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Teachers' Challenges in Promoting Higher Order Thinking Skills in English Classrooms of Senior High School

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Abstract

This study delves into the challenges encountered by teachers in promoting Higher Order Thinking Skills (HOTS) within English classrooms at the senior high school level. Employing a qualitative narrative inquiry approach, the research utilized thematic data analysis to gain insights into the experiences of participating teachers. The findings from the thematic analysis yielded three primary themes. The first theme highlights the significance of HOTS for academic achievement, teacher professional growth, global communication, and educational resources, as well as the importance of integrating HOTS into English language instruction. The second theme addresses the pedagogical challenges, including teacher competence, time limitations, and the abilities and motivation of students, which hinder the effective promotion of HOTS. Teachers often struggle with formulating HOTS questions, devising appropriate teaching strategies, and managing time effectively. The third theme explores the strategies teachers employ to address these challenges, such as thorough preparation, contextual teaching methods, and the use of authentic materials. Overall, the study provides valuable insights into how high school English teachers navigate and overcome the obstacles in promoting HOTS, a critical component of 21st-century education.

Keywords: Higher Order Thinking Skills (HOTS); Promote of HOTS in Learning; Senior High School Teachers; Challenges in Teaching HOTS in English Classrooms

Introduction

A central issue in bringing the students to think critically in a classroom is one of the efforts for educators to achieve in this era. Higher-order thinking skills (HOTS), well known as the skills of the 21st century, have come to be widely recognized as the 4Cs. (Teo, 2019; Yennita & Zukmadini, 2021; Barta et al., 2022) stated these skills equip students with a comprehensive education that prioritizes practical abilities that involve critical thinking, collaboration, communication, and creativity. Critical Thinking (CT) is a model of intelligence specifically created for solving challenges in real-world problems. To promote these skills, teachers must make an exciting plan for a lesson in a class. The concept of CT in (Hirai et al., (2022)) highlights a holistic cognitive ability that integrates several CT skills, such as solving problems, concluding, and making judgments. These skills are needed in this era. Besides that, it allows students to question assumptions, explore multiple perspectives, and make reasoned judgments (Janse van

Rensburg & Rauscher, 2022). Utilizing mental functions like attention, categorization, selection, and judgment is necessary while learning to think critically, analytically, and evaluatively.

The Merdeka Belajar curriculum in Indonesia aims to improve education by focusing on students and encouraging creativity. It emphasizes critical thinking, understanding, and global competence, aligned with the values of Pancasila. The teacher has been using many ways to teach English to satisfy students' ability in English to make them interested and creative in using English. Studies research by (Fakhomah & Utami, 2019; Ginting & Kuswandono, 2020) found that the obstacle to improving higher-order thinking skills is how they teach in the classroom teachers must manage their time and resources moreover the challenges appear from teachers' competence, knowledge, and preparation to promoting HOTS. Therefore, the influence of teacher competence in promoting HOTS in English classrooms is a crucial topic (Mutohhari et al., (2021)).

A good critical thinker can infer acceptable conclusions from others and be able to distinguish between relevant and irrelevant statements. Creativity and innovation are common components of critical thinking. Involve critical thinking can be done with, open-minded, conceptualization, imagination, drawing connections, predicting, and with other approaches. Through those approaches, critical thinkers can examine something by analyzing, communicating, and solving the problem in the information that has been given. Sigh et al., (2023) divulged that Higher-order thinking skills include creativity, critical thinking, problem-solving, metacognition, reflection, and logical reasoning. Teachers can encourage these skills by asking challenging questions and presenting real-life problems that require students to use their knowledge effectively.

According to Ghanizadeh et al., (2020), Bloom's Taxonomy comprises six levels: remembering, comprehending, applying, analyzing, evaluating, and creating. HOTS involves six cognitive stages, beginning with analysis, evaluation, and creation. Teachers emphasized the importance of developing these skills. Bloom's Taxonomy is split into six levels: memory, comprehension, application, analysis, evaluation, and creation. The HOTS progressed through six cognitive levels, beginning with analysis, evaluation, and creation. Teachers were required to emphazised and pay serious consideration to the development of these skills.

