

## TEACHERS' CONSTRAINTS IN THE IMPLEMENTATION OF HIGHER ORDER THINKING SKILLS IN EFL CLASSROOMS

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**Abstract:** The current study aimed to investigate the constraints that the EFL teachers encountered during the implementation of higher order thinking skills. This study employed purposive sampling. It involved twelve English teachers from five senior high schools. The participants were selected based on their teaching experience and the accreditation status of their schools. All participants were teaching in schools designated as *Sekolah Penggerak*, which are part of an Indonesian government initiative to drive educational improvement. Data were gathered through classroom observations and semi-structured interviews, then analysed using thematic analysis to identify recurring patterns and key issues. The analysis revealed three main constraints in the implementation of HOTS-based learning: (1) linguistic challenges, including students' limited vocabulary, grammatical difficulties, and pronunciation issues that hindered active participation in critical thinking tasks; (2) heterogeneous language proficiency levels among students, making it difficult for teachers to deliver lessons that met the needs of all learners equally; and (3) time constraint, especially regarding the planning and execution of lessons that require deeper thinking and active student engagement. These findings highlight the need for more targeted language support for students, differentiated teaching strategies, and improved time management or curriculum adjustments to support the effective integration of HOTS in EFL classrooms.

**Keywords:** *EFL, English proficiency, higher order thinking skills, linguistic challenges, time constraint*

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## INTRODUCTION

The current curricula used by schools in Indonesia both Kurikulum 2013 (2013 curriculum) and Kurikulum Merdeka (Merdeka curriculum) include the skills of 21<sup>st</sup> century. Those skills are known as four Cs (Collaboration, Communication, Creativity and Critical Thinking). Critical thinking is a part of higher order thinking

skills. In Merdeka curriculum, HOTS are embedded in the formulation of learning outcome (CP), while in 2013 curriculum, HOTS are used to formulate core competence (KI) and basic competence (KD) (Subhkan & Wahyudin, 2024).

Integrating higher order thinking skills in the learning process is indispensable. These skills allow the students not only memorize the facts. The students understand, think critically, and apply the knowledge practically. HOTS include skills such as analysing, evaluating, reasoning and creating – skill that are required in the classroom and in everyday situations. Liu et al. (2022) asserted that higher-order thinking allows someone to manipulate information and make use of both new and existing knowledge to come up with a rational solution to novel situations. Rather than just recalling information, students engage with it thoughtfully, ask questions, and use it to make informed decisions.

In addition, the competencies known as the HOTS give students the ability to recognize, assess, and analyse problems while coming up with ideas for answers and solutions (Gupta & Mishra, 2021). They enable students to identify issues, explore various possible solutions. This involves breaking down complex problems, considering different perspectives and selecting the most suitable response. These thinking skills are valuable not just in academic work, but also in personal decision-making and collaboration with others.

Higher-order thinking skills should be incorporated not only in mathematics and science classrooms but also in ESL/EFL instruction. When critical thinking is incorporated into language instruction, students are more motivated to learn about and develop their thinking skills (Li, 2016). It does not only work for the productive skills such as writing and speaking but the two receptive skills (listening and reading) might involve the critical thinking as well. Mohammed AlKhoudayr (2015) mentioned that In order to develop students' critical thinking skills, teachers must act as a patient facilitator, helping students to incorporate critical thinking into their writing, reading, speaking, and listening lessons. Employing higher order questions as a teaching strategy can improve students' critical thinking and listening comprehension skills (Faravani & Taleb, 2020)

Several studies have been conducted to investigate how higher order thinking skill is integrated in EFL classrooms. Suryani (2024) found in her study that the participants implemented higher order thinking skills completely in the learning phases yet a few only integrated higher order thinking skills in one of phases i.e. planning or evaluation phase. Nguyen and Nguyen (2022) conducted a study to find out teachers' strategies in incorporating higher order thinking skills in reading instructions. The results of study revealed that modeling, game-playing, making predictions, asking questions, and providing feedback are some of the tactics used to employ HOTS in reading. Masyhud et al. (2021) carried out a study to investigate the implementation of higher order thinking skills using lesson study. The findings showed that the school included several activities such as roleplaying, group discussions, and gaming competitions to expose the students' English proficiency.

