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Analysis of Higher Order Thinking Skills (*HOTS*) in Reading Comprehension Question Final Test for Junior High School: Teachers' Voices

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Abstract

The purpose of this study is to investigate the strategies and approaches used to create HOTS questions in reading comprehension texts to improve students' HOTS skills. This study used a qualitative approach, relying on questionnaire data that results from teachers who created HOTS questions to explain and describe data. The subjects of this study were English teachers as participants. Researchers discovered numerous things using questionnaire data obtained via Google Forms. The research design is a case study, which describes teachers' perspectives on HOTS questions and the obstacles faced by teachers in creating HOTS questions. The research instrument was a questionnaire that was sent by Google Forms. In collecting data, the researcher sent the Google form link to the teacher and the researcher reviewed the answers from the teacher, and the data in this study were the teacher's answers to the questions about HOTS, which were attached to the Google form. The study's findings include three significant points 1. Teacher's challenges with drafting HOTS questions. 2. Teacher's strategies for using HOTS questions in reading comprehension question final test**. 3.** Teachers' technique or process for creating HOTS questions to increase students' HOTS skills**.** 4. How students respond to the teacher's queries. 5. The outcomes obtained by students using the HOTS method.

Keywords: *Higher Order Thinking Skills (HOTS), Reading Comprehension, Question Final Test*

Introduction

Higher Order Thinking Skills (HOTS) have emerged as a pivotal element in the discourse surrounding education in Indonesia, signifying a shift in focus towards fostering advanced cognitive abilities to prepare students for the demands of 21st-century life and learning (Meditama, 2022). According to Syawaludin et al. (2019), these skills are indispensable for students' educational success and their preparation for future career challenges. Higher order thinking skills is an important aspect in teaching and learning especially at higher education institutions.

The government's commitment to integrating HOTS into various aspects of education underscores the importance of equipping students with the ability to think critically, creatively, and analytically. These skills are essential not only for solving complex problems but also for driving innovation and adapting to an ever-changing global environment (Widana, 2017; Nizam, 2016; Changwong, 2018; Jannah, 2022). As a result, factors such as improved teaching-learning processes, school responsibility, and student accountability can all have an impact on their thinking abilities.

Higher order thinking skills (HOTS) involve the ability to examine information, assess ideas, and devise new solutions or concepts. Certainly, improving these skills allows students to think more critically and creatively in acquiring and processing knowledge (Brown, 2004 Ahmad, 2018). On the other hand, Lower Order Thinking Skills (LOTS), which are foundational cognitive skills such as remembering, understanding, and applying information, represent the essential building blocks upon which HOTS must be developed (Anderson & Krathwohl, 2001). Together, LOTS and HOTS form a comprehensive framework for cognitive development, as emphasized in Bloom's Taxonomy.

The Indonesian education system, through the 2013 curriculum, has highlighted the need to prioritize HOTS to cultivate a generation of critical thinkers capable of addressing multifaceted challenges (Keith and Ramadani, 2024). This focus is particularly evident in subjects such as English, where reading comprehension plays a fundamental role in developing students' ability to interpret, analyze, and evaluate information. Reading comprehension, as a higher-level cognitive process, offers an ideal platform for fostering HOTS by requiring students to engage deeply with texts and apply their critical thinking skills to evaluate meaning and context (Hermansah, 2022; Rahmah, 2023).

However, despite these aspirations, numerous studies have identified persistent gaps. Students often exhibit strong performance on questions rooted in LOTS but struggle significantly with tasks designed to assess HOTS (Armala et al., 2022). These findings underscore the need to address the challenges inherent in teaching strategies and assessment design. While the value of HOTS is well-recognized, teachers face an array of obstacles in developing effective HOTS-based

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questions for reading comprehension.

For one, many educators lack a thorough understanding of HOTS principles, which complicates their ability to align questions with students' diverse cognitive levels (Seman et al., 2017; Laili et al., 2020). Furthermore, systemic issues such as limited access to resources and time constraints hinder the ability to design and implement high-quality assessments that truly capture the essence of HOTS (Nurizki et al., 2024). These challenges are compounded by the lack of practical training and examples to guide teachers in crafting questions that inspire critical and creative thinking.

