# ENGLISH TEACHERS' KNOWLEDGE ON HIGHER ORDER THINKING SKILLS (HOTS)

# Wisma Yunita (Corresponding Author)

English Education Study Program, Faculty of Teacher Training and Education, University of Bengkulu, Bengkulu, Indonesia Email: wismayunita@unib.ac.id

#### Svahrial

English Education Study Program, Faculty of Teacher Training and Education, Universitas Bengkulu, Bengkulu, Indonesia Email: eric.syahrial@gmail.com

# Gita Mutiara Hati

English Education Study Program, Faculty of Teacher Training and Education, Universitas Bengkulu, Bengkulu, Indonesia Email: gitamutiara@unib.ac.id

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Abstract: The Higher Order Thinking Skills (HOTS) has been embodied in the 2013 curriculum by the government of Indonesia, in which aims every individual in Indonesia has good skills at critical thinking, creative thinking, collaboration, and communication to face life in the 21st century. Therefore, the English teachers in Indonesia should have good knowledge of HOTS to teach their students. This study aims to investigate the knowledge of the Junior High School (JHS) and Senior High School English (SHS) English teachers on HOTS in Bengkulu province. Data obtained by providing a questionnaire containing questions with four answer choices (strongly agree, agree, disagree, and strongly disagree) in the form of Google form to 69 JHS English teachers and 74 SHS English teachers in Bengkulu province. The data were analyzed using simple statistics by calculating the average value of all answers from all question items and categorized them into Very Good (3.26-4.0), Good (2.6-3.25), Less Good (1.76-2.5), and Very Poor (1-1.75). The results of this study revealed that the level of knowledge of English teachers in Bengkulu Province on HOTS is in a good category (3.24) for JHS teachers and very good (3.31) for SHS teachers. These findings give contributions related to the knowledge of JHS and SHS English teachers in Bengkulu Province about HOTS. **Keywords:** Higher order thinking skills; 2013 Curriculum; English teachers

# INTRODUCTION

individual in facing the global era in the form of critical and creative thinking, collaboration, and good communication skills. As stated by Brookhart (2010), HOTS is the ability to think critically, logically, reflectively, meta-cognitively, and creatively. Further, HOTS leads the individual to have the ability to apply knowledge, skills, and values in reasoning, reflection, problem-solving, decision making, innovating, and creating new things (Kusuma, Rosidin, Abdurrahman, Suyatna, 2017; Sulaiman, Muniyan, Madhvan, Hasan, & Rahim, 2017; Abdullah, Mokhtar, Halim, Ali, Tahir, & Kohar, 2017; Hugerat & Kortam, 2014).

The skill of HOTS has been invaded in all In the 21st century, HOTS is needed by every aspects of life, including in the education field. For example, the Ministry of Education and Culture of the Republic of Indonesia has been embodied HOTS in the 2013 Curriculum. It is because education is the main place to introduce and practice the HOTS knowledge, especially teachers. The teachers are regarded as the main actors to transfer the knowledge of HOTS in all lessons and it is the easiest to see the changes in the students' thinking skills in their daily life (Rajendran, 1999; as cited in Singh & Marappan, 2020). They are the main factors that influence the success or failure in applying HOTS in the classroom (Seman, Yusoff, & Embong, 2017). The teachers teach this skill to their students at schools, including at JHS and SHS. Therefore, the

knowledge of HOTS to achieve the goal of the 2013 curriculum itself.

HOTS is closely related to language learning. Eran (2016) proclaims that Language is an instrument of thought, in which thought is expressed by using a language. Students will think critically before conveying their ideas and argument when solving the problems, promoting creativity, understanding the discourse, and explaining things well so that HOTS is required in the learning process. The English teachers integrate HOTS with the teaching methods that will be applied in the English classroom.

Several studies on the analysis of teachers' knowledge of HOTS has been conducted by some scholars in different disciplines. For example, mathematics (Retnawati, Djidu, Kartianom, Risga & Anazifa, 2018; Abdullah et al., 2017; Madu, 2017), physics (Kusuma et al., 2017), history (Hashim, Osman, Arifin, Abdullah, & Noh, 2015), or integrated fields of science such as at the basic education level (Yusoff & Seman, 2018). Those studies revealed that the teachers and pre-service teachers of those subjects at schools have different knowledge and perception about HOTS in the teaching and learning process. Also, the implementation of HOTS in the teaching and learning process was still far from HOTS principles.

