An Analysis of Students' Achievement in Reading Comprehension through Higher Order Thinking Skills (HOTS)

by Dumaris E. Silalahi, Herman, Partohap Saut Rs Ade Sahbana Damanik , Lydia Purba

Submission date: 10-May-2022 06:03AM (UTC-0800) Submission ID: 1982826742 File name: 1249-11217-1-PB.pdf (738.47K) Word count: 8403 Character count: 45137

An Analysis of Students' Achievement in Reading Comprehension through Higher Order Thinking Skills (HOTS)

Dumaris E. Silalahi¹, Herman², Partohap Saut Raja Sihombing³, Ade Sahbana Damanik⁴, Lydia Purba⁵

15 Universitas HKBP Nommensen, Medan, Indonesia; dumaris.silalahi@uhn.ac.id

² Ingiversitas HKBP Nommensen, Medan, Indonesia; herman@uhn.ac.id

³ 20 versitas HKBP Nommensen Pematangsiantar, Indonesia; partohap.sihombing@uhn.ac.id

Universitas HKBP Nommensen, Medan, Indonesia; sahbanaade@gmail.com

⁵ Universitas HKBP Nommensen Pematangsiantar, Indonesia; ly diapurba@uhn.ac.id

ARTICLE INFO

Keywords:

ABSTRACT

HOTS; Reading comprehension; Descriptive text; Achievement

Article history:

Received 2021-12-03 Revised 2022-02-36 Accepted 2022-05-11

This research aimed to find out the students' achievement by using HOTS as learning strategy in reading comprehension at grade VIII of SMP Yayasan Perguruan Keluaraga Pematangsiantar. This study used qualitative method with eighteen reading comprehension questions and questionnaires. The participants of this research were academic year 2021. Data analysis used simple descriptive statistics namely the type of sic interpretative studies in which the data are obtained used a classroom observation in mobile and interview between students. Thus, share questionnaires to the student in the form of a Google form to 65 respondents. The result showed the level of thinking skills of students in answering HOTS phase encounter significant enhancement. Students who have high thinking abilities are better at answering HOTS questions compared to students in the medium and low categories. The research findings highlight at C1-C6 phase of students reading comprehension that gave positive response to each statement of criteria in HOTS questions. The findings of students HOTS on students' reading comprehension divided remembering text with strongly agree scale 58,4%, understanding supporting sentence with strongly agree 50,2%, applying decoding process with agree scale 49,2%, analyzing main ideas with strongly agree 50,2%, evaluating inference with agree scale 51,7%, and creating new ideas with agree scale 53,3%. This study, recommendations for future research are required to stimulate the cognition ability in sensory domains of HOTS so that the students are skilled in answering and create oriented questions for junior high school students when they level up in phase of HOTS.

This is an open access article under the <u>CC BY-NC-SA</u> license.



Corresponding Author:

Herman

Universitas HKBP Nommensen, Medan, Indonesia; herman@uhn.ac.id

http://journal.staihubbulwathan.id/index.php/alishlah

1. INTRODUCTION

In the 21st century, English is representation of languages around the world in which to gain relationship between other countries, as universe language English used by the people to create interactive communication and enlightenment around the world. (R. Silalahi, Silalahi, Dumaris, & Herman, 2021) stated English is universal language where the people from other countries requires English for communication. English is the first international language taught formally to student starting from elementary school until university level, even though as foreign language it is very important to be learned for educators and student in Indonesia caused many things should be considered through English language as learning media such as books, journal, and other information (Van Thao, Herman, & Purba, 2020). It is useful for every people to learn English so that they can compete at international level to communicate with other people from many countries.

Teaching English universally in education need enlighten to grow up the quality of languages in all field of education. English is present as important skills in Indonesian education, Indonesian requires English language as the way to enhance the ability to communicate with native and non-native speaker around the world and international. English objectively used to gain knowledge and personal insight that very helpful to develop language skills, build greater interaction, comprehending, and respect with other peoples, Thus English language can construct education perspectives and provide opportunity for educators who teaches English as international language. Consequently, educators should <u>12</u> e ability to improve and develop English skills. (Fikri, Padmadewi, & Suarnajaya, 2014) stated in learning English there are four skills that need to be mastered namely listening, speaking, reading, and writing (Manullang, Sianipar, Herman, & Sinurat, 2022). This skill gives an instruction and direction for student in learning English and become the focus of learning objective of English as foreign language, the ability of students in learning English are equally important to improve thinking abilities especially in education perspective and gain comprehending the significances of knowledge in large issues.