It has been a challenging task for the teachers to implement higher order thinking skills in their classroom. The teachers are found out not to have comprehensive understanding of higher order thinking skills implementation (Pusparini et al., 2020; Seman et al., 2017). Other obstacles that inhibit the implementation of higher order thinking skills are students' competence (Ginting &

Kuswandono, 2020; Tyas et al., 2019), teaching and learning materials (Hidayat & Lestari, 2023) and time constraints (Singh et al., 2020).

The results of a study on HOTS-based learning indicate that a few research studies have been done on EFL teachers' constraints especially when it comes to finding out what secondary school English teachers think about the use of HOTS-based instruction. Hence, the present study is intended to investigate the difficulties encountered by English teachers in employing higher order thinking skills. By identifying the constraints, the study aims to offer practical insights that can guide future development programs, improve instructional materials and create more supportive conditions for the use of HOTS in EFL classrooms. Ultimately, this research not only highlights the importance of teacher perspectives but also contributes to the broader effort making higher – order thinking a more achievable and sustainable part of EFL classrooms.

## **METHODOLOGY**

### **Subjects**

The research involved twelve English teachers teaching at five public senior high schools. The participating teachers, each with over ten years of teaching experience, were selected as the study sample because they taught at Sekolah Penggerak-accredited schools, where the Kurikulum Merdeka is implemented. This current curriculum is integrated with the skills of 21<sup>st</sup> century, in which critical thinking is implemented in the teaching and learning process.

### **Design and Procedures**

This study used multiple case study, that aims to figure out the constraints the English teachers encountered when implementing higher order thinking skills in teaching and learning process. It took more than one case (school). Analysing how the program or phenomena functions in several contexts is a key goal of the multicase research (Stake, 2005).

The procedures started by confirming the schools to be a part of the study. The researcher sent the letter of the consent to the participating schools where the research was carried out. Participants were informed that the confidentiality of all data collected, including their identities, would be strictly maintained throughout the study. The participants could draw themselves as participants in the event of an emergency.

### **Data Collection and Data Analysis**

The data of the study were collected by using observation and interview. The researcher conducted the classroom observation in order to figure out the obstacles the participants came across during the classroom interaction. The researcher made field notes to obtain a deep analysis. Fraenkel et al. (2012) mentioned that field notes are the thorough notes that researchers make while observing events in the classroom or school or when speaking with informants.

Once the classroom observations were completed, the researcher validated the data using interviews. The questions were developed based on the research question of the study, for example: *“What challenges do you encounter when implementing hots-based learning?”* *“How have you handled the challenges?”* The interviews took around 20 – 30 minutes. The interviews were recorded with the approval of the

participants to ensure the precise transcription and analysis. To enhance the trustworthiness of the data collected through interviews, the researcher employed member checking as a validation strategy. After transcribing the interviews, the researcher shared the transcripts with the participants to verify the accuracy of their statements and to provide them the opportunity to confirm, clarify, or elaborate on their responses. This process helped ensure that the findings accurately represented the participants' perspectives and experiences regarding the implementation of Higher Order Thinking Skills (HOTS) in English classrooms

The researcher employed the thematic analysis in analysing the data of the study. Braun and Clarke (2006) stated that thematic analysis is the process of finding, examining, and summarizing patterns (themes) in data. The analysis consists of six phases. Firstly, the researcher familiarized herself with the data obtained. She checked the data from the interviews and observations repeatedly. Secondly, the researcher identified the codes from interviews and observations. Next, the researcher categorized the data into three themes namely linguistics problems, the different level of students' linguistic proficiency and time constraints. Afterwards, the researcher examined coded data positioned within each theme to make sure it fits. Next, review and adjust themes that were not fully consistent with the aim of study to better align them with the research focus. Lastly, the researcher wrote final analysis and findings description.