Though prior research has delved into HOTS development in specific contexts, such as social studies (Tasrif, 2023) and general assessment methodologies (Abosalem, 2016), there remains a distinct gap in the literature regarding the unique challenges faced by English teachers in developing reading comprehension questions specifically tailored to promote higher-order thinking. This study is dedicated to bridging that gap by investigating the specific strategies and challenges English teachers encounter when designing HOTS-oriented questions for junior high school reading comprehension assessments.

It seeks to address critical questions, including: (1) What are the primary challenges teachers face in formulating HOTS questions for reading comprehension? (2) What strategies do educators employ to incorporate HOTS-based questions into final tests effectively? (3) How do students respond to these assessments, and what are the learning outcomes associated with their application? By employing a qualitative case study approach, this research gathers data through comprehensive questionnaires completed by 10 English teachers with varied levels of experience. The analysis of their perspectives aims to shed light on actionable solutions and innovative practices to enhance HOTS-oriented assessments.

The findings of this study will offer valuable insights for educators, presenting practical techniques to improve critical thinking skills through targeted reading comprehension tasks. These insights are intended to align classroom practices with national curriculum goals, thereby not only addressing the immediate needs of students and educators but also equipping students with the higher-order cognitive skills necessary to succeed in future academic and professional settings. In other reason, this study aims to identify the challenges and strategies faced by teachers in designing questions on reading comprehension texts. The experience gained from this process benefits the reader, especially in understanding how teachers face and overcome obstacles in developing HOTS-based questions to support learning effectiveness. Through this research, educators will be better positioned to navigate the complexities of HOTS integration and foster an enriched learning environment that emphasizes the power of critical and analytical thought.

Method

This study employed a qualitative approach with a case study design to explore teachers' experiences and challenges in creating Higher Order Thinking Skills (HOTS) questions for reading comprehension tests. The research focused on English teachers from junior high schools, selected based on their teaching experience and familiarity with HOTS. Participants included 8 teachers, one of whom were certified civil servants with over 10 years of experience, while the remaining eight were honorarium teachers with at least three years of teaching experience and 4 students who became participants after getting feedback from what the teacher taught in English language learning. The selection criteria ensured a diverse representation of perspectives, and participants were recruited through professional networks and referrals to ensure their relevance to the study. See the table of background information on the participant or interviewers

Table 1. Background information on the interviewers Teachers and Students

Name	School	Teaching Experiences	Name	School	Grade
SY	MTS	5	**BA**	SMPN	7
DI	SMPN	20	**MI**	SMPN	7
LA	MTS	6	**JK**	MTS	7
MA	SMP	5	**AR**	SMP	7
SF	SMP	6			
KH	MTS	7			
KR	MTS	3			
FZ	MTS	2			

Note : MTS (Madrasah Tsanawiyah), SMP (Sekolah Menengah Pertama)

The primary research instrument were a questionnaire and interview distributed via Google Forms, designed to align with the study's objectives of examining teachers' strategies, challenges, and outcomes related to HOTS questions. To validate the questionnaire, a pilot test was conducted with three experienced educators to assess clarity, relevance, and comprehensiveness. Feedback from the pilot test was used to refine the questions, ensuring they effectively captured the intended data. Sample questions included: "What challenges do you face when drafting HOTS questions?" and "Describe your process for creating HOTS questions to enhance students' critical thinking."* These questions were directly tied to the research goals of understanding teachers' practices and obstacles.