English language learners must be master the skill of reading. (Cahyaningati, 2018) stated reading is a complex way which involves the ability to think and deep understanding the meaning of the text (Lumbantobing, Pardede, & Herman, 2020). For this reason, reading become very significant skills in education field whereby through reading significantly the student can enrich new information and achieve knowledge from other references. In reading to comprehend an essence of ideas that emerge from the text need biological endowment that very useful to give an influence into cognition ability. Additionally, the importance ideas of students to grasp the meaning of books, article, journal relates to the reading literacy give a large issue into Reading literacy achievement is a broad term that refers to how well students are able to understand what they are reading in class (Araujo, 2014). for this reason the students who have abilities in general sense able to understanding what they had read before in reading process.

Reading comprehension is the ability of brain capacity to grasp the meaning in large grue to comprehend and explore the social phenomena in reading text. Ahmadi (2013:12) stated reading comprehension is a process of understanding a text, exploring the meaning, purpose, and message conveyed in a text (Sirait, Hutauruk, & Herman, 2020). It is important for readers to be able to analyze and evaluate what they have read critically in order to have good reading comprehension. In order to fully comprehend what we read, we must use a combination of text and readers. As a result, critical thinking while reading is part for improving student comprehension skills. Reading is not same with other skills such as speaking, writing, listening, but reading requires critical thinking skills to take new ideas and information in text. Obviously that student need deep meaning to get the valid information. Reading skills establish a basis for identifying and clarifying a meaning that must be developed in reading activity to lead new knowledge and skill. Hence, to teach this skill educators need to develop a good strategy to enhance their thinking skill in reading process by using HOTS would be beneficial for both student and educators as well.

In order to make reading text become very interesting, the researchers require the right issues reading comprehension achievement. (Ghanizadeh, Al-Hoorie, & Jahedizadeh, 2020) stated HOTS is

thinking process to seek the fact or truth concerning the ability to think critically, logically, creatively, and metacognitive. For this reason, HOTS should be realized in various texts in teaching and learning process such as descriptive text, recount text, narrative text and others. In addition (D. E. Silalahi, Sihombing, Herman, & Purba, 2021) stated HOTS aid the learners more easily and directed to learn English objectively in learning process. The ability of student to think critically need a set of instruction and enlighten to guide them to be skillful in learning process, thus the great challenge to possess by teacher in the classroom is the ability of student to comprehend the lesson with various way to infuse HOTS phase reading comprehension skills.

In junior high school the students are introduced to be able think critically and creatively. Brookhart (2010:5-8) stated that HOTS are defined into three categories namely transfer, critical thinking, and problem solving it means that (HOTS) in terms of transfer the students that able to apply knowledge directly in the classroom, in term of think critically HOTS uses to take decision and breakthrough, lastly in term of problem solving the student create resolution for the problem.

HOTS in the classroom can help students develop read critically (Shafeei, Hassan, Ismail, & Aziz, 2018). One of the obstacles when implemented HOTS the students were difficult to comprehend the phase of HOTS in which the ability to analyzed, create, and evaluate were still low as the activities were not achieved because the student only remembered the material in reading text. Thus, when the students asked about question they failed to answer and the student lack confidence to create new opinion or arguments in the classroom as a result the student were not active in teaching and learning process, In addition, they were not able in reading text overall as the ability of student to read was not accurate. First, almost of students unknowledgeable with reading processes such as decoding process that required identification word skills. as a result, when they read books, journal, or articles, they failed to comprehend certain information completely or taken essence. Second, the students tend confused when reading text because they did not understand main ideas. thus, they unfamiliar with how to separate the ideas into cognition ability of mind. Third, the student lacked knowledge and experience to taken the essence of text. The researchers assume that all problems were occured from the student unrealized about how they catch sense of text as a result the material given were not achieved.

Considered the fact above, there is an urgent to used a strategy in teaching and learning process that can help them to solve problems, HOTS strategy is one of many strategies can be used in read text simultaneously and can support to analyze the text. (Indriyana & Kuswandono, 2019) states there were various procedures to enhance reading comprehension used HOTS namely divergent question, informing learning aim, group collaboration, giving feedback, giving motivation. The focus of reading achievement not only understanding the context of text but also able to achieve new insight in teaching and learning process, may some skills that are required to extract the context of the skills that express it. These skills required by student in order to achieve HOTS on student reading comprehension.