## FINDINGS AND DISCUSSION

### Findings

#### The Obstacles the Teachers Encountered during the Implementation of Higher Order Thinking Skills Based Learning

Having analyzed the data from interviews and observations through thematic analysis, the researcher found three main themes of the obstacles in the implementation of higher order thinking skills-based learning. The themes as well as the codes are presented in the following table.

Table 1. Themes and codes for the obstacles of HOTS based learning

Themes	Codes
Linguistic problems	<ul style="list-style-type: none"> <li>a. The students were not able to engage in the conversation or role plays effectively as they lacked of vocabulary</li> <li>b. The students' writing assessment had grammatical errors.</li> <li>c. The students' mispronounced several words</li> <li>d. The students were only familiar with the basic vocabularies</li> </ul>
Heterogeneous class	<ul style="list-style-type: none"> <li>a. The students had different level of proficiency</li> <li>b. The students were not distributed equally in terms of their English proficiency</li> <li>c. In some classes, the low achievers dominated</li> </ul>
Time constraints	<ul style="list-style-type: none"> <li>a. The students' could not finish the speaking performance as the material delivery was time consuming</li> </ul>

### **Linguistic problems**

The data from observations and interviews revealed that linguistic problems are the obstacle the teacher encountered in higher order thinking skills-based learning. In classroom observation, the researcher found that the students got stuck in providing the information when the teacher asked them to continue the story telling. They could not continue the story because their limited vocabulary. They tried to use vocabulary in Bahasa instead. As stated by teacher initialed SU in the interview, *“the students were unable to use proper words as they have speaking performance”*. The other teachers, DE and RO also had the same responses, *“the problem is vocabulary. The students lack of vocabulary. It hindered the students to come forward to have a presentation”* (DE). RO mentioned in the interview *“A lot of vocabularies the students are unfamiliar with. The students only knew the basic ones for example ‘headmaster’ yet they have no idea with the advanced one such as principal”*.

In another classroom observation, the students mispronounced the vocabulary when the teacher asked them to describe an object in the material of descriptive text. The teacher corrected the students right away. The teacher initialed WE mentioned in the interview that *“the students did not know how to pronounce particular words”*.

Grammatical competence is also the problem that the teachers came across when conducting higher order thinking skills-based learning. In the observations, the researcher found that the students struggled with writing the grammatically correct sentences. In one of the classrooms, the students made mistakes in subject verb agreement. The teacher, RI, claimed that *“The students are reluctant to have speaking performance. They are afraid of making mistakes due to the limited grammar and vocabulary they have”*. Likewise, the other teacher, AM, stated that *“The students found difficulties in grammar when writing a text”*. The teacher, AH, also had the same point, *“The students found difficulties in sentence construction. The grammar was poor. Most of students used improper words in writing. Consequently, they are occupied only in composing a grammatically correct sentence”*.

### **Heterogeneous class**

Heterogeneous class is another issue in the implementation the higher order thinking skills-based learning. Based on the data of the observations, the researcher figured out that the students had different level of linguistic proficiency. They are not distributed evenly in the classroom. As a result, the teachers felt the implementation of higher order thinking skills-based learning did not run successfully. The students with low proficiency level of English needed more time to complete the HOTS based assessment. This finding is confirmed by the data of the interview. The teacher, DS, stated that *“The students’ abilities are not the same”*. The other two teachers, DE and AI, also had the same responses. *“The students sitting at the back row tended to be passive compared to students at the front row, who are more enthusiastic and active”* (DE). *“The level of student’s ability is varied due to the students’ recruitment process”* (AI).