Promoting higher-order thinking skills, including critical thinking, creativity, problem-solving, and decision-making, is essential in the Indonesian curriculum to prepare senior high school students for the complexities of college and their future careers, enabling them to analyze information, assess evidence, construct well-reasoned arguments, handle complex situations, devise effective solutions, and generate new ideas in a rapidly changing world (Christensen & Mathé, 2023). The effectiveness when promoting HOTS in the classroom a teacher needs to consider teaching media, methods, and assessment plans for students (Shanti et al., 2022). Learning is the process through which people make a conscious effort to go from inexperience to experience, from incorrect attitude to correct attitude. Involving students in the learning process will be beneficial and experience for students (Teo, 2019b).

As an educator, the level of conveying HOTS skills to students is largely determined by the degree to which they believe these skills help students succeed academically, empower them to make decisions in their daily lives moreover to encourage them to think creatively (Assaly & Jabarin, 2021). Encourage students with HOTS in English classrooms to begin to analyze, evaluate, and create the information that is critical for deep learning and understanding. One of the issues in education is to make students able to think critically especially aware of applying HOTS in teaching. The incorporation of HOTS in English language teaching and learning is important and there are challenges in its implementation and the strategies that have been effective in promoting these skills in learners.

The present study is concerned with what happens in the field when teachers promote HOTS in their English classes. The focus of this study is teacher challenges in the promotion of HOTS in the classroom. This research also highlights the potential impact of factors on teacher perspectives, beliefs,

and attitudes. This study is expected to enhance teacher professionalism awareness, and the development need-ed in promoting HOTS.

Method

The current study used qualitative research, it was decided that the best method to adopt this investigation that the researcher conducted with a narrative inquiry research design. One of the advantages of using narrative inquiry is this method that the data collected are dialogic, engaging, selfrevealing, and more importantly gives researchers an effective method for learning about people's identities in education, a concept that is very suitable and concealed in people's sociological personalities (King et al., 2008). The advantages of narrative also explained that the data obtained was simpler to remember since it is more real, authentic, and revealing. This study was conducted in one of the high schools in Yogyakarta. The selection of setting in this study is because the researcher aims to explore in detail the particular situations, and interactions, understand narrative inquiry, and the challenges promoting HOTS in English subject. This depth study can reveal valuable knowledge in the field of education. This study used purposive sampling with the subject criteria being teachers who implement the curriculum Merdeka and implement HOTS in their lessons and teachers who are over 30-50 years old with more than 20 years of teaching experience. The use of purposive sampling in this study to understand individual's experiences and stories about the study. However, based on their expertise and familiarity with applying HOTS, teachers were chosen as respondents. This study utilized a narrative inquiry method. In narrative inquiry, the researcher retells participants' life stories. Therefore, this study used primary and secondary data collection through interviews and documentation.

Data Analysis

To analyze data from interviews and documents from lesson plans and assessments, the researcher used thematic analysis. Thematic analysis involves identifying, analyzing, and reporting patterns (themes) within data (Maeda et al., 2022). This study adopted six phases of analysis by (Braun & Clarke, 2021) the procedures follow; familiarizing with the data, generate initial codes, sorting different codes into penitential themes, entails of analysis the data, defining and naming themes, focus on the producing report.

Result and Discussion

Result

The result of the interviews was analyzed thematically. The result revealed three themes: 1) teachers' perspective regarding promoting HOTS in English classrooms, 2) factors influencing teachers' challenges in promoting HOTS in English classrooms, and 3) how teachers overcome the challenge'.

- 1. Teachers' Perspective Regarding Promoting HOTS in English Classrooms
- 1) Educator Professionalism and Student HOTS Abilities

The students' needs for future success emphasize the skills of 21st-century skills such as creativity, communication, critical thinking, and collaboration to thrive in an environment. Therefore, fostering holistic success through educator professionalism and students' HOTS abilities is categorized as challenging for teachers. There are several factors based on the interview results such as holistic education for success, teacher professionalism, and students' abilities to HOTS.

a) Holistic education for success

One of the skills included in holistic education is critical thinking skills. The goals of education are to have a piece of new knowledge and improve students' skills. Holistic education assists students in achieving their potential teaching and learning environment is that more enjoyable, exciting, and humanist by allowing them to interact or socialize with their surroundings. Therefore, interviewees who stated the same categories made this statement. Through implementing HOTS in their classroom as well as their career success and English proficiency.

