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Teachers' strategies and challenges in conducting HOTS-based activities in Merdeka Curriculum era

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Abstract

This study investigated the approach used by English teachers to promote Higher-Order Thinking Skills (HOTS) during the learning process. The Indonesian government, specifically the Ministry of Education and Culture, has taken the lead in implementing the Merdeka Curriculum, a curriculum 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. This study employed mixed-method study that 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 strategies used by Merdeka Curriculum teachers were project-based learning and open-ended questioning. However, some teachers faced challenges in implementing these strategies in English classes, such as students' skill levels, teachers' expertise, and negative perceptions.

Keywords: *Teachers' strategies and challenge; HOTS; Merdeka Curriculum*

INTRODUCTION

The educational curriculum is crucial in assessing the competence of graduate students within the education system. It is consistently examined based on its ability to align with the evolving demands of science, technology, and society. The curriculum implemented in the Indonesian educational system is known as the Merdeka Curriculum. These curriculums necessitate teachers to cultivate their approaches for incorporating higher-order thinking skills, also known as HOTS, into their teaching and learning process. This is achieved through student-centered learning, with the aim of improving students' cognitive competency. Through the implementation of the learning model, teachers are afforded the opportunity to implement learning activities that require a higher level of cognitive

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abilities. Therefore, it is anticipated that HOTS will not only improve students' understanding of scientific concepts but also equip them with the skills to apply these concepts in their daily lives.

Higher order thinking skills (HOTS)

Many academics have thoroughly researched higher-order thinking skills (HOTS) because of their importance in modern schooling. Higher-order thinking refers to a cognitive capacity that combines the skills of transferring knowledge, critical thinking, and problem-solving (Brookhart, 2010). Faravani and Atai (2015) define higher-order thinking skills (HOTS) as tasks that require problem-solving and critical thinking abilities. Brookhart (2010) classifies higher-order thinking skills into three categories: transfer, critical thinking, and problem-solving. To transfer knowledge, students need to fully understand and skillfully apply the information they have learned in a different context (Anderson & Krathwoll, 2001). Higher-order thinking ability pertains to the aptitude of students to establish connections between their learning and things that were not expressly instructed as being interconnected.

Critical thinking, one of the cognitive skills in HOTS, covers the cognitive tasks of deductive reasoning, questioning and research, seeing and expressing, contrasting and linking, untangling complexity, and closely examining contradicting ideas (Barahal, 2008). In the practice of critical thinking, education aims to equip students with the required skills for rational analysis, thorough reflection, and sound judgement. Moreover, addressing problems requires students to be able to instinctively identify the best or suitable answer to apply when trying to reach a particular objective. Students also needs critical thinking, creative ideas, and good communication to solve the situation.

Bloom's taxonomy is a widely used educational framework for evaluating courses and quantifying learning outcomes (Alsowat, 2016) and has undergone a modification that consists of six separate levels: remembering, understanding, applying, evaluating, and creating. The highest point of the cognitive sphere is the process of bringing something into existence. The highest three levels of Bloom's Taxonomy consist of analyzing, assessing, and generating. HOTS, an acronym for Higher Order Thinking Skills, is the generally used term for these skills.

HOTS, as defined in Bloom's taxonomy (Bloom, 1956), pertains to cognitive abilities that go beyond mere acquisition of knowledge and understanding. These talents include the processes of analyzing, synthesizing, and evaluating. Narayanan and Adithan (2015) define the cognitive talents cultivated in higher-order thinking talents (HOTS), such as synthesis and invention, as the actions of assembling, creating, formulating, and developing. To clarify, the implementation of higher-order thinking skills (HOTS) necessitates teachers assisting students in the practical application of their knowledge during the learning process (Narayanan & Adithan, 2015). Crawford and Brown (2002) classified HOTS into three specific types of cognition: content, critical, and creative thinking. Bloom's Taxonomy can identify higher-order thinking skills (HOTS) in the stages of application, analysis, synthesis, and assessment (Bradshaw et al., 2002).