Data collection involved sending the Google Form link to participants and reviewing their responses. The data analysis process followed a systematic

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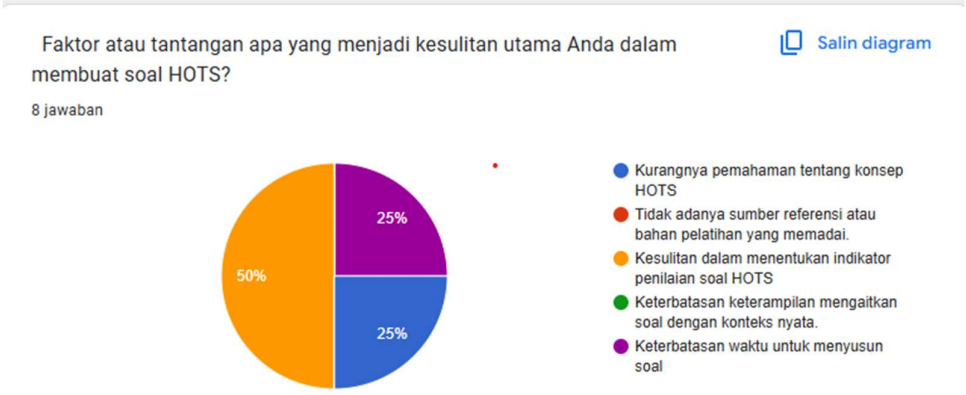
approach: (1) identifying key themes from the responses, (2) categorizing the data into predefined and emergent themes (e.g., challenges, strategies, student outcomes), and (3) conducting a content analysis to interpret the findings. To ensure reliability and validity, the researcher employed member checking by sharing preliminary findings with participants for verification and used peer debriefing to cross-validate interpretations with colleagues. Additionally, triangulation was achieved by comparing questionnaire responses with insights from informal follow-up discussions with a subset of participants.

Ethical considerations were prioritized throughout the study. Participants provided informed consent before completing the questionnaire, and their anonymity was preserved by omitting identifying details in the data presentation. The study adhered to ethical guidelines for educational research, ensuring no harm or discomfort to participants. Despite its contributions, the study had limitations. The small sample size and reliance on self-reported data may limit the generalizability of the findings. Future research could expand the participant pool and incorporate classroom observations or interviews to strengthen the data. Nonetheless, the methodological rigor, including validation, triangulation, and ethical protocols, supports the credibility of the findings and their relevance to improving HOTS-based assessments in education.

Results

Researchers discovered numerous things using questionnaire data obtained via Google Forms. The study's findings include three significant points 1. Teacher's challenges with drafting HOTS questions. 2. Teacher's strategies for using HOTS questions in reading comprehension question final test**. 3.** Teachers' technique or process for creating HOTS questions to increase students' HOTS skills**.** 4. How students respond to the teacher's queries. 5. The outcomes obtained by students using the HOTS method.



Teacher's challenges with drafting HOTS questions

Based on the questionnaire results, there are several main factors that pose challenges for teachers in designing HOTS (Higher Order Thinking Skills) based questions. One of the biggest challenges is determining assessment indicators, with 50% of respondents revealing that they experience barriers in setting appropriate criteria to measure students' higher order thinking skills. This shows the need for a deeper comprehension and support in developing effective assessment strategies to enhance the quality of learning. In addition, 25% of respondents revealed that a lack of understanding of the *HOTS* concept was an obstacle in the question preparation process.

This shows that there is still a need to increase understanding and training for teachers to be able to design more effective questions. Lastly, 25% of respondents mentioned that time constraints in developing questions were a significant challenge. The busyness in managing various other tasks in the learning process makes it hard for teachers to devote the required time to design *HOTS* -based questions optimally. These results indicate the need for better solutions in terms of training, more systematic guidelines, and more efficient time management for educators.