Excerpt T1: Yes, it's important, but it's more about orientation and preparation for further studies. So, for example, when students have to go to college, they have to take the TOEFL or IELTS

b) Teacher Pedagogic Competence

The pedagogic competence of teachers refers to the quality of teaching and professionalism as educators. The ability of the teacher plays a crucial role in students' accomplishment. To become a professional and competent teacher implementing HOTS in English classrooms is challenging. Designing the questions, finding the resources, joining seminars, or improving knowledge of de-signing HOTS is part of being professional as a teacher.

Excerpt T2: I participated in the development of HOTS the curriculum in 2013 and joined it because we had to make school examination questions it's been a long time ago, but I often used a guide to formulate HOTS questions guide.

However, this was different from T2's statement, where she had never attended a seminar but only participated in discussions with the class teacher who helped evaluate the questions she had made. This was because the school had organized a seminar but there was a lack of support from the school.

c) Students' Abilities of HOTS

The teaching approach in twenty-first-century learning emphasizes critical thinking, problemsolving, and communication skills for enjoyable learning. Factors such as personal experience and interest influence the students' ability to HOTS, which varies. The demands of eras require students to master skills that are considered important for students to succeed. The role of teachers is to improve students' abilities, teachers can create learning environments that stimulate the development of students' thinking skills. However, the level of students in learning based on the HOTS is levelled so that learners are not confused. The Level of HOTS standardized by the curriculum such as high schooler students are in the level of analysis, synthesis, and evaluation.

- Excerpt T1: To promote HOTS in English classes because when we as a teacher can adapt the HOTS and level them into practice even when the curriculum is changing HOTS has to be a part of learning to make the students creative and able to use the English language.
- Excerpt T2: So, what I did was, made them familiarize themselves with HOTS-level questions, and provided them with extensive knowledge. There are many characters of questions in AKM or UTBK. another example of questions in UTBK such as preceding, in the preceding text there is text asking about the concept, exposition argument, conclusion, following text, the meaning of a paragraph, and stated text, etc. When I teach my students, I also give them an example of questions that might come out during the exam such as the HOTS questions I mentioned before.
- 2. Factors Influencing Teachers' Challenges in Promoting HOTS in English Classrooms

a) Pedagogical Challenge

Understanding the components of successful teaching is a crucial element of continuous professional growth. However, staying abreast of optimal methods can be difficult due to daily teaching. In the end, to ensure the credibility of an assessment of the effectiveness of teaching, it should be compared to the advancement students are achieving.

b) Teacher Competence

Curriculum reform in Indonesia has significantly impacted education and teaching styles, with a focus on effective HOTS teaching by giving students the freedom to learn and allowing teachers to creatively design appropriate assessments. Interviews with teachers reveal various strategies for promoting HOTS and preparing HOTS questions, including assessing students' learning needs, using contextualized materials, differentiated teaching, clear learning objectives, and group discussions to encourage problem-solving. According to the results of interviews with teachers, there are numerous strategies used by teachers in promoting HOTS and preparing HOTS questions, such as preparing students' HOTS levels of varying learning needs, providing apperception, choosing contextualized materials, differentiated teaching, clear learning objectives, and providing group discussions to help students solve problems. (Astrid et al., (2022)). Meanwhile, activities provided by teachers such as project-based, speaking activities, and discussions (Bo et al., 2022). This is the basis for teachers when promoting HOTS in the classroom, while it is a challenge for teachers to determine learning strategies that are by learning objectives, conduct appropriate evaluations, and maintain student focus aligning with (Umam et al., 2022).

Moreover, based on the interviewee's answers they have a challenge such as the contextual theme considering students' knowledge, considering the level of students in HOTS, and teacher knowledge in formulating questions.

Excerpt T1: Usually just a basic preparation, so if the topic is mostly understandable it is adjusted to what is currently a hot topic in Indonesia and the situation is appropriate with them such as election, etc. The topic is usually already determined in the book or government, so I can't choose. Maybe for a theme like a report text in class X under project P5 about reset related to writing.