Anderson and Krathwohl have altered Bloom's taxonomy by modifying the cognitive stages of learners. The cognitive process consists of six stages: remembering (C1), understanding (C2), applying (C3), analyzing (C4), evaluating (C5), and producing (C6). Teachers should formulate their learning objectives using Bloom's taxonomy while cultivating students' higher-order thinking skills (HOTS). The initial three components of the taxonomy bloom model are C1 (remembering), C2 (understanding), and C3

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(producing) (applying). HOTS, which stands for higher-order thinking Skills, is present in the cognitive processes of analyzing (C4), evaluating (C5), and producing (C6). Thus, HOTS is regarded as the superior component of Bloom's taxonomy. Although HOTS originates from C4 (analysis), teachers should not begin the class with something other than HOTS. Instead, it should commence with C1, C2, and C3 (lower order thinking skills (LOTS)) (Anderson & Krathwoll, 2001).

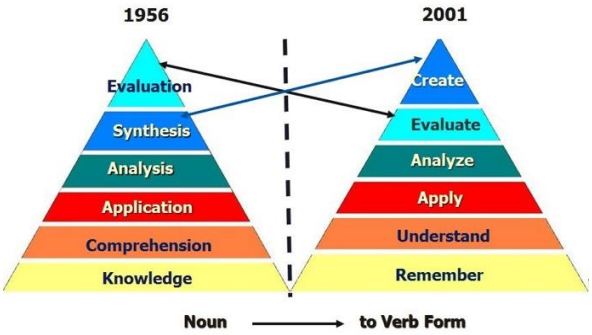

Figure 1. Bloom VS Anderson and Krathwohl

Conklin in her book stated that the ultimate goal of classroom instruction is to encourage students to employ higher-order thinking not because it is superior to facts, but because it encompasses lower-order thinking. Higher-order thinking is extremely valuable, as it makes use of all levels of thought. Students must first study and comprehend the facts in order to analyze them. Higher-order thinking prepares students for application in the actual world outside the classroom. It entails memorizing a set of connected facts. These exercises will assist pupils in maturing into adults and making choices (Conklin, 2012).

Teachers may employ Bloom's Taxonomy as a framework when assigning tasks or posing inquiries in order to promote higher-level cognitive processes deliberately. 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 students' requirements. At times, students are required to start with basic questions as a foundation for more advanced reasoning.

Conklin (2012, p.73) states that Bloom's Taxonomy has proven to be a reliable paradigm for inquiry over time. Concurrently, it has been enhanced by the alterations resulting from considerable research. Teachers often find it easy to understand and accessible. Bloom's Taxonomy is an excellent questioning strategy that can assist students in developing higher-order thinking skills in the classroom due to many factors.

HOTS, or higher-order thinking skills, refers to the ability to analyze, apply, evaluate, create, interpret, and integrate thoughts and information to reach a well-founded conclusion. These ideas are then effectively communicated through written or spoken expression. According to Faragher and Huijser's (2014) article, the use of higher-order thinking Skills (HOTS) assists students in developing metacognition and awareness. This, in turn, allows them to articulate their thoughts verbally, leading to an automatic enhancement of their writing abilities. Additionally, they acknowledged that if students can assess their writing abilities, they may adopt a positive mindset and derive advantages from their education. Purnama and Nurdianingsih (2019) assert that HOTS offers students valuable advice in shaping their writing concepts. HOTS can also enhance students' speaking proficiency by encouraging them to articulate their thoughts and communicate

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them effectively to their peers. In their study, Setyarini and Ling (2019) discovered that students who possess critical thinking abilities demonstrate a willingness to openly communicate their thoughts prior to class without concern for the judgment or errors of their peers. Students will possess these benefits when they merge their proficient cognitive abilities with their English language proficiency (Setyarini & Ling, 2019).