The benefit HOTS are fully acceptable to several ways. Firstly, students applied critical thinking in reading questions, this approach ensures to develop students' capability in catching the sense of text. Second, HOTS provide learners with the opportunity to reading accurately. Third, students build an opinion in reading comprehension by interpreting and analyzing the meaning in text question an essential subject that offer a platform of activity to enhance HOTS belongs to knowledge and information. In relation to this, there are some previous studies that have been conducted by some researchers who took same popic about reading comprehension analysis based on comprehension questions such as in the English examination papers need further revisions in order to achieve the standard of HOTS that have become part of the new curriculum education analysis. Based on the findings, some practical suggestions have also been developed to further enhance the use of HOTS in Erglish teaching and learning practices in Malaysia.

Based on the phenomenon above, the researchers want to find out students' reading comprehension achievement through HOTS in descriptive text caused by their lack motivation, confused build ideas, and lack vocabulary. Concern with phenomenon, the researchers are interested

conducting research, An Analysis of Students Achievement in Reading Comprehension through HOTS in Descriptive Text at Grade Eight Yayasan Perguruan Keluarga Pematangsiantar.

2. METHODS

2.1. Design of the Research

This study used qualitative research method that seek a najor issue to comprehend phenomenon. (Herman, Shara, Silalahi, Sherly, & Julyanthry, 2022) states qualitative research is an interpretative approach which attempts to gain insight into the specific meanings and experience in a certain social phenomenon through subjective experiences of participants this research described the result of data analysis in the form of text. It is a basic interpretative study to comprehend a phenomenon, a stage, or a particular point of view from the participants involved. (Ary, Jacobs, Sorensen, & Razavieh, 2010) defined that the participant ideas were share form of text or words on students' reading comprehension descriptive text, in present the data analysis student were give different various questions in reading comprehension achievement. The content analysis is flexible research design to give the various goals and objectives. (Sihombing, Silalahi, Saragih, & Herman, 2021) states content analysis is the basic control of analysis to be systematic. For this reason, the analysis concern into criteria of HOTS that explore the content based on references and inferences to the meaning, context and objectives text, messages, and other form of communication. The data analysis percentage figures were used in research data. The design of research used qualitative non-parametric that intends to distribution free test on students' achievements by using HOTS, the final resolution of this research was organize on students' achievement in reading descriptive text based on HOTS criteria. Tzhe percentage of number is crucial part to compute the indicator of valid and generalizable of qualitative research design. The researchers used of numeric figures in qualitative research that present various ways in seek the issues of HOTS phase.

The function HOTS were fully describing the abilities of students into level cognition ability in which to generalize questions in major issues of HOTS. The distinctive creative were to seek the truth of evidence in class and enable to answer reading comprehension correctly. In this research the researchers used qualitative design caused this analysis related with HOTS in which to find out students' achievement by using HOTS in reading descriptive text. (Ary et al., 2010) stated the meaning of people and group place on social phenomena and human programs qualitative research design are employed and the researchers picked the kind of descriptive text that have been previously learnt in google classroom thus sharing the content of descriptive text by considering each criteria as follow:

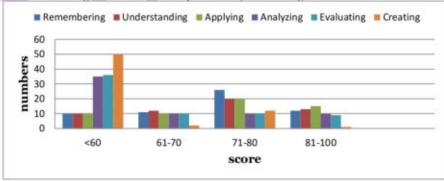


Figure 1. HOTS in Reading Comprehension

2.2. Instrument of the Research

The research instrument is a tool to collect and compare the analysis of research data in literacy point of view. (Herman, Purba 21 hao, & Purba, 2020) states the instrument is one of the essential point in gathering data. To examine the data in this study, the researchers will use several method and instruments namely observation, interviewing, questionnaire, and document analysis. This research was conducted at SMP Yayasan Perguruan Keluarga, the researchers choose one class comprises VIII A and VIII B they are 65 students as a subject. they were chosen as the subjects because the criteria were analyzed relates HOTS students' achievement in reading comprehension descriptive text, it means that the subject were chosen used purposive sampling. Purposive subject gives appropriate information as a data source.