In addition, several studies on HOTS were also found in the English language teaching field. For example, how to innovate with HOTS in the Reading class at the university level in Malaysia (Yoke, Hasan, Jangga, Rohani. & Kamal, 2015), this study found that the ESL students have a positive perception toward the teaching of HOTS in the reading classroom. A survey on level questions in the field of teaching English at the university level was conducted by Ashadi and Lubis (2017) and Yuliati and Lestari (2018). The results of the survey revealed that the lower thinking level is dominantly used in questions. Thamrin and Agustin (2019) investigated the SHS English teachers' perceptions, the practice, and the constraints in endorsing HOTS in teaching a foreign language. from three generations (Baby Boomers, generation X, and generation Y) and Mursyid and Kurniawati (2019). The results show that the teachers from all generations were aware of HOTS and applied it differently when teaching English. Thamrin and Agustin (2019) discussed the phenomenon of conceptual variations on reading comprehension through the HOTS strategy in Universitas Kuningan and described

teachers in all subjects should have good how the HOTS strategy improved the students' skills in comprehending the academic reading text. Various concepts on reading comprehension are seen from the C1-C6 phase of HOTS strategy and critical reading.

> Moreover, studies on HOTS analysis in English textbooks were also investigated by Indonesian scholars (e.g. Sukmawijaya, Yunita, & Sofyan, 2020; Febriani, Yunita, & Damayanti, 2020). The results show that there was a textbook that has integrated well and unwell of HOTS proportion in the language skills and language knowledge tasks.

> As aforementioned, in the field of English teaching field, most studies focused on HOTS in reading, level of questions, teachers' perception, practice and constraints, and HOTS proportion in language tasks in textbooks. There is no study as far as those authors investigating the English teachers' knowledge on HOTS in Indonesia. Therefore, it is rational for this study to investigate the state JHS and SHS English teachers' knowledge of HOTS in Bengkulu province. To address the issue the research question of this study is; "How is the state JHS and SHS English teachers' knowledge of HOTS in the learning process in Bengkulu Province?"

# **METHOD**

The method deployed in this study was descriptive-quantitative. Descriptive research is research that describes the data and the characteristics of the subject of the research (Margono, 2010), while quantitative research collects and analyzes the data in terms of the numerical procedure (Gay, Mills, & Airasian, 2012). Thus, this study used the descriptivequantitative method to describe and explain the findings of the study in terms of English teachers' knowledge on HOTS in Bengkulu Province.

The respondents of this study were 69 JHS English teachers and 74 SHS English teachers in Bengkulu province. The data of this study were collected by providing the questionnaire that was made using Google form to all of the respondents. The questionnaire used in this study was adapted from a questionnaire by Retnawati et al. (2018) and Andini (2017). It was modified to be fifty questions about HOTS and ten questions of protocol test that contain HOTS criteria. The item questionnaire consisted of five components, namely 1) teacher's knowledge on HOTS, 2) implementing HOTS in the learning process, 3) learning strategies in implementing HOTS, 4) measuring and assessing HOTS, and 5) the

benefits of HOTS for students in the learning process. The measurements used in this study are by using a Likert scale with four options (i.e., strongly agree, agree, disagree, and strongly disagree).

The data collected from the questionnaire were analyzed quantitatively using simple descriptive statistics by calculating the average value of all answers from all question items. Finally, the data were organized to go through data interpretation where the results were

interpreted to become findings by categorizing the answers into Very Good (3.26-4.0), Good (2.6-3.25), Less Good (1.76-2.5), and Very Poor (1-1.75) following Arikunto's (2003) theory.