Overview of Merdeka Curriculum

In Indonesia, Ministry of Education and Culture has recently introduced a program called "Merdeka Belajar" (freedom of learning), which emphasizes the use of higher-order thinking skills. Additionally, a new curriculum called "Merdeka Curriculum" has been implemented, which utilizes project-based learning as the primary method of instruction and assessment. Yamin and Syahrir (2020) argue that the Merdeka Curriculum aims to promote inventive and creative critical thinking, as well as the ability to cooperate and communicate effectively. However, the use of higher-order thinking abilities helps students enhance the quality of their thinking, improve their skills, and effectively apply their information to solve problems and make informed decisions (Heong et al., 2016).

The Merdeka Curriculum implemented by the Ministry of Education, Culture, Research, and Technology in 2021, is a significant step towards enhancing the education system in Indonesia. In the age of globalization, students are expected to possess not only academic abilities but also life skills, creativity, and innovation. The Merdeka curriculum is specifically tailored to address these requirements, equipping students with the necessary skills to tackle forthcoming obstacles effectively. The Merdeka Curriculum, as described by Indarta et al., (2022) is not just a set of guidelines, but a collaborative effort that values the role of teachers. It is designed to meet social expectations by equipping students with 21st-century abilities and the capacity to adjust to changing environments quickly.

The Merdeka Curriculum includes a distinctive feature known as the "Proyek Penguatan Profil Pelajar Pancasila" or the project to strengthen the profile of Pancasila Students. The objective of this initiative is to enhance the moral and ethical qualities of students as outlined in the "Profil Pelajar Pancasila". This project utilizes the Project Based Learning methodology for the learning process. Throughout this process, the teacher must engage students at each stage of the project actively. Students must possess the ability to think critically and creatively, which is essential. They must possess the ability to solve problems and make meaningful contributions to environmental issues in their surroundings. Therefore, students should employ higher-order thinking Skills (HOTS) in those processes. To utilize HOTS effectively, teachers should engage students actively in the learning process, encouraging actions that go beyond just comprehension. The exercises should facilitate the development of critical thinking skills, including the ability to analyze, synthesize, and evaluate information.

In addition, the Merdeka Curriculum includes a Minimum Completeness Assessment (Asesmen Ketuntasan Minimum; AKM). This assessment is compulsory for every school to conduct. The students must employ advanced critical thinking skills while completing this evaluation, as the questions are presented in the form of contextualized prompts. Contextualization is an essential component of the learning process. Teachers must possess the ability to generate instructional resources and utilize strategies that captivate students and establish connections with real-life situations. The instructor facilitates the students' discovery of significance, worth, and conviction in their learning, enabling them to utilize it in practical endeavors effectively. The teacher evaluates the student's

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performance based on their ability to apply their knowledge and skills to real-life situations. Consequently, students ought to cultivate these characteristics to effectively confront the demands of the current era, which necessitates students to actively and independently resolve their learning difficulties.

However, in Indonesia, teachers commonly employ a teacher-centered approach in English education. Teachers may experience fear when faced with a curriculum shift, particularly if the new curriculum incorporates specific types of technology, such as interactive whiteboards or online learning platforms, in the teaching and learning methods (Akinyemi, year as cited in Razali, 2018). If the instructors received adequate training on the new curriculum, they would be able to implement it. Teachers, particularly those in rural regions, undergo culture shock. They are required to manage two groups of students simultaneously, adapt to a dynamic curriculum, and facilitate the development of their students' cognitive abilities. Therefore, it is crucial to understand the responsibilities and methods employed by teachers to stimulate students' cognitive abilities and enhance their higher-order thinking capabilities. The objective of this study is to examine the strategies employed by teachers in instructing higher-order thinking skills (HOTS) and to identify the difficulties encountered by instructors in implementing these tactics. This research was conducted in the era where teachers use The Merdeka Curriculum which HOTS is supposed to be used in almost all learning process. This condition makes this research different from the 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 2013 Curriculum.

METHOD

Respondents

The research was carried out in secondary schools located in Pekalongan Regency. The study sought to investigate the strategies and challenges encountered by teachers when using activities that foster higher-order thinking skills (HOTS) in the instructional process. The high schools in Pekalongan Regency were chosen based on their practical accessibility for research purposes.