During one observed lesson focused on interpreting themes in a narrative text, higher-level students were able to identify symbolism and discuss character motivations critically. However, lower-level students had difficulty understanding the plot itself, let alone engaging with higher-order questions. As a result, the teacher

had to frequently switch between simplifying the task and providing translations, which diluted the depth of the activity and interrupted the learning flow.

The diversity in student ability also led to unequal participation, especially during group discussions, debates, and problem-solving activities designed to promote HOTS. In several classrooms, more proficient students tended to dominate discussions, completing tasks quickly and confidently. Meanwhile, less proficient students either remained silent, repeated simple ideas, or copied their peers' answers without true understanding. For instance, the more skilled students led the conversation during a group assignment where they were supposed to come up with answers for a social problem, while the rest just followed along. After class, teachers vented their displeasure, saying they found it difficult to actively engage weaker kids without distracting those who were prepared for more difficult work.

### **Time constraint**

The data from interview and observations indicate that the time allocation in higher order thinking skills-based learning is not sufficient. The teachers need to extend the time for the students to complete the assessment. The students had to finish the writing assessment at home and submit it on the other day. In one of the classes, the teacher was found out focusing on the grammatical pattern by inviting the students one by one writing their own sentence on the board prior to writing a text. In speaking class, the teachers could only evaluate some of the students while the rest did not have the chance to carry out the speaking performance due to the time constraint. The teacher, SU, asserted in the interview that *"The time allocation is not sufficient for the students to carry out speaking performance. Meanwhile, the lecture session is time consuming especially for grammar session"*

Time limits have an impact on the kind and scope of questions teachers pose. Even while many teachers make an effort to pose challenging topics, the pressure to move on to the next subject sometimes results in hurried or insufficient time for students to have classroom discussion. Some teachers admitted to this issue, saying that in order to keep the learning pace, they frequently employ simple questions.

### **Discussions**

Based on the findings of the research, the low English proficiency of the students is one of the obstacles the teachers encountered when implementing higher order thinking skills-based learning. Many students struggled with basic language skills such as vocabulary, grammar and pronunciations. Due to these problems, it is hard for the students to participate in learning activities that require critical thinking.

For instance, tasks like writing a text, doing presentations, or acting out role plays all involve HOTS because students need to analyse, evaluate, and create ideas. However, when students do not have sufficient vocabulary or grammar knowledge, they find it difficult to express their thoughts clearly. Poor pronunciation can also affect their confidence and make it harder for them to communicate during speaking activities. As a result, students focus more on trying to understand the language itself rather than thinking deeply about the topic. This makes HOTS-based learning less effective. These findings are similar to what Assaly and Jabarin (2024) found in their study. They found that students with low proficiency in English often depend on memorizing rather than thinking critically. Fitriani et al. (2021) also found that students with low English ability struggle to take part in higher-level thinking tasks.

Another obstacle is heterogeneous class, meaning that students have very different levels of English proficiency, learning styles, backgrounds, and cognitive abilities. This diversity makes it difficult for teachers to design lessons that are suitable and effective for all students. In a mixed-ability class, some students may be advanced and ready to engage in HOTS tasks such as analysing texts, debating ideas, or writing arguments. Meanwhile, others may still be struggling with basic English skills like forming correct sentences or understanding instructions. When this happens, teachers often find themselves needing to slow down for the lower-level students, which can limit the depth and complexity of tasks for the more advanced ones. As a result, students either get overwhelmed or bored, which negatively affects their learning motivation and participation. This is in line with the study conducted by Abkary and Purnawarman (2020) suggesting that evaluating students' HOTS can be difficult while teaching in a diverse classroom. The teachers must use a single HOTS assessment to evaluate the skills of some students.