To get the data the researchers used several method and instruments namely observation, questionnaires and interview as follow:

- Observation was conducted at SMP Yayasan Perguruan Keluarga in academic 2021 year. is a
 techniques that can used for qualitative research (kohtari)....the researchers used observation to
 record all the activities in class to provide real and valid data, in addition, it will used to avoid bias
 in collecting the data so that the data cannot be manipulated, observation of this research are used
 to get natural data that occur in learning process.
- 2. interview is used to know more about student HOTS in comprehending text as well as contribute answer from questionnaires, interview provides an opportunity for the researchers to know the ability of students in the way of think of respondents and ask investigations questions to explore ideas (....refre) in this study, call interview used WhatsApp was conducted 45 of 65 students as the interviewee, the online interview was conducted to seen digital capability in response each questions that emerge from other platform in digital literacy

In addition, the researchers chose a semi structured interview to collect student responses. Semistructure interview is a step to collect the research data in which she or he has prepared an interview instructions before doing interview in terms of the precise wording of questions (reference) in this research, students answered eighteen open-ended questions related to their capability in HOTS phase using digital literacy for English learning and to find out what problems occur in implementing HOTS at school and interview were also conducted to collect the data to seek whether the theory and reality are synchronous or not in the phase of HOTS in teaching and learning process.

2.3. Questionnaires

There are two types of questionnaires, which are frame by (Arikunto, 2010), namely open question and close question, the first types contain the questions, which are not refer on pre determine set of responses. It gives the respondent opportunity to answer questions freely then the second types contained close questions in which the respondents answer by choosing possible answer

The researchers used questionnaires to obtain the data in order to gather the main data about students' reading comprehension achievemen by using HOTS. In collecting the data, the researchers used questionnaire. Kabir (2016:182) stated the use of questionnaire consisting of series of questions and other prompts for the purpose to collect information from respondents the set of question will be given to the students, thus it collected from the respondents.

Variable	Phase	23 dicators	Items number
Students HOTS	Students level	1.knowledge	1.
	cognition ability	2.comprehension	2
		3.application	3
		4.analysis	4
		5.syhntesis	5
		6.evaluate	6
Students reading comprehension	Identification, description	Place, things, person	7,8,9,10,11,12
Achievement	Generic structure, language feature	Focus on specific participants	13,14,15,17,18

Table 1. Indicator of questionnaires on the use HOTS in reading comprehension

2.4. Validity in questionnaires

The researchers applied study protocol included pilot test that used to check validity in questionnaires. Pilot study is performed reflecting all the procedures of the main study and validates the feasibility of the study by assessing the inclusion and exclusion criteria of the participants for this reason the criteria of HOTS used to answered each question that emerge from descriptive text.

2.5. Reliability in questionnaires

Reliability in questionnaires is a step of assessing competency of the measurement procedure used to collect the data. In order to consider the result is valid, the procedure must first be valid. The researchers check reliability in questionnaires used the researchers employed questionnaires through Likert- types items. The respondents were chosen the best option indicate their response to selected the various statements based on the scale, which is provided.in contrast the respondents on picked the statement based on the scale which is distributed. The numbers indicated whether 'Strongly agree' (SA)','Agree (A)', Neutral (N)','Disagree (D)','and Strongly Disagree (SD)'The instrument comprises Likert-Scale questionnaires that used to measure people attitude and to any statements or topic with the specific criteria of '.it is used in each questions that consist of several question to measure students' achievement in reading comprehension, then it is distributed through Google form that divided of some criteria were remember, understand, applied namely LOTS analyzed, evaluate and create namely HOTS of the reading comprehension text, each of aspect comprises of three questions. Therefore, this instrument comprises of eighteen questionnaires, the questionnaires included HOTS and LOTS statements in descriptive text.

2.6. Data Collection and Analysis

In collecting the data, the researchers used questionnaire by considering the original Likert-scale that refer a set of statement (items) offer for a reality phenomenon and participant are asked to show the level agreement (van Thao, Herman, Napitupulu, Hien, & Pardede, 2021). Questionnaire refers to a device for securing answer to questions by using a form which respondents fill in detailed and it refers to a number of questions printed or typed in definite order that deals with Google form provide templates for designing form suited to specific themes with listing the questions the create form questionnaires. There were two kinds in collecting the data namely multiple choice and questionnaires. In collecting the data the researchers used test as the beginning step of research procedure was preparing the questionnaires A questionnaires is one of the technique in collecting the data that comprises of questions that used to get information from participant, this research used online questionnaires using Google form, online questionnaires was used to enhance the ability of student in digital literacy skills, the questionnaires contained closed-ended questions. Close-ended questionnaires