The study included 13 English senior high school teachers from Pekalongan Regency, two of whom were chosen for interviews and observations. One teacher hails from SMA 1 Kajen, while another comes from SMK Karangdadap in the Pekalongan Regency. The high schools in Pekalongan Regency were chosen based on their practical accessibility for research purposes. Two observed teachers were selected based on their affiliation with schools that implemented the Curriculum 2013 and the Merdeka Curriculum.

Instruments

The study utilized three instruments for data gathering. The data collection methods employed in this study consisted of a questionnaire, semi-structured interviews, and direct classroom observation. The questionnaire was used to obtain a thorough evaluation of the attitudes and opinions held by the participants. The questionnaire consists of eighteen Likert scale questions and 11 open-ended questions. The decision to use a semi-structured interview was based on its capacity to increase adaptability and promote the creation of questions. The interview utilized Indonesia to obtain more detailed info. The data obtained from the interview were transcribed and subsequently translated into English in order to facilitate data analysis for the findings.

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Data analysis procedures

This study employed a mixed methods approach to analyze the data. A mixed methods study is a research approach that involves the collection, analysis, and integration of both quantitative and qualitative data to address research inquiries. The goal required the use of a qualitative case study method, which involved conducting in-depth interviews and observations. This research approach can uncover probable motivations and desires. Research pertaining to attitudes and opinions seeks to uncover individuals' emotions and thoughts toward a specific topic or entity. Thus, it is necessary to adopt a qualitative approach. Qualitative researchers can gain a thorough understanding of events by conducting comprehensive interviews that include interacting closely with the subject.

Furthermore, it is possible to achieve this by closely observing the spatial distribution of events. Qualitative research should focus on distance education students, and the key phenomenon is a fundamental concept, idea, or process in qualitative research (Creswell, 2002). Additionally, a quantitative approach was necessary to gather numerical data to compare different groups. The numerical data in this study is presented as average percentages derived from a questionnaire. The questionnaire has Likert scale items and open-ended inquiries.

Several methodologies were employed in the data collection process. To acquire comprehensive information, the English teachers first filled out the questionnaire. Furthermore, to examine their strategies for incorporating higher-order thinking skills (HOTS) into the learning process, interviews were performed with a subset of two teachers out of the total of 13 selected. After those steps, teachers were observed confirming the accuracy of their interview answers. Observational data can enhance and offer further understanding of the interview's findings. The interview results can be verified by using observation. The data analysis involved employing descriptive statistics to compute the percentage for the questionnaire and assessing the transcripts and field notes obtained via observation. The interview transcripts and observation notes were gathered and systematically categorized. The aim was to determine the strategies used by teachers and the challenges faced while incorporating higher-order thinking skills (HOTS) exercises into the English learning process.

RESULTS AND DISCUSSION

Teachers' strategies in applying higher order thinking skills (HOTS)

The data from the questionnaire showed that one out of 13 teachers did not use HOTS in their learning process and does not understand it. Therefore, he is no longer used in the analysis. 12 teachers used HOTS in their learning process. Nevertheless, the frequency and strategies of using HOTS activities in their classrooms vary. Figure 2 shows teachers' perceptions of using HOTS.

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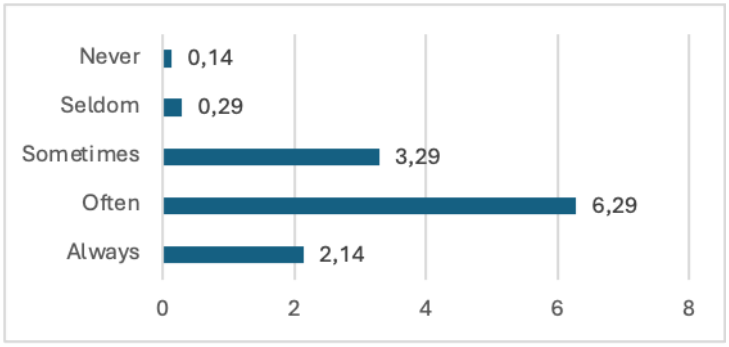