Excerpt T2: Yes, it needs to be considered. Due to this consideration, we implement differentiated learning to ensure that not all tasks are at a high-order thinking skill (HOTS) level. This approach allows for a mix of difficulty levels, including some lower-level tasks, so students do not perceive them as overly challenging. Not all questions provided to students are at the HOTS level. The challenge is we have to concentrate. As an assessor evaluating students during their presentations, I observe their performance, assess their speaking skills, and provide feedback accordingly. Sometimes, formulating questions is challenging for me.

c) Time Management

Time management is one of the challenges teachers face when promoting Higher-Order Thinking Skills (HOTS) in an English classroom. Because the teacher invites students to discuss with each other where the teacher plays a full role in managing the class which will become chaotic and uncontrollable due to class capacity full of students' ideas. Based on the results of the interview, the teachers agreed that the lack of time in English subjects is a challenge that must be overcome by the teacher. On the other hand, the teacher also agrees that the lack of motivation to teach students during the last hour of English subject causes the class to become crowded and less controlled so the way the teacher overcomes this is by giving games or ice-breaking.

Excerpt T1: Needs more time to manage the class. As a teacher, we already know how to manage the time as one lesson needs 90 minutes, so we have to wisely manage the opening, lesson core, and

also closing. The challenge is because of I teach two grades, for classes X and XI. In one class there are 36 students. Because there are a lot of classes, it's hard for me to handle it.

Excerpt T2: Specifically, I may require additional time during the final hour of the lesson, as students' motivation to learn and the classroom environment or dynamics may be challenging to control.

d) Students' abilities and motivation

According to (Lu et al., 2021) teachers need to consider learners' motivation in learning, learning strategy, and preference for the smart classroom when analyzing, developing, implementing, and assessing learning activities in an innovative learning process and also the atmosphere to develop students' HOTS. The teachers encounter challenges in students' motivation because of time allocation. Students have different abilities therefore the teacher drilled their knowledge before the class began.

Excerpt T1: To handle it I give the background knowledge, such as apperception "So you think like this, then what makes you think like that", then they are free to answer and I guide them to be able to answer so they will be open-minded.

Meanwhile, the results of T1 and T2 agree that students' abilities cannot be directly elevated to a high level; they must be guided and exposed to a mix of difficulties in the HOTS levels.

- Excerpt T2: Yes, it needs to be considered. Due to this consideration, I implement differentiated learning to ensure that not all tasks are at a high-order thinking skill (HOTS) level. This approach allows for a mix of difficulty levels, including some lower-level tasks, so students do not perceive them as overly challenging. Not all questions provided to students are at the HOTS level. However, another challenge is students' motivation.
- Excerpt T2: Through motivate my students and interact with them to understand their anxieties and determine how to overcome these issues.
- Excerpt T1: Particularly at the last hour most of the students were already exhausted. However, I always guide and motivate them. And how I handle it by monitoring the students and asking them if they have difficulty.

3. The Teacher Overcomes the Challenges

To overcome the challenge when promoting HOTS in English classrooms the teacher does various approaches as follows.

1) Dynamic and Contextual Teaching

Emphasizing contextual teaching in a modern approach to education can foster relevance and engagement in the learning process. These methods create a dynamic learning environment that can cater to diverse learning styles and needs.

a. Appropriate Teaching Method

Choosing the effective teaching method depends on what fits with the students. Based on the results of the teachers, they are using visualization and inquiry learning. The use of visualization and inquiry is considered to help students in expressing their thoughts and thinking critically. According to T1, after visualizing the material or using video-based learning, students one by one presented their thoughts in front of the class. The teacher also uses differentiated learning so the students are not bored.

Excerpt T1: My consideration of teaching HOTS of course the source. In my experience when teaching a class of sport, the students like to learn with practice. So, I considered making a media and making more practice rather than delivering the material because of the students' characteristics, they will be bored if we teach the text based on the book. Therefore, it's more about practice and for material, I gave a discussion.

T2 uses an inquiry teaching model, which is to provide understanding, and then students solve the problem with their experience and knowledge.