Time constraint is the other challenge faced by EFL teachers when implementing higher-order thinking skills (HOTS) in the classroom. Developing students' critical, analytical, and creative thinking abilities requires more time than traditional, lower-order tasks such as memorization, translation, or grammar drills. However, a few teachers in the study reported not having enough time in class to carry out HOTS-based activities effectively. Yin and Abdul Samat (2024) stated that teachers frequently find it difficult to set aside enough time for thorough planning to successfully integrate HOTS. The study found that time management and the course requirements had an impact on the EFL teachers' instructional decisions when facilitating HOTS. Another study which also found time constraint as the challenge in HOTS-based learning was conducted by Gustiana et al. (2024). In their study, few teachers acknowledged that they require additional time to include the Higher Order Thinking Skills (HOTS) into their lessons particularly for tasks in the close and preliminary activities, where they typically have a limited amount of time—just a few minutes. It suggests that teachers' creativity was greatly influenced by time, which also constituted a barrier to their ability to develop and select the type of activity for the learning activity segment.

## CONCLUSION

This study explored the obstacles experienced by EFL teachers in implementing higher-order thinking skills (HOTS) in senior high school classrooms. Based on observations and interviews with twelve experienced teachers, the research identified three main challenges: students' linguistic problems, heterogeneous classroom composition, and time constraints.

Students' limited vocabulary, grammatical difficulties, and pronunciation issues made it hard for them to participate in activities that required critical and creative thinking, such as presentations, writing tasks, and role plays. In addition, the diverse levels of students' English proficiency in one class made it difficult for teachers to deliver lessons that matched all students' needs. Teachers often had to adjust their teaching pace, which impacted the depth and effectiveness of HOTS-based activities. Lastly, time limitations further hindered the implementation of HOTS. Teachers reported not having enough time to conduct deep-thinking tasks due to the demands of covering curriculum content within limited hours.

This study shows that to use HOTS in English classes, students need more support with vocabulary, grammar, and speaking. Teachers also need ways to handle mixed-level classes and more time to do deep-thinking activities. Schools should help by giving teachers more time and flexible teaching plans. This can make HOTS easier to use and help students learn better.

## REFERENCES

- Abkary, N. S., & Purnawarman, P. (2020). *Indonesian EFL teachers' challenges in assessing students' higher-order thinking skills (HOTS)*. 509(Icollite), 482–489. <https://doi.org/10.2991/assehr.k.201215.076>
- Assaly, I., & Jabarin, A. (2024). Arab Israeli EFL teachers' perceptions and practices vis-à-vis teaching higher-order thinking skills: A complicated relationship. *Language Teaching Research*, 28(4), 1635–1655. <https://doi.org/10.1177/13621688211032426>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/doi.org/10.1191/1478088706qp063oa>
- Faravani, A., & Taleb, E. (2020). Teachers' use of Bloom's higher order questions in class to augment EFL learners' listening comprehension and critical thinking ability. *Journal of Language and Cultural Education*, 8(2), 94–113. <https://doi.org/10.2478/jolace-2020-0015>
- Fitriani, R., Iskandar, I., & Seseno, M. (2021). The implementation of higher order thinking skills (HOTS) in English Language Teaching: the case of Indonesian Senior High School EFL teachers. *Didaktika: Jurnal Kependidikan*, 12(4), 739–750.
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. . (2012). *How to design and evaluate research in education* (8th ed). McGraw-Hill.
- 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>
- Gupta, T., & Mishra, L. (2021). Higher-order thinking skills in shaping the future of students. *Psychology and Education*, 58(2), 9305–9311. [www.psychologyandeducation.net](http://www.psychologyandeducation.net)
- Gustiana, P. D., Yunita, W., & Maisarah, I. (2024). *The higher order thinking skills (HOTS) in activities of the lesson plan by in service teachers of the teacher certification program*. 12(01), 125–136.
- Hidayat, R. H., & Lestari, Y. B. (2023). Challenges teachers face in applying higher order thinking skills: A case study at Madani Super Camp English Course. In *Proceedings of the 3rd Annual Conference of Education and Social Sciences (ACCESS 2021)*. Atlantis Press SARL. <https://doi.org/10.2991/978-2-494069-21-3>
- Li, L. (2016). Integrating thinking skills in foreign language learning: What can we learn from teachers' perspectives? *Thinking Skills and Creativity*, 22, 273–288. <https://doi.org/10.1016/j.tsc.2016.09.008>
- Liu, J., Ma, Y., Sun, X., Zhu, Z., & Xu, Y. (2022). A systematic review of higher-order thinking by visualizing its structure through HistCite and CiteSpace software. *Asia-Pacific Education Researcher*, 31(6), 635–645.