Figure 2. Teachers' perception of using HOTS

According to a comprehensive survey conducted among a sample of English teachers, 52% reported frequently incorporating higher-order thinking Skills (HOTS) into their teaching methods. This survey was complemented by direct observations of two teachers, Teacher A and Teacher B, in their classroom settings. It was noted that they need to consistently incorporate higher-order thinking Skills (HOTS) in every class or instructional material. Teacher A, for instance, failed to implement the HOTS procedures during the class observation. However, Teacher A also mentioned in the interview that he knew HOTS and frequently incorporated them into his teaching methods.

Meanwhile, 27% of English teachers occasionally utilized higher-order thinking Skills (HOTS) in their instruction. They utilized Higher Order Thinking Skills (HOTS) for students who had moderate to advanced English proficiency levels. HOTS was mostly employed for enrichment purposes, often in the form of open-ended questions. This condition is consistent with the interview conducted with Teacher A. Teacher A utilized higher-order thinking Skills (HOTS) questions to provide additional challenges for students who were at a medium to high level of proficiency. Teacher A asserted that he employed higher-order thinking Skills (HOTS) in his teaching-learning process as a result of this activity.

The open-ended questionnaire reveals that the twelve teachers had different approaches to using HOTS activities in the classroom. Seven teachers said their approach was project-based learning. They did, however, only use it in some specific subjects or topics and hardly apply it in their classroom. Three teachers said that they applied problem-based learning as their approach. Teacher B said in the interview that she practically always used this in meetings. Though those techniques only applied somewhat, Teacher B additionally mentioned that in practically every meeting, she used conversation, video analysis, text analysis, inquiry, genre-based learning, presentation, and reflection.

The results of the questionnaire align with the observations made by Teacher A and Teacher B. The researchers conducted observations of the classroom activities in Class X E 3 at SMAN 1 Kajen and Class XI TKR 2 at SMKN 1 Karangdadap. Teacher A was tasked with instructing English to students in class X E 3, whereas Teacher B was designated to teach students in class XI TKR 2. Both Teacher A and Teacher B completed the questionnaire prior to the observation. The observational data suggests that the teachers used teaching methods to successfully integrate higher-order thinking skills (HOTS) into their English lessons.

Teacher A's interview and class observation

Through classroom observation, the researcher found that Teacher A, despite using the Merdeka Curriculum, predominantly employed lower-order thinking abilities rather than

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higher-order thinking skills. Teacher A instructed on the topic of Exposition Text, specifically focusing on current societal issues. There had been a total of four meetings. During the initial session, the teacher presented a question from their instructional module known as a trigger question. The teacher's inquiry, based on the given excerpt, falls within level 1 of Bloom's Taxonomy, namely in the category of knowledge. Teacher A administered identical questions at meetings two, three, and four, all of which fall under level 1: remembering and level 2: understanding.

Following the presentation of trigger questions by Teacher A, the students were instructed to read the provided text, answer the questions, and complete the accompanying worksheets. Nevertheless, during the completion of the worksheet, the student engaged in an analytical process that involved examining the structural and generic structure. Students were tasked with identifying the paragraph that corresponded to a specific generic structure. Anderson and Krathwohl (2001) state that the analysis process entails breaking down a particular material or notion into its components and then investigating how these components are interconnected and contribute to the overall structure.

During the interview, Teacher A disclosed that they instructed students with poor proficiency levels. Consequently, the instructional methods employed primarily consisted of question-answer sessions and completing worksheets, which were then submitted by the students using Google Classroom. Teacher A would evaluate the students' assignments from Google Classroom, enabling him to determine their ability to complete the tasks. If he discovered the students were unable to complete the assignment, he would summon them to the front of the classroom and instruct them to practice individually. He rigorously tested those students on the target language. While instructing them, he assigned the students with moderate to advanced competency to engage in an enrichment activity, where they were tasked with answering more challenging questions. He regarded this as a Higher Order Thinking Skills (HOTS) activity.