#### RESULTS AND DISCUSSION

The aim of this study is to investigate the knowledge of the JHS and SHS English teachers on HOTS in Bengkulu province. The results of the analysis are presented in the table 1;

Table 1. Results of the questionnaire

No	No Components of HOTS		Teachers				
		JHS		JHS SHS			
		Mean	Category	Mean	Category		
1	Teachers' knowledge on HOTS	3.38	Very Good	3.43	Very Good		
2	Implementing HOTS in learning process	3.31	Very Good	3.31	Very Good		
3	Learning strategies in implementing HOTS	3.18	Good	3.29	Very Good		
4	Measuring and assessing HOTS	3.08	Good	3.24	Good		
5	Benefits of HOTS for students in learning process	3.25	Good	3.30	Very Good		
	Average	3.24	Good	3.31	Very Good		

As shown in table 1, it shows that the JHS and SHS English teachers in Bengkulu Province understand HOTS in the English learning process. The knowledge of the JHS English teachers on HOTS was a good category with a mean score of 3.24. It is viewed from five components of HOTS in which two of them were a very good category (e.g. teachers' knowledge on HOTS and implementing HOTS in the learning process), other components were a good category (e.g. learning strategies in implementing HOTS, measuring and assessing HOTS, and benefits of HOTS for students in the learning process). Also,

the SHS English teachers' knowledge of HOTS was a very good category with a mean score of 3.32. Among the five components, there was one only component that had a good category, namely measuring and assessing HOTS, while other components were a very good category.

# Teachers' knowledge on HOTS

The teachers' knowledge on HOTS explains about the teachers' understanding on HOTS. It consisted of twelve questions. The results are presented in table 2.

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Table 2. Teacher' knowledge on HOTS

No	Statements	JHS			SHS	
		Mean	Category	Mean	Category	
1	I know the terms of HOTS or higher order thinking skills.	3.44	Very Good	3.50	Very Good	
2	I understand that HOTS is a thinking skill that is not just remembering and identifying	3.55	Very Good	3.58	Very Good	
3	I understand that HOTS is a thinking skill that is in the cognitive domain of Bloom's taxonomy	3.24	Good	3.37	Very Good	
4	I understand the six cognitive levels in Boom Taxonomy	3.20	Good	3.16	Good	
5	In HOTS, knowledge of dimension developed in factual knowledge encourages the growth of meta-cognitive abilities	3.20	Good	3.18	Good	
6	In HOTS, the knowledge of dimension developed in conceptual knowledge encourages the growth of metacognitive abilities.	3.14	Good	3.31	Very Good	
7	In HOTS, the knowledge of dimension developed in procedural knowledge encourages the growth of metacognitive abilities.	3.24	Good	3.31	Very Good	
8	HOTS fits the needs of 21th Century Skills.	3.60	Very Good	3.55	Very Good	
9	HOTS increases the thinking level of students to be higher.	3.53	Very Good	3.54	Very Good	
10	In the learning process that uses HOTS includes the level of analysis.	3.52	Very Good	3.63	Very Good	
11	In the learning process that uses HOTS includes the level of evaluating	3.37	Very Good	3.50	Very Good	
12	In the learning process that uses HOTS includes the level of creating	3.50	Very Good	3.54	Very Good	
	Average	3.38	Very Good	3.43	Very Good	

As presented in Table 2, the JHS and SHS English teachers have the same knowledge on HOTS that is very good. It indicates that they have been familiar with HOTS (e.g. terms and definition, the way of thinking skills, knowledge of dimension, level, the needs of HOTS for the 21st century).

However, when it is viewed from each item of the question, there is a different response between the JHS and SHS English teachers. The SHS English teachers have a better understanding (a very good category) of HOTS' knowledge than JHS in terms of items number 3, 6, and 7.

Implementing HOTS in learning process

This component is intended to see the JHS and SHS English teachers' knowledge in implementing HOTS in the learning process. The results of the analysis are shown in table 3.