The results of the questionnaire above show that teachers tend to have several obstacles in determining indicators of HOTS-based questions in reading comprehension texts and time constraints are another factor faced by teachers. This is supported by several teacher statements in an interview. DI stated that

"*Teachers confront several challenges, including, the composing language or words that students can grasp. Sometimes, students are still confused in answering questions*. *Currently, students' knowledge in answering questions or solving problems in other ways, is still at the LOTS level. Thus, teachers must be able to increase students' critical thinking at the HOTS level".*

In other words, the participants had challenges when participants will gave tests to students. The teacher challenges some factors. Firstly, the students are still confused when they are answering the question. This is because students are still unfamiliar with working on HOTS model issues, and their knowledge is still at the C1 - C3 level (specifically remembering (C1), understanding (C2), and applying (C4). Secondly, the students can answer the questions final test. However, they do not comprehend the question. Sometimes students answer questions without understanding whether they are correct or incorrect since they can still not understand and answer the questions appropriately. In other voices questioner on Google form, Participant SF stated

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Teachers' understanding of HOTS is still limited. Not all teachers have a deep understanding of the characteristics and how to create HOTS questions. This is a challenge for teachers. Analyzing resources and crafting HOTS questions might be difficult. Turning ordinary questions into HOTS questions that test higher-order thinking skills demands talent and creativity.

This means that the participants are still limited to creating HOTS questions. The participants were still confused about their test when they gave the test to the students. Also, teachers have limited time to prepare HOTS questions. It might be challenging for teachers to find the time to create excellent HOTS questions when they have a full teaching schedule. Event, Lack of references and examples of HOTS questions. There are not many references or examples of HOTS questions that can be used as a guide for teachers. Certainly, these are some factors that challenge teachers. In other voices, participant 3 also stated when asking HOTS questions, teachers face many challenges that require them to think critically to overcome the problems. Then, all participant stated that *Teachers face challenges in determining the appropriate cognitive level for students. In addition, teachers also have difficulty in identifying the cognitive level of Basic Competencies (KD) and determining question indicators that are aligned with the expected thinking skills.* Therefore, with a deeper understanding of cognitive taxonomy and assessment strategies, teachers can design more effective questions to measure learning outcomes.

Teacher's Strategies for Using HOTS Questions in Reading Comprehension Question Final Test

Teachers employ a variety of tactics to increase students' critical thinking skills, including creating hot questions. Certainly, every teacher uses a unique technique, depending on the student's ability and the teacher's grasp of HOTS questions. Each teacher must be aware of the student's cognitive capacities, including high, medium, and low thinking skills. It was recounted by DI, who stated that.

I have several strategies to make it easier to improve students' hots. Firstly, Students are trained to understand the reading first. Secondly, students are invited to discuss through the reading. Students are trained to answer questions repeatedly, starting from easy-level questions to difficult levels (depending on their abilities). Finally, students are invited to discuss the results of the answers they have answered.

In other words, Participant DI technique is particularly effective in increasing student's critical thinking skills. Certainly, students must be taught to understand the reading of the questions and to think critically when answering questions. The teacher then asks hots-based questions. So that students can practice what they

have learned during the discussion with the teacher. Likewise, the teacher invites discussions about the questions that the teacher has tested or examined. In other words, the teacher wants students to answer the questions together so the students know which responses are wrong and correct. Therefore, students can introspect themselves. Based on participant SY stated that several strategies use question HOTS in Reading comprehension through questions on the final test

I provide grids of questions initially, followed by practice questions to prepare students
for the final exam, including HOTS questions. Students' work is a tactic for improving student's Higher Order Thinking Skills (HOTS). It means that the students answer questions.

Participant LY mentioned that teachers can enhance students' hots skills by encouraging analysis and innovation. *The teacher asks students to examine the components of lemon tea after asking questions about the process text. "Please review the three components and debate them with your group. After students comprehend the components of lemon tea, the teacher can assign extra tasks such as "Now that you've learned about procedure text lemon tea, create some procedure text with your friends." The topic must be unique among other groups. You have to write the text for your book.*

In other words, what participants do is a tactic for improving students' HOTS. Improving student's critical thinking skills is difficult; teachers must understand HOTS and LOTS correctly. The teacher begins by teaching students about reading comprehension through reading texts and reading text questions. The teacher then frequently provides training so that students can practice their critical thinking skills, as well as questions based on their abilities, making it easier for students to enhance their hot skills. The preceding remark describes the teacher's technique for enhancing students' critical thinking skills by asking questions regarding the procedure texts. Participant MA stated that Teachers help students grasp HOTS questions by assigning text questions or exercises that develop their thinking skills. Participant MA reported challenges with HOTS model questions during basic teacher assessments, even at the LOTS level. However, teachers may train students and create opportunities for them to think critically.