According to the interview with Teacher A, He implemented the activities as a deliberate approach for the Teacher to instruct the students with higher-order thinking Skills (HOTS) questions while also maintaining a focus on a target language for students with lower proficiency levels.

Teacher A employed group discussions to enhance the critical thinking abilities of the students. During the fourth meeting, he instructed his pupils in the group to respond to the questions and examine the text based on its linguistic characteristics. Teacher A's interview data indicates that group discussions have a positive impact on student involvement. During these talks, students engage actively by exchanging ideas and completing brief research on the subject matter utilizing Google. It is important to mention that most meetings are done in Bahasa Indonesia. However, Teacher A allowed the students to make use of Google Translate. Afterward, they were obligated to present their discussion results in English. In addition, the students had the freedom to recompose their findings and deliver them orally during their presentation to their classmates.

Teacher B's interview and classroom observation

Teacher B's classroom observation produces divergent outcomes in comparison to Teacher A. Teacher B employs many strategies to cultivate the growth of higher-order cognitive abilities in her classroom. She taught eleventh-grade students Descriptive Text. However, following the researcher's analysis of her teaching module, she concluded the course by instructing the students to utilize their expertise in understanding descriptive

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writing in practical scenarios. Specifically, the students were directed to employ their descriptive skills to evaluate a product, create a video, and subsequently share it on a marketplace platform to earn money as an affiliate. The pupils must possess the ability to utilize descriptive language to solve problems pertaining to their immediate surroundings and environment. According to the researcher, Teacher B utilized Project Based Learning to improve the students' higher-order thinking skills (HOTS). In the first meeting, Teacher B used games to deliver the content. However, Teacher B used the reviewed games; it was not a game that involved higher-order thinking skills. 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 that 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 a process that involved higher-order thinking skills. Teacher B also 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's class observation, the researcher found that Teacher B still used the same strategy to employ higher-order thinking skills in her classroom, which are class discussions and questions. Teacher B also used the game; "Guess Who" to review the adjective that the students had learnt before (level 3: applying). 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.

During the fifth session, Teacher B instructed the students to commence the production of a video product review using the previously created storyboard. This

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activity required advanced cognitive skills at level 6, specifically in creation. Additionally, the students were responsible for writing the script and committing it to memory. This approach required great imagination, as the kids were free to select any product, regardless of its quality, from their surroundings or something that they had 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 was finished, they had to post it on their social media.

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. During the sixth meeting, students exclusively engaged in that 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 utilizing Higher-Order Thinking Skills despite their limited English ability.

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 serves as another strategy that Teacher B employs to incorporate higher-order thinking skills in her English class. However, this activity was unsuccessful because most students needed a higher 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, therefore they used Bahasa Indonesia. Teacher B resolved this issue by permitting the students to utilize 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. 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.

Challenges faced by the teachers

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 lessons compared to higher-order thinking skills. Teacher A

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finds it difficult to teach higher-order thinking abilities in the class due to the students' lack of language proficiency required for elaborating their replies or engaging in group discussions. Teacher A regularly encouraged students to utilize their electronic devices to access online translation tools, such as Google Translator, to interpret the teacher's instructions and responses to questions that need advanced cognitive abilities. However, additional time allocation could have facilitated the effective delivery of the material. Furthermore, Teacher A expressed a predicament in deciding whether to prioritize the target language or emphasize the use of higher-order thinking skills in his classroom. The students found it difficult to concurrently incorporate both components, making this decision problematic for them. Teacher B faced the same challenge as Teacher A which was her students proficiency level that made her difficult to incorporate higher-order thinking skill in her English classroom. Both teachers also stated that it was difficult to incorporate HOTS while teaching English, therefore they must choose or else they need much time to finish one material. Based on the interview this condition occurs because Teacher A did not have enough knowledge in incorporating HOTS in his teaching learning process and Teacher B's negative perception of her students' ability in learning English.