Table 3. Implementing HOTS in learning process

No	Statements		JHS	SHS		
		Mean	Category	Mean	Category	
13	I know a model of teaching based on HOTS that needs to	3.21	Good	3.29	Very Good	
	be implemented in the process of learning English.					
14	Project-Based Learning model encourages the thinking	3.39	Very Good	3.37	Very Good	
	level of students to be higher.					
15	Problem-Based Learning model encourages the thinking	3.40	Very Good	3.40	Very Good	
	level of students to be higher.					
16	Discovery learning model encourages the thinking level	3.40	Very Good	3.32	Very Good	
	of students to be higher.					
17	Inquiry-Based Learning model encourages the thinking	3.37	Very Good	3.25	Good	
	level of students to be higher.					
18	In the learning process, HOTS can be facilitated by	3.28	Very Good	3.36	Very Good	
	practicing question and answer between students and					
	teachers					
19	In the learning process, HOTS can be facilitated by	3.21	Good	3.31	Very Good	
	practicing question and answer between students and					
	students					
20	In the learning process, HOTS can be facilitated by	3.36	Very Good	3.36	Very Good	
	practicing group discussions					
21	In the learning process, HOTS can be facilitated by using	3.20	Good	3.25	Very Good	
	games					
22	In HOTS, students can be honed by providing questions	3.34	Very Good	3.24	Good	
	that contain higher-order thinking processes					
	Average	3.31	Very Good	3.31	Very Good	

As shown in Table 3, the JHS and SHS English teachers' knowledge on implementing HOTS in the learning process is in a very category. It indicates that they know that HOTS can be integrated with learning models (e.g. projectbased learning, problem-based learning, discovery learning, and inquiry-based learning), practicing question and answer, group discussion, and games. The learning model applied in the learning process will influence the students' interest to follow the learning in the classroom especially when applying HOTS. The learning model should have presented the stages of learning to provide a memorable, creative, and innovative learning experience (Wahana, 2019) so that HOTS can be applied effectively.

The teachers who can implement HOTS in the learning process give a positive impact on students. The student can develop their thinking quality and improve their knowledge for solving the problem and making the right decision (Yee, Lai, Tee, & Mohammad, 2016). Also, it assists students' productive and receptive skills in English language learning. The students will be accustomed to thinking critically in everyday life whether in writing something, responding to a problem, listening to an event or opinion, and understanding the content in texts, articles, books, and so on. It confirms Rosyida's (2019) statement, language learning should link to the

real situation of daily life. The students can get and feel the benefits of HOTS for their life.

# Learning strategy in implementing HOTS

In the learning process, HOTS is implemented with some learning strategies. It aims at improving students' thinking skills in all learning activities. In this component, the questions about learning strategy in implementing HOTS consisted of seven questions. The results of the analysis are presented in table 4.

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Table 4. Learning strategy in implementing HOTS

No	Statements		JHS		SHS	
		Mean	Category	Mean	Category	
23	Learning containing HOTS can be done using the	3.30	Very Good	3.39	Very Good	
	Project-Based Learning model.					
24	Learning containing HOTS can be done using the	3.08	Good	3.28	Very Good	
	Discovery-Based Learning model.					
25	Learning containing HOTS can be done using the	3.24	Good	3.24	Good	
	Inquiry-Based Learning model.					
26	Learning containing HOTS can be done using the	3.31	Very Good	3.41	Very Good	
	Problem-Based Learning model.					
27	I know a learning model that can facilitate HOTS	3.05	Good	3.18	Good	
28	In the learning process using HOTS, teachers can	3.28	Very Good	3.39	Very Good	
	provide problems to be solved by students from low to					
	high levels					
29	In the learning process using HOTS, the teacher can	3.01	Good	3.20	Good	
	assign students to read literature about HOTS					
	Average	3.18	Good	3.29	Very Good	

As presented in Table 4, there is a difference in knowledge between the JHS and SHS English teachers on HOTS in which the JHS English teachers' knowledge is a good category while the SHS English teachers' knowledge is a very good category. It implies that the SHS English teachers' knowledge of learning strategy in implementing HOTS is more superior than JHS English teachers.

Based on each item of the question, the JHS and SHS English teachers have a different understanding in terms of item 24 (e.g. learning containing HOTS can be done using the discovery-based learning model) in which the response of the JHS English teachers is in a good category while the SHS English teachers are in a very good category. Meanwhile, other items of questions are responded to by both JHS and SHS English teachers in a good category (e.g. item 25, 27, and 29) and a very good category (e.g. item 23, 26, and 28). For the responses in a good category, both JHS and SHS still lack the understanding that HOTS can be done using the inquiry-based Learning model, facilitate students to improve their HOTS ability, and assign students to read literature.