<https://doi.org/10.1007/s40299-021-00614-5>

- Masyhud, M., Nurbatra, L. H., & Hartiningsih, S. (2021). The implementation of higher order thinking skills (HOTS) through lesson study: A case study at Islamic School in Thailand. *JINoP (Jurnal Inovasi Pembelajaran)*, 7(1), 92–101. <https://doi.org/10.22219/jinop.v7i1.10357>
- Mohammed AlKhouday, Y. A. (2015). The effect of teaching critical thinking on Al-Buraimi University College students' writing skills: A case study. *International Journal of Applied Linguistics and English Literature*, 4(6), 212–219. <https://doi.org/10.7575/aiac.ijalel.v4n.6p.212>
- Nguyen, Y. N. T., & Nguyen, H. B. (2022). Teachers' strategies in incorporating higher-order thinking skills in reading classes. *European Journal of English Language Teaching*, 7(4), 15–33. <https://doi.org/10.46827/ejel.v7i4.4393>
- Pusparini, D., Suparno, & Sarosa, T. (2020). Teachers' knowledge about higher-order thinking skills and its implementation in teaching reading. *Jurnal Edulingua*, 7(2), 76.
- Seman, S. C., Yusoff, W. M. W., & Embong, R. (2017). Teachers challenges in teaching and learning for higher order thinking skills (HOTS) in primary school. *International Journal of Asian Social Science*, 7(7), 534–545. <https://doi.org/10.18488/journal.1.2017.77.534.545>
- Singh, C. K. S., Gopal, R., Ong, E. T., Singh, T. S. M., Mostafa, N. A., & Singh, R. K. A. (2020). ESL teachers' strategies to foster higher-order thinking skills to teach writing. *Malaysian Journal of Learning and Instruction*, 17(2), 195–226. <https://doi.org/10.32890/mjli2020.17.2.7>
- Stake, R. E. (2005). The Sage handbook of qualitative research. In N. K. D. Y. S. Lincoln (Ed.), *Qualitative Research in Organizations and Management: An International Journal* (3rd ed.). Sage. <https://doi.org/10.1108/17465640610666642>
- Subhkan, E., & Wahyudin, D. (2024). *Kajian Akademik Kurikulum Merdeka*. Pusat Kurikulum dan Pembelajaran Badan Standar, Kurikulum, dan Asesmen Pendidikan Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi.
- Suryani, H. (2024). Higher Order Thinking Skills in EFL classrooms: Evidence in five secondary schools. *Kasetsart Journal of Social Sciences*, 45, 103–112. <https://doi.org/https://doi.org/10.34044/j.kjss.2024.45.1.11>
- Tyas, M. A., Nurkamto, J., Marmanto, S., & Laksani, H. (2019). *Developing higher order thinking skills (HOTS) – based questions: Indonesian EFL teachers' challenges*. *October*, 52–63. <https://doi.org/10.17501/26307413.2019.2106>
- Yin, Y., & Abdul Samat, N. (2024). Factors affecting teachers' HOTS implementation in Chinese college EFL classrooms. *International Journal of Academic Research in Progressive Education and Development*, 13(1), 1053–1066. <https://doi.org/10.6007/ijarped/v13-i1/20513>

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