Based on an open-ended questionnaire, seven teachers answered that the strategy they use to implement HOTS was project-based learning. However, they only applied this strategy in some meetings or some material; they only applied this strategy if the material was appropriate for the project; they wrote that they did not apply the strategy because of their students' English level proficiency.

Discussion

The results from the observation, document analysis of the lesson plans, direct semi-structured interview, and questionnaire revealed that teachers employed several tactics in implementing activities that focused on higher-order thinking skills (HOTS). However, they employed higher-order thinking skills (HOTS)-based activities when the students had a moderate to high level of proficiency. Teachers often employ a plethora of instructional strategies when teaching students at lower proficiency levels. According to the questionnaire, teachers possess knowledge of and implement higher-order thinking skills (HOTS) in their teaching methodology. However, they employ it exclusively in specific texts and for particular students. It aligns with Teacher A's observation. Teacher A employed predominantly lower-order thinking skills in his class as opposed to higher-order thinking abilities since he asserted that his students were unable to engage in activities that required higher-order thinking skills. This observation aligns with the findings of a study done by Djami and Kuswandono (2020). Djami and Kuswandono discovered that there was a discrepancy between the self-reported usage of higher-order thinking skills (HOTS) activities by teachers and the actual observations of their classroom practices. The observations revealed that the teachers tended to primarily employ challenging questions or implement a scientific approach, which is mandated by the 2013 curriculum. Teacher A's teaching approach revealed that they continued to utilize the practice of incorporating higher-order thinking skills (HOTS) questions as part of the assessment, as outlined in the Curriculum 2013 (Djami & Kuswandono, 2020). During the interview session, Teacher A expressed the belief that providing students with higher-order thinking skills (HOTS) questions is equivalent to engaging them in HOTS activities. Teacher A stated that he rarely changes his teaching method because his negative perception of his students and the lack of his teaching method especially in HOTS activities. This conditiona is in line with the result of the study that was conducted by Retnawati et al. (2018) which found that teachers have a limited understanding of HOTS and need to be more proficient in enhancing students' HOTS, solving HOTS-related

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problems, or assessing students' HOTS. Nevertheless, the teacher is already cognizant of the need for HOTS and integrating a diverse range of innovative teaching methodologies into their classes (Heri et al., 2018). In the study titled "Indonesian EFL Teachers' Challenge in Assessing Students' Higher-Order Thinking Skills (HOTS)", Abkary and Purnawarman also discovered that teachers were unable to create HOTS questions due to a limited comprehension of HOTS evaluation. teachers employed many evaluation methods, and a majority of them encountered difficulties when evaluating students' HOTS (Abkary & Purnawarman, 2020). They also stated that to achieve success in performing the HOTS assessment, teachers must implement many activities in the classroom prior to the assessment. However, to implement many activities that employed HOTS took a lot of time to prepare. Teacher A and Teacher B stated that they rarely integrated HOTS activities in their classroom because they need more time to prepare. This condition is in line with the finding in research that conducted by Mohamad et.al (2023) about "Educational Challenges in the 21st Century: A Literature Review" that stated that teachers faced challenged which is time consuming in preparing teaching material.