The findings above imply that English teachers understand the learning strategies in the implementing HOTS in learning process. As emphasized by Jamaluddin, Kadir, Abdullah, & Alias (2020) and Lopez, Ibanes, & Racines (2017), implementing the right and appropriate learning strategies for students can make the learning process becomes easier and can maximize students' potential for HOTS. Thus, the learning models such as project-based learning, problem-based learning, discovery learning, and

inquiry-based learning, practicing question and answer, group discussion, and games are the appropriate learning strategies in implementing HOTS for JHS and SHS students. Those ask students to think higher in solving the problems and find the right solution.

# Measuring and assessing HOTS

This component informs the JHS and SHS English teachers' knowledge of measuring and assessing HOTS in the learning process. This component of HOTS consisted of seven questions. The results of the analysis are presented in Table 5.

Table 5. Measuring and assessing HOTS

No	Statements		High School	Senior	High School
		Mean	Category	Mean	Category
30	I know how to design an assessment instrument that contains HOTS	2.94	Good	3.06	Good
31	Students' high-order thinking skills (HOTS) can be measured using written assessments (for example, reading test questions in the form of multiple choice)	3.08	Good	3.14	Good
32	Students' higher order thinking skills (HOTS) can be measured using oral assessments (e.g. presentations)	3.18	Good	3.33	Very Good
33	Students' higher order thinking skills (HOTS) can be measured using observational assessments in the learning process	3.18	Good	3.35	Very Good
34	Students' higher order thinking skills (HOTS) can be measured using an assessment in the form of an essay	3.18	Good	3.37	Very Good
35	Students' higher order thinking skills (HOTS) can be measured using an assessment in the form of open-ended problems.	3.15	Good	3.35	Very Good
36	In making questions containing HOTS, I know what operational verbs (OV) can do	2.85	Good	3.12	Good
	Average	3.08	Good	3.24	Good

As presented in Table 5, the results show that both JHS and SHS English teachers have the same knowledge on measuring and assessing HOTS in the learning process that is a good category. However, there is a different response in each item of the question. The JHS English teachers' response in all questions is a good category, while the SHS English teachers' response consists of two categories, namely a good category (questions number 30, 31, and 36) and a very good category (questions numbers 32, 33, 34 and 35).

The results of this analysis indicate that both JHS and SHS English teachers have known how to measure and do assessment HOTS in the learning process in Bengkulu. Abosalem (2016) argued that teachers should create assessment techniques that help them in their job and reveal students' skills. Therefore, the varieties of assessment methods should be applied by teachers such as observations, short answer multiple-choice questions, and questions (Doganay & Bal. 2010). Widana (2017) suggested three characteristics of assessment HOTS for teachers, they are; 1) measure the ability of a high level; it includes the ability to solve problems (problem-solving), critical (critical thinking), creative thinking skills thinking (creative thinking), argued ability (reasoning), and make decisions (decisionmaking). 2) Contextual issue; it loads stimulus in the form of the case (based on case) such as global issue. 3) Not familiar for students; it aims at building students to think to be more creative. With those suggestions, the teachers should follow the assessment principles in assessing and measuring HOTS in the learning process.

The benefits of HOTS for students in learning process

HOTS gives students some benefits in the learning process. The benefits of HOTS are described in fourteen questions. The results of the analysis are presented in Table 6. It shows that SHS English teachers have better knowledge than JHS English teachers on the benefits of HOST for their students in the learning process.