Excerpt T2: As I mentioned before, it is an expository text, so I applied contextual learning by identifying the issues that students are familiar with. I implemented this approach so that they could critically respond to the questions and articulate their thoughts based on personal experiences.

In addition, both teachers agree that using authentic material, specifically connecting the material with issues related to students' lives, can help students think critically. These statements are supported by the teachers' designed lesson plans derived from analyzing data in documents.

b) Authentic Materials

In the context of overcoming the challenge based on the two interviews, researchers found that both teachers agreed to use authentic materials. The use of authentic materials is proven to make students active and creative when expressing opinions and thinking critically when given problems related to their daily lives, so teachers feel that the use of authentic materials can improve students' critical thinking skills (Velasco, 2021). The use of authentic materials is aligned with topics that are currently being discussed, according to the context of students' lives. Even though the government has agreed upon the topic, the teacher only follows it. However, the teacher must also adjust the topic to a context or theme that is suitable for high school students (Ayuningrum et al., (2024)).

- Excerpt T1: I usually adopt the material that adjusts with the theme and students' ability, and I use authentic material such as the election.
- Excerpt T2: Selecting content or materials that are suitable for students involves choosing themes that are contextual or relevant to them themes that resonate with their feelings or observations. This approach enables students to express their opinions effectively.

Based on the results of the interviews, both teachers have the same perception that when implementing HOTS in the classroom, teachers must adjust the content so that students are willing to express their thoughts.

c) Resources

In choosing resources, teachers use IT according to the demands of the curriculum. Teachers vary the resources with learners' experiences. Teachers also consider the ability of learners to obtain the right resources. During the observation, the researcher saw that students were quickly responsive in using social media so this did not make it difficult for teachers because the resources were already available and easily accessible to students.

Excerpt T2: Yes, I do have it, but it is just a standard one. Social media, especially, has been helpful to me in obtaining information, particularly on trending topics that are relevant to students' environment and pique their interest in learning.

Discussion

Applying HOTS in an English classroom is an essential undertaking for English teachers, aiming to develop students' analytical, creative, and critical thinking abilities. Encourages students to produce creative insights and practical solutions, and educators can help students achieve their goals. This finding is consistent with (Abdelnaser & Ibtihal, 2021) about the importance of HOTS can be seen as a teacher's responsibility to implement HOTS for students' skills for the future. The role of HOTS involves continuous improvement either for students or teachers. This relates to Laksani et al., (2019) the factor was students' heterogeneity cognitive and difficulty in developing appropriate instruction moreover teachers' lack of knowledge and experience. Teachers should consider their current instructional methods and personal beliefs before incorporating critical thinking into lessons (Lutfi et al., 2021). Overcome the challenges through appropriate teaching methods, authentic material, and using appropriate resources thus relating to Cáceres et al., (2020) the lesson's main focus is on the subjects that teachers select, the tasks that students perform, and the connections they make between these tasks and developing their skills of critical thinking. This result also align with (Singh et al., 2020) the majority of teachers choose topics that relate to core concepts and real-world problems, encouraging students to analyze, ask, and come up with solutions. Overall, this study highlights the significance of HOTS questions for senior high schoolers in terms of their future study and career success. It emphasizes the role of teachers in promoting HOTS is to prepare students for the complexities of modern society by fostering critical thinking, creativity, and problem-solving skills. The researcher sees the findings of this study as understanding and overcoming the problems teachers have while promoting HOTS is vital for enhancing teaching methods and connecting educational theory to practical implementation.

Conclusion

To sum up, this study highlights the importance of teachers' perspectives and efforts in promoting Higher-Order Thinking Skills (HOTS) in English classrooms. The findings show that HOTS is crucial for meeting students' future study needs, contributing to both teachers' professional development and students' academic success. Teachers play a vital role in preparing students for the complexities of modern society by fostering critical thinking, creativity, and problem-solving skills. Despite facing challenges such as time constraints and diverse student abilities, teachers can overcome these by employing dynamic teaching approaches, utilizing real-world materials, and leveraging various resources. Understanding and addressing the pedagogical challenges associated with HOTS is essential for enhancing teaching practices and bridging the gap between educational theory and practice.

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