Meanwhile, from direct observation of Teacher B, it was evident that she employed higher-order thinking abilities rather than lower-order thinking skills. During the interview, Teacher B mentioned that they consistently incorporate higher-order thinking skills (HOTS) exercises in their meetings, regardless of whether these activities align with Bloom's Taxonomy. Moreover, she stated that in the Merdeka Curriculum, teachers have the freedom to design and implement the teaching and learning process according to the circumstances. They can also connect the content being taught with the context to foster students' critical thinking abilities. Furthermore, it is imperative for students to actively participate in their educational journey to take ownership of their learning process. Indarta et al. (2022) state that the Merdeka Curriculum is in line with societal expectations regarding students' proficiency in 21st-century skills and their capacity to adjust to changing environments quickly (Indarta et al., 2022). This is a result of the interdependence between education and social issues. Calacar (2020) asserts that education is crucial for developing character, cultivating lifelong learning habits, promoting advanced 4C skills (creativity, critical thinking, communication, and collaboration), and preparing students for various career opportunities in light of the rapid advancements of the 21st century (Calacar, 2018). Teacher B attempted to implement her instructional plan, which was based on the Merdeka Curriculum. The primary goals of this plan were to establish a connection between the students and real-life situations, as well as to provide them with the necessary skills to tackle challenges in their lives. However, the pupils in Teacher B's class exhibited passivity when faced with open-ended questions, primarily due to their limited vocabulary skills. This can be demonstrated by the students actively responding to inquiries in Bahasa, even while they are answering higher order thinking skills (HOTS) questions in Bahasa. This finding is consistent with the investigation conducted by Rashid (2010) on the pedagogical approaches employed by educators while instructing students with lower language proficiency in higher-order thinking skills (HOTS) reading. These findings suggest that the language proficiency of students affects teachers' teaching approaches because of their lack of comprehension of 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, Teacher A is still affected by 2013 Curriculum that used HOTS for

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students outcome . 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 however they 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. Profil Pelajar Pancasila stated clearly about critical thinking and creative in thinking and problem solving, it means in teaching, teacher should relate the material and the context, these activities need higher order thinking, because students must 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. However, in class observations, only Teacher B who applied and concern about the characters.

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. From the interview with both instructors, Teacher A, a young teacher, does not engage in any learning community and seldom acquires knowledge from other teachers on higher-order thinking skills. The study conducted by Khasawneh et al. (2023) is a significant piece of research that emphasizes the importance of recognizing the positive effects that collaborative teaching methods can have on students' academic achievements while examining the impact of learning communities on teacher performance. This study underscores the necessity of ensuring that an adequate amount of time is set out for collaborative activities, fostering a culture of supportive leadership within educational institutions, and supplying appropriate tools for collaboration. As a result, Teacher A has minimal experience with advanced cognitive skills and mostly depends on pre-made worksheets from a certain publisher to improve students' ability to think critically. Teacher A places greater importance on students' language proficiency rather than on the development of higher-order cognitive skills. Teacher A commented that it required significant effort to concentrate on both critical thinking and linguistic proficiency at the same time.

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Consequently, he places a high priority on achieving mastery of language as his main objective. Teacher A prioritizes attaining fluency in the target language but also employs techniques to actively include students in advanced critical thinking abilities at the end of the course. This involves presenting questions for group discussion and allowing students to employ Google Translate to respond to the questions and generate written assignments. These strategies have a restricted influence on cultivating higher-order cognitive talents and improving students' capacity for critical thinking.

CONCLUSION

The study revealed that teachers employed various ways to teach higher-order thinking skills during English lessons at varying competency levels, Teacher A used questioning while Teacher B used project-based learning. This finding is in line with the data from questionnaire that seven teachers from 13 teacher used project based learning and 3 teachers used questioning strategy. However, those teachers also stated that they rarely used these strategies in their classrooms. Those teachers, including Teacher A and Teacher B used HOTS activities only in certain material and to certain students. 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 permission to teachers to utilize and incorporate teaching modules developed by fellow teachers on the Ministry of Education's learning portal. However, most teachers still use 2013 Curriculum paradigm. Due to time constraints, teachers rely on the strategies presented in the learning module rather than attempting to complete the task independently.

The Teachers also consider the students' proficiency when implementing activities that promote higher-order thinking skills in the English language classroom. Teacher A tended to achieve the target language first to low low proficiency level students while Teacher B, even though she used project based learning, she still also struggle with her students' proficiency level. The data from questionnaire also gave the same result that 11 Teachers employed 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. 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, and the students' poor level of proficiency. The pedagogical implication of this study is that teachers should receive training and exposure to exemplary methods of implementing activities that promote higher-order thinking skills.

AUTHOR CONTRIBUTION

Author 1: Conceptualization, Methodology, Writing, Editing, Data; **Author 2**: Reviewing, Supervision; **Author 3**: Reviewing, Supervision

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