Table 6. The benefits of HOTS for students in learning process

	Table 6. The benefits of HOTS for students in learning process								
No	Statements	Junior High School		Senior	High School				
		Mean	Category	Mean	Category				
37	In learning using HOTS, students ask questions more	3.21	Good	3.21	Good				
	often								
38	In learning using HOTS, students become more	3.24	Good	3.32	Very Good				
	courageous in expressing their opinions.								
39	In learning using HOTS, students become more willing	3.15	Good	2.82	Good				
	to make observations.								
40	In learning using HOTS, students want to do	3.23	Good	3.37	Very Good				
	experiments.								
41	In learning using HOTS, it will foster the students'	3.30	Very Good	3.47	Very Good				
40	creativity.	2.20	G 1	2.42	W G 1				
42	In learning using HOTS, students take advantage of	3.20	Good	3.43	Very Good				
42	existing information technology in schools.	2.10	C 1	2.21	V C 1				
43	In learning using HOTS, students apply procedural	3.18	Good	3.31	Very Good				
44	knowledge to specific areas of study to solve problems. In learning using HOTS, students process what they	2.97	Good	3.18	Good				
44	learn at school independently	2.91	Good	3.10	Good				
45	In learning using HOTS, reasoning from what he learns	3.01	Good	3.16	Good				
43	in school independently.	5.01	Good	3.10	Good				
46	In learning using HOTS, presenting what they learn in	3.01	Good	3.10	Good				
10	school independently.	3.01	3004	3.10	3004				
47	In learning using HOTS, students are encouraged to do	3.20	Good	2.67	Good				
• •	higher physical activity	0.20	333 <b>2</b>	,	0000				
48	In learning using HOTS, students are encouraged to do	3.07	Good	3.08	Good				
	higher mental activity								
49	In learning using HOTS, it encourages the creativity of	3.30	Very Good	3.43	Very Good				
	students to solve problems and ultimately find solutions.		•		•				
50	In learning using HOTS, it opens opportunities for	3.31	Very Good	3.44	Very Good				
	students to use a variety of techniques, media and		-		-				
	equipment.								
	Average	3.25	Good	3.30	Very Good				

the JHS English teachers only responded to three items of questions with a very good category. Item 41 (HOTS will foster students' creativity), item 49 (HOTS encourage students' creativity to solve problems and ultimately find solutions), and item 50 (HOTS opens opportunities for students to use a variety of techniques, media, and equipment). Meanwhile, the SHS English teachers responded to seven items of questions with a very good category, namely item 38, 40, 41, 42, 43, 49, and 50.

According to the results of the research presented in Table 1, it indicates that both JHS and SHS English teachers have good ability in implementing HOTS principles in the English teaching and learning process even though the JHS English teachers' knowledge on HOTS is in a good category. It also assumes that they have had good cognitive skills because HOTS and cognitive are related to each other. The cognitive skill in Taxonomy Bloom's theory includes

Table 6 shows that among fourteen questions, means that the level of HOTS is higher than memorizing facts or retelling something that is heard (Yuliati & Lestari, 2018). Thus, HOTS is an important thing in educational implementation in Indonesia to improve the students' ability in thinking skills. In this case, teachers and students are the main targets for implementing HOTS.

English teachers who have good and very good knowledge of HOTS affect the English language teaching and learning process, the students, and the goals of the English language learning at JHS and SHS. As affirmed by Dinni (2018) and Saputra (2016), HOTS is the ability to solve problems, think creatively, think critically, the ability to argue, and the ability to make decisions. Students in every learning activity must have the skill of HOTS today (Kusuma et al., 2017; Sulaiman et al., 2017). It can be applied when making questions in language skills and language knowledge tasks for the students in the English teaching and learning process. The knowledge, comprehension, application, analysis, teachers develop those questions containing synthesis, and evaluation (Brookhart, 2010). It HOTS principles, and the students will answer the questions by using their critical thinking skills. Therefore, teachers and students are related to the importance of HOTS in English language learning (Retnawati et al., 2018). The students support the teachers' professional development, so do the students (Avargil, Herscovitz, & Dori, 2012).

In addition, Table 1 shows that the SHS English teachers tend to have better knowledge than JHS English teachers do. However, their knowledge is in a good and a very good category. It seems that there are some factors influenced such as class environment (Budsankom, Sawangboon, Damrongpanit, &

Chuensirimongkol 2005), academic background (Nisa, Nadiroh, & Siswono, 2018), teachers' motivation (teachers' want to know.