Al-Ishlah: Jurnal Pendidikan, Vol. 14, 2 (June 2022): 1853-1868

1859 of 1868

was used to gather response from participant that mostly represent their view. In this part, the participants were asked to fill their personal information belongs to gender, name, class and WhatsApp number, next the student were asked about their behavior used digital literacy as learning module, the students were required to respond eighteen multiple choice questions which consist of HOTS criteria, the purpose used HOTS was as an application used in learning module, then in third part was reading comprehension text that used to enhance the cognition of student in comprehend HOTS phase. This part used five points Likert scale (5 for strongly agree, 4 for agree, 3 for neutral 2 for disagree 1 for strongly disagree)

The Likert scale questionnaires comprised eighteen items from their sub-indicators consisting of benefit HOTS including student's reading comprehension in descriptive text using formula by

(Sutrisno,	2004:	272)	M-	$\sum Fx/$	N
------------	-------	------	----	------------	---

- M : mean
- $\sum Fx$: number score
- N : number individual

To interpret the result of questionnaires requires qualitative interval as follow:

- 1. Determining maximal value/maximal value x 100
- 2. Determining the percentage minimal score /maximal score x100
- 3. Determining range and formula, percentage maximal score, percentage minimal score
- 4. Determining 5 interval
- 5. Determining interval wide

Table 2. Percentage responde	nts (Abidin & Purbawanto, 2018)
------------------------------	---------------------------------

	13
Criteria	Parcentage
Strongly agree	84% < score ≤ 100 %
Agree	68 % < score ≤ 84 %
Neutral	$52 \% < \text{score} \le 68 \%$
Disagree	$36 \% < \text{score} \le 52 \%$
Strongly disagree	% < score ≤ 36 %

3. FINDINGS AND DISCUSSION

Based on the result of the research analysis shown in the table below, it can be seen that some HOTS phase is to find out the students' reading comprehension achievement "descriptive text" as learning material at grade VIII YPK Pematangsiantar. almost of students chosen strongly agree' (SA) and 'agree' (A), in each statement of every criteria in the questionnaires, in contrast it refers that HOTS as learning strategy is creative, criticize and problem solving to the course content in descriptive text and can enhance their skills in teaching and learning process. The findings in line to (Ghanizadeh et al., 2020) that inform that HOTS is very useful to enrich the capability in understanding literacy skills in reading comprehension. In the current study, the use of HOTS is effective to contribute student to enhance their confidence in comprehending the main ideas and vocabulary. The students' achievement at Grade VIII Yayasan Perguruan Keluarga enable them to give statement or opinion concern the criteria of HOTS in reading comprehension as follow:

1860 of 1868

		Scale				
No	Questions	SD	D	N	Α	SA
1.	What is the topic of the	02				No.
	text in descriptive text	0	0	1	26	38
	able to recall fact in teaching and learning process	(0,0%)	(0,0%)	(1,5%)	(40,%)	(58,5%)
2.	What is Singapore					
	describe a place, things	0	1	1	26	37
	that give an experience in life	(0,0%)	(1,5%)	(1,5%)	(40,%)	(56,9%)
3.	Is Singapore beautiful					
	island to invite by the	0	1	1	24	39 (60%
	student in doing observation and seek the knowledge	(0,0%)	(1,5%)	(1,5%)	(36,9%)	

Table 3. C-1 Remembering phase by (Agustina, et al. 2019)

HOTS can be a set of instruction in learning strategy in which able to increase students' achievement in reading comprehension descriptive text. The various levels are design to enhance student reading comprehension comprised recall fact and list the main ideas in text, Table 3 refer that in Strongly agree (SA)' scale, the first statement comprised of 38 (58,5%) students, the second statement comprises of 37 (56,9%) and third statement 39 (60%) students. So, It can be found the average is 58,4%. On the agree scale (A)', the first statement comprises 26 (40%) student, the second statements comprised 26 (40%) students, the third statement comprised 24 (36,9%) students. So, it can be found the average is 38,9%. On the neutral scale (N) the first statements comprised 1 (1,5%) students, the second statements comprised 1 (1,5%) and third statements comprised 1 (1,5%) students. So, it can be found the average is 1,5%. On the disagree scale (D) the second statement comprised 1 (1,5%) students and the third statement comprised 1 (1,5%). It can be found the average is 1,5%. As final conclusion, the analysis was found in remembering aspect present the ability of student to comprehend the meaning and ideas in reading descriptive was achieved