Give students time to try to understand the text reading, then the teacher prompts students to answer questions quickly and spontaneously without writing. If the student's answer is incorrect, give good direction (without offending students), and when students answer questions correctly or incorrectly, give a little praise so that students keep on trying to learn.
Other participants also stated that "*providing training on questions or other tasks*

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either in the form of questions with answers to analyze or tasks about evaluating or creating something is a form of good effort that the teacher must make, then the teacher evaluates each lesson by inviting students to discuss the right answers to the questions they have done before".

In other words, teachers create strategies for making HOTS model questions to improve students' critical thinking and HOTS questions help students in critical thinking.

Teachers' Technique or Process for Creating HOTS Questions to Increase Students' HOTS Skills

Participants use a variety of approaches or techniques while creating HOTS questions to help students enhance their critical thinking skills. This is as described by Participant SY:

This technique or process is carried out to make it easier for teachers when they want to know students' abilities, the teacher can find what topics will be discussed, and the teacher can determine the form of questions (multiple choice or essay). Next, choose the skill, the next step is to compile the questions. Make sure the compiled questions make students think, don't let students only remember.

Participant DI said that
The teacher analyzes the lessons that have been taught, then the teacher compiles the questions according to the learning then the teacher gives a text test trainer (questions can be essay or multiple choice).
Participant LY supports the above statement,
Stating that each teacher has their method for determining test questions for students. Teachers can create their own questions or ask students to practice from a textbook or guidebook (student worksheet). Teachers might pose questions that require students to observe or create. For example, after reading a narrative text about the ant and the dove, "Please give a conclusion about what the text and what moral message is contained in the text".

In other words, the participant wants to increase students' HOTS through problem training by asking students to observe or identify a reading text or make something so that students can think critically and creatively.
Teachers create HOTS questions to facilitate the assessment of students' critical thinking skills. Based on Participant 4's statement, there are numerous strategies for making inquiries.

Analyze the Basic Competencies to develop HOTS questions. We do numerous things

while creating HOTS questions. First, create a question grid. Second, select an interesting and context-appropriate stimulus. Third, create question items using the Question Grid. Fourth, create a scoring guideline (rubric) or answer key.

It can be concluded all participants have various techniques or processes to create HOTS questions however share the same goal: teachers aim to increase students' high critical thinking skills. Thinking skills are not inherent but can be developed via supervised practice. As a result, teachers must have the appropriate approaches for developing HOTS questions on the reading comprehension question final text based on student's ability and teachers' comprehension of HOTS questions.

How Students' Responses to the Teacher's Queries

Every student's response is unique (different responses), as proven by the teacher's statement when creating a questionnaire using Google Forms. Some students are challenged and interested in the availability of HOTS questions. Participant BA reported it as follows:

Students feel more challenged and engaged when working on HOTS problems since they need memorization or basic understanding and critical, analytical, and creative thinking abilities. This makes learning more exciting and boosts student motivation. HOTS model questions enable students not just to retain and comprehend the subject, but also to analyze, evaluate, and generate new knowledge. This helps students develop higher-order thinking abilities, which are necessary for academic and professional success.

Contrast participant MI, who stated that student response is normal.

It happens because students are still accustomed to the presence of many queries LOTS level and HOTS questions are still considered unfamiliar.... Participant JK stated *Sometimes students remark that HOTS model questions are too hard. However, it will help students become accustomed to critical thinking...* Contrast for participant AR stated that

Students' reactions to HOTS questions, the majority of academic students usually feel challenged to solve HOTS questions, although some of them feel anxious/worried that they cannot solve them. Some students have low critical thinking and still find it difficult to answer questions when they feel difficult, there are two possibilities to answer the question as it is or not answer the question at all.