The difference of finding on the JHS and SHS English teachers' knowledge on HOTS is not only shown in the questionnaire, but also the results of the protocol test. This test was tested consisting of ten questions. Among those questions, only seven questions contain HOTS (e.g., question no of 3, 4, 5, 7, 8, 9, and 10) while others contain lower-order Thinking Skills (LOTS) (e.g., question no of 1, 2, and 6). The results are presented in table 7.

Table 7. The results of protocol test

No	Level of Questions	Junior Hi	gh School		Senior High Schools		
		Correct	Wrong	N	Correct	Wrong	N
3	Cognitive 3: (HOTS) – C5 (Evaluate) – OV Conclude	30	39	69	32	42	74
4	Cognitive 3: (HOTS) – C5 (Evaluate) – OV Choose	53	16	69	63	11	74
5	Cognitive 3: (HOTS) – C5 (Evaluate) – OV Decide	48	21	69	59	15	74
7	Cognitive 3: (HOTS) – C5 (Evaluate) – OV Decide	64	5	69	69	5	74
8	Cognitive 3: (HOTS) – C5 (Evaluate) – OV Choose	43	26	69	53	21	74
9	Cognitive 3:(HOTS) – C4 (Analyze) – OV Check	65	4	69	70	4	74
10	Cognitive 3: (HOTS) – C5 (Evaluate) – OV Decide	23	46	69	27	47	74
Tota	ıl	326	157	483	373	145	518
Perc	entage	67.50%	32.50%	100%	72%	28%	100%

Table 7 shows that the percentage of correct answers from SHS English teachers is higher than JHS English teachers. It indicates that the SHS English teachers are better than JHS English teachers in answering the HOTS questions. The results assume that higher education levels demand the English teachers to have more ability to HOTS in the English teaching and learning process.

Comparing to the previous studies, the findings of this study were in line with Sukmawijaya et al's. (2020) study, the authors of the English textbook for tenth-grade who have a background in English language teaching entitled Bahasa Inggris published by the Ministry of Education and Culture of the Republic of Indonesia to have good knowledge of HOTS. It is viewed from the proportion of HOTS that has been integrated well by the authors in making language skills and language components tasks in the textbook.

However, the different findings were also found in several studies conducted by several scholars about the English teachers' and non-English teachers' knowledge of HOTS. Pratiwi, Dewi, & Paramartha (2019) reported that the knowledge of the English teachers in Bali about HOTS is still low. It was proved by the summative tests made by them is still far from the HOTS principle. Likewise, in the English textbook context, Febriani et al. (2020) reported that the composition of HOTS in the language skills and language knowledge tasks in the textbook were not fulfilled yet the criteria of HOTS. It assumes that the authors of the textbook have not had a good ability in HOTS. The low knowledge about HOTS is also found in non-English teachers. Retnawati et al's. (2018) study revealed that the mathematic teachers' knowledge of HOTS was low.

Although the findings of this study revealed that the English teachers' knowledge of HOTS

was good and very good, this study also has weaknesses. It is in terms of the numbers of the participants of the study that has not received a larger number of samples in Bengkulu province, especially JHS and SHS English teachers who live in remote areas. Therefore, it is suggested for the further researcher to conduct a study with more numbers of respondents, so that more comprehensive data will be reached.

#### **CONCLUSION**

This paper has done analyzing the JHS and SHS English teachers' knowledge on HOTS in Bengkulu province. Based on the results of the analysis, it can be concluded that the JHS and SHS English teachers in Bengkulu have different knowledge of HOTS. The knowledge of JHS English teachers is a good category, while SHS English teachers' knowledge is very good on HOTS. Their knowledge on HOTS was viewed in five components, namely teacher's knowledge on HOTS (Terms, definition, and level of HOTS), implementing HOTS in the learning process, learning strategy in implementing assessing, and measuring HOTS, and the benefits of HOTS in the learning process. Also, the results of the protocol test on HOTS show that the SHS English teachers have more correct answers than JHS English teachers.

The findings of this study inform the knowledge map of the Junior High School and Senior High School English teachers in Bengkulu Province on high-level thinking skills (HOTS), which can be useful for determining government policies related to teaching the English language, especially in Bengkulu Province.

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