course we have to help them to get such skills. Students also need to think on a level that is higher than just memorizing facts. You see, when we teach, it is not just for students to understand what the material is about, but also to analyze it and to use think how it can solve the environment problems. So, I often try to use Project Based Learning even though my students' English proficiency level were very low, but I always try because I want my students have meaningful and fruitful learning experiences.
- Researcher : Okay. So, what is the challenge that you faced when you conducting HOTS based activities in your classroom?
- Teacher : B Yeah.. My biggest challenge in incorporating HOTS in my class, and I think it become the biggest challenge for teachers in Pekalongan as well, is the proficiency level of students. My students..you know..have to translate almost every word from their mother tongue. Even, when they have to speak or present their discussion result, they have

to write it down first and then they read that. And you know... their pronunciation is not correct, so almost in every meeting I have to correct their pronunciation. But, in some lesson, I ignore it, I give them another learning experience, yeah..in this case their English often put aside first.

Researcher

:

Teacher B

But you still did HOTS activities?

: For me, even though it is really hard to teach students using HOTS based activities, but I know that improving critical thinking students is also important. I also want my students have meaningful learning experience, not also about knowledge, at first, I think I have to choose whether I have to teach English first or teach using HOTS based activities, because my students cannot do both. But then I choose to try do both, even though they have to use Google translate, and took a lot of time to speak, but I think it is ok, but of course I cannot do it often, because it needs more time

Researcher

:

Teacher B

So, you need more time to do the activities.

: Indeed, I need more time to prepare HOTS based activities, I have to make the instruction, I have to prepare the special worksheet, I have to prepare the main activities, the project, and etc. And I also know, my students English are not really good, it also takes a lot of time from them to learn English and it usually fails. Yeah.. at the end of the lesson, their English still not good, but I do know they have a new skills from them to survive in the real life. For example, In teaching Descriptive text that you have observed, their language is not significantly improved, but they know that the skill of describing, and the knowledge they have got can be used to solve financial problem, they also learn about online market, marketplace and how to become affiliate of the marketplace. I think that's also important for them, but I can apply those kind activities often, because the time is limited, and I also don't have time to always prepared HOTS activities

Researcher

:

Teacher

:

Okay Bu, do you have a solution for those challenges?

A Honestly, I don't have a solution for this, but, I join Teacher Learning Community that really improve my professional skills. I have a lot of friend teachers that always share their best practices at least one a month. Their best practice, most of them, contain HOTS

activities, so I can adopt and apply in my own classroom with a modification of course. But, if you ask me how about their English, I can tell you, it is a kinda dilemma for me as an English teachers, why? Because my students English proficiency level are very low. If I used HOTS activities, they will not use their English, I have to always teach them and make them understand English first before they engage with HOTS activities. But, one of my friend in my community said that I can do both, even though it will take time. They can use Google Translate or any machine translator. So, I try to apply HOTS activities with the help of Google Translate. As for the time constrain, I think Merdeka Curriculum has given the best solution. In Curriculum 2013, I have to finish all the material in time, but in Merdeka Curriculum, I have the flexible time, It's all depend on me to arrange the time, because I know my students so I can arrange the time according their pace of learning

Researcher : Wow, Learning community. Such an insight. Do you think curriculum has significant impact for teacher to apply HOTS in their classroom?

Teacher B : Not really I think. Curriculum is only a guidance, but using HOTS in your teaching is important to foster critical thinking. Whatever the curriculum is, HOTS still important and need to incorporate in your classroom. However, Merdeka Curriculum give me more chance to apply HOTS in my teaching process. Because we are no longer have to finish the material in certain time. In curriculum 2013, we have to finish a lot of material in one semester while in Merdeka Curriculum we don't have to, we can adjust it based on our students condition, so I have more time to apply HOTS. But, for me, it still difficult, though, because my students' proficiency is low, so I still have to teach them the target language first for example pronoun, jenis kata, grammarnya, dan sebagainya, usually I need 1 meeting, which is 4 lesson hours to explain this before I apply HOTS in the next meeting", tapi, I still want to make my teaching relate with my students' context, as stated in Capaian Pembelajaran in Merdeka Curriculum.

Researcher : Oh, I see. Last question Bu, as you know Kemdikbud has launch PMM, and you can access all book and teaching module there, do you take advantage of it?

Teacher B : Hmm.. dulu.. I used teaching module from PMM (Platform Merdeka Mengajar), I followed all the activity just the same as the teaching module, but, I think if I

apply all the activity, it was not proper for my students, so, now, I adjust it with my students condition. And recently I make my own teaching module based on government *instruction*

Researcher

:

Teacher

:

Okay Bu, thank you very much for your time and help, I really appreciate it.

B My pleasure Bu Niken.

APPENDIX F

	<p>PEMERINTAH PROVINSI JAWA TENGAH DINAS PENDIDIKAN DAN KEBUDAYAAN SMK NEGERI 1 KARANGDADAP</p> <p><small>Jl. Raya Paksihaho No. 8 Karangdadap Kabupaten Pekalongan 51174 (0285) 7930830 www.sman1karangdadap.sch.id Surat Elektronik: sman1karangdadap@gmail.com</small></p>
<p>SURAT KETERANGAN NOMOR : 421.4 / 93II</p>	
<p>Yang bertanda tangan di bawah ini :</p> <p>Nama : TUTI EVAWATI, S.Pd</p> <p>Jabatan : KEPALA SMK NEGERI 1 KARANGDADAP</p> <p>dengan ini menerangkan bahwa:</p> <p>Nama : NIKEN EMIRIA FARADELLA, S.Pd.</p> <p>NPM : <u>20540003</u></p> <p>Maksud : Telah melakukan penelitian dalam rangka penyelesaian penulisan tesis dengan judul " Teachers Strategies and challenges In Conducting Higher Order Thinking Skills (HOTS) Based Activities In English Language Classroom". Di SMKN 1 Karangdadap dari tanggal 28 Juli s/d 10 September 2023.</p> <p>Demikian surat keterangan ini dibuat untuk dipergunakan seperfunya.</p>	
<p>Pekalongan, 10 September 2023 KEPALA SMK NEGERI 1 KARANGDADAP PROVINSI JAWA TENGAH</p>	
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<p> Dokumen ini ditandatangani secara elektronik dengan menggunakan Sertifikat Elektronik yang diterbitkan oleh Balai Sertifikasi Elektronik (BSrE) BSSN</p>	



PEMERINTAH PROVINSI JAWA TENGAH
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Juli s.d 12 Agustus 2023, benar – benar telah melaksanakan Penelitian di SMA Negeri 1
Kajen dengan Judul : "Teachers' Strategies and Challengers In Conducting Higher Order
Thinking Skills (HOTS) Based Activities In English Language Classroom".

Demikian surat keterangan ini dibuat dengan sebenar-benarnya untuk dapat dipergunakan
sebagaimana mestinya.

Kajen, 12 Juli 2023

Kepala Sekolah



Ircham Junaidi, S.Pd., M.Pd.

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