The answer above indicated that students' reactions are not the same. Some of them feel anxious or worried when they answer the HOTS question. However, some students gave positive responses, namely that students felt challenged in

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answering HOTS model questions. It depends on their critical thinking. Certainly, every student has a problem or challenge that they must overcome. The higher critical thinking will be easier when they answer the HOTS question in the reading test. This occurs because students will be extra careful in responding to the HOTS questions. Certainly, students must be able to read and answer the questions correctly. So that students can accurately answer the questions. The lower critical thinking will be difficult when they answer the question. However, teachers can enhance students' HOTS skills if teachers often train students or give students practice problems (giving several assignments both group and individual to solve a problem).

The Outcomes Obtained by Students Using the HOTS Method

The researcher could observe students' reactions through the participant's statement as a teacher where the participant gave a positive statement, that HOTS questions could improve students' HOTS skills in reading comprehension at the end of the semester. Seeing the good reactions from some students to the final exam questions using the HOTS model, some students felt challenged and pleased. Students can not only answer LOTS model questions, but they can also answer HOTS model questions, and their reading comprehension of questions is improving because HOTS questions require students to think critically, not just in understanding questions, but also in analyzing and evaluating them, and the students are more creative in answering questions. Of course, the answer to the student's query will not be found in the text's content; this is known as strengthening students' critical thinking skills through HOTS model questions in reading comprehension of text questions. This is consistent with the information gathered by researchers through a Google form. Participant BA stated that:

Students are more creative and capable of fulfilling their potential.
Based on my experience, students generally perform better while responding to LOTS model questions than when answering HOTS questions. This is owing to the two questions' varying levels of difficulty.
Participant MI stated that:
Because the answers to the LOTS model questions are typically included in the reading text, students find it easier to answer the questions, even though the HOTS model questions are more difficult and only a small percentage of students can follow the model....

To strengthen the data, the researcher discovered that Participant JK had made a statement that is highly pertinent to this investigation. The participant JK said that

Students who have excellent recall or understanding abilities can simply complete the offered questions and receive high grades, however, students with weak comprehension abilities struggle when given questions appropriate for their level and receive low grades. Students who are ambitious and want to constantly improve their talents may be discouraged by a large number of questions that are only about remembering and understanding. Students who believe they are too knowledgeable to answer LOTS of questions can look for more challenging learning that is relevant to their interests...

Participant AR stated that
Improve critical thinking skills - HOTS questions encourage students to not only remember and understand but also analyze, evaluate, and create. - With better critical thinking skills, students can provide more comprehensive and quality answers. HOTS questions are usually related to complex problems that require students to apply their knowledge and skills creatively. - Good problem-solving skills can help students to get higher grades.

Based on the above statement, the researcher concluded that there were some favorable (positive) evaluation results on teachers' efforts and tactics for increasing students' HOTS skills in understanding reading texts in the final exam. Students feel intrigued and challenged when they receive HOTS model questions, as they are accustomed to working on problems using the LOTS problem model. Certainly, students' accomplishments in working on HOTS model questions receive positive feedback from teachers, and students can develop their critical thinking skills when solving problems.

Discussion

From the results of the above research, teachers can enhance students' critical thinking skills by creating HOTS questions, even though each student has different abilities at high, moderate, and high levels. As we know, high-level thinking questions can encourage students to think deeply about the subject matter, certainly, the assessment of high-level thinking can provide stimulation as a learning assessment to develop students' high-level thinking. The findings of the above researchers are reinforced by the findings of Widana, (2017) stated that higher order thinking skills can be developed through the learning process in the classroom.

Therefore, to help students hone their critical thinking skills, it is important for the learning process to provide opportunities for them to discover concepts through knowledge-based activities. These activities will encourage students to improve their creativity and critical thinking skills.

One of the efforts that can be made by teachers is that teachers can create strategies for making HOTS questions and carry out the process or steps in making

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HOTS questions. Making questions depends on the material that has been learned and the ability of students so that teachers can be easier in making or preparing questions. This can be proven by the participant's statement that HOTS questions can improve students' critical thinking and HOTS questions are usually related to complex problems that require students to apply their knowledge and skills creatively.

Therefore, students can provide more comprehensive and quality answers. The teacher can use strategies and approaches to create questions on their own or ask students to work on questions from the package book (worksheet). This is how the person described it. Students are taught to understand the reading first. Then students are invited to debate the text. Students are also educated to answer questions repeatedly, beginning with basic questions and progressing to challenging levels (based on student ability).

Finally, students are asked to explain the results of their answers. The above assertion is consistent with the prior researcher's statement. Tasrif, (2023) discovered that by using HOTS, kids can observe, question, reason, try, communicate, and analyze material. In addition, HOTS abilities and concepts must be developed early on. This approach is extremely consistent with the recommendations of the 2013 Curriculum and the Merdeka Curriculum.

It is worth noting that the teacher's strategy by involving students to solve reading problems and understand the text gradably, from easy to more difficult reading problems allows them to process the text deeply. This in-depth cognitive processing may result in better retention of information and recall for the subsequent activities (Craik & Tulving, 1975; Pollack, 2022). The research by Pollack (2022) demonstrates that students given treatment using deep processing performed better recall of words than the students given shallow processing of words. This further confirm the efficacy of deep processing in reading comprehension which can be applied in other learning contexts.

Furthermore, the strategy of reading problem solving from easy to more difficult tasks might enable students to deal with the task easier at the beginning to proceed to more complex tasks. The ability to solve the problems makes them to have better confidence or self-efficacy in solving more challenging tasks. Extensive studies have been carried out to reveal the correlation between self-efficacy and reading comprehension (FitriE, Sofyan, Jayanti, 2019; Shehzad, Hamzah, Alkurtehe, & Rawian, 2019; Schöber, Schütte, Köller, McElvaney, & Gebauer, 2018;).

The study by FitriE, Sofyan, Jayanti (2019), for example, indicates that there is a significant correlation between reading self-efficacy and reading comprehension. This further implies that the higher the students' self-efficacy is, the better they might comprehend the reading texts. In addition, the teacher also invited the students to discuss their reading texts. Discussion is crucial in language learning

including in reading comprehension processes. One of the primary reasons is that discussion permits scaffolding to happen in the process of understanding reading texts.

Scaffolding originally derived from Vygotsky's sociocultural theory (SCT) views that learning is ingrained interactive practices in meaningful ways such as through language clues and social modes in particular through pair or group works. Several studies have proven empirically the efficacy of scaffolding for reading comprehension (Karimi & Jalivand, 2014; Tabrizi, Behnam & Saeidi ,2019; Muzammil & Saifullah,2020). Earlier experimental study by Karimi & Jalivand (2014), for instance, reveals that the experimental group with teacher and peer scaffolding outperforms the experimental group in the posttest. This finding suggest that scaffolding is contributive to comprehension processes.

These findings shed a light on the critical role of strategies for the teachers in enhancing students reading comprehension through higher order thinking skills and at the same time offer valuable insights for language teacher to promote students' higher order thinking skills through strategies relevant to the characteristics of classroom.

Conclusion

Based on the findings of the data analysis, HOTS is a high-level thinking skill that necessitates critical, creative, and analytical thinking about information and data while addressing problems. Researchers conducted interviews with many teachers who asked about HOTS-related topics. Researchers discovered that teachers can assess students. HOTS using practice tests or final exams. One of the efforts that can be made by teachers is that teachers can create strategies for making HOTS questions and carry out the process or steps in making HOTS questions.

The strategy can be done by the teacher after knowing the student's ability level. Each teacher's strategy is not the same depending on the teacher's understanding and students' abilities. However, there are numerous techniques for improving students' HOTS. First, children are taught to understand the material. Students are allowed to discuss the text. Students are also taught to answer questions repeatedly, beginning with easy questions and progressing to more difficult or demanding levels (based on their ability). Finally, students are invited to talk about the results of their answers. As a result, the teacher's technique and process for developing HOTS questions can help students enhance their *higher-order thinking skills* (HOTS).

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