Table 4. C-2 Understanding phase by (Agustina, et al. 2019)

No	Statements	Scale SD	D	N	А	SA
4.	How big is the population					
576	· · · ·	0	0	1	28	36
	society and places	(0,0%)	(0,0%)	(1,5%)	(43,1%)	(55,4%)
5.	What is Singapore most					
	famous for international	1	1	0	29	34
	business in the world	(1,5%)	(1,5%)	(0,0%)	(44,6%)	(52,3%)
6.	Is the business district an					
	old place that used by the	1	0	3	33	28
	peoples to communicate each other	(1,5%)	(0,0%)	(4,6%)	(50,8%)	(43,1%)

HOTS are appropriate to enhance student capability such as to comprehend paragraph and supporting ideas in reading comprehension. The EFL teacher involve student in thinking process to analyze any ideas that emerge in descriptive text. Table 4 refer that 'Strongly Agree' (SA)'scale, the fourth statement comprised of 36 (55,4%) students, the fifth statement comprised of 34 (52,3%) students, the sixth statement comprised of 28 (43,1%) students. So, it can be found that the average percentage is 50,2%. On the Agree Scale (A)' the fourth statement comprised 28 (43,1%) students, the fifth statement comprised of 29 (44,6%) students, the sixth statement comprised 33 (50,8%). So, it can be found the average percentage is 46,1%. On the 'Neutral (N) scale, the fourth statement overwhelm 1 (1,5%) students and sixth statement comprised 3 (4,6%) students, it can be found the average percentage is 2,0%. On the Disagree (D) scale, the fifth statement comprised 1 (1,5%) students and On the Strongly Disagree (SD) the fifth and sixth statement comprised 1 (1,5%). It can be found the average percentage is 1,5%. As final conclusion, the analysis was found in understanding aspect present the ability of student to classify supporting sentence given a deep understanding about how to arrange and distinguish identification and description in descriptive text was achieved.

	Scale					
No	Statements	SD	D	N	Α	SA
7.	According the text where is					
	the Singapore place that	1	0	2	32	30
	describe an old place that used by the society to take a photos or videos	(1,5%)	(0,0%)	(3,1%)	(49,2%)	(46,2%)
8.	The text state that to identify					
	a business place need to	0	0	4 (6,2%)	30	31
	share the location as public services	(0,0%)	(0,0%)		(46,2%)	(47,7%)
9.	Singapore is it location		15		11.63.1	
	within asia it's a central	0	1	1 (1,5%)	34	29
	point that making easy to travel nearby	(0,0%)	(1,5%)		(52,3%)	(44,6%)

HOTS is thinking process in which focused to make student confidence make presentation in front of classroom and make an action simultaneously. Table 5 referred on Strongly Agree (SA) scale, the seventh statement comprised 30 (46,2%) students, the eight statements comprised 31 (47,7%) students, and the ninth statement comprised 29 (44,6%) students. So, it can be found the average percentage 46,1%. On the 'Agree' (A) scale, the seventh statement comprised 32 (49,2%) students, the eighth statement comprised 30 (46,2%) students, the ninth statement comprised 34 (52,3%) students. It can be found the average percentage is 49,2 %. On the Neutral (N) scale, the seventh statement comprised 2 (3,1%) students, the eighth statement comprised 4 (6,2%) students and the ninth statement 1 (1,5%) student. It can be found the average percentage is 3,6%. On the Disagree (D) scale, the ninth statement only 1 (1,5%) student. On the Strongly Disagree (SD) the seventh statement only 1 (1,5%) student. As final conclusion, the analysis was found in applying aspect present the ability of students to made presentation encounter significant achievement in which to apply knowledge simultaneously was achieved.

1862 of 1868

No	Statements	Scale SD	D	N	A	SA
10.	How business district is					
	very modern, with lots of	0	0	1	35	29 (44,6)
	tall new office buildings.	(0,0%)	(0,0%)	(1,5%)	(53,8%)	
	Singapore also has some nice older sections					
11.	How the government					
	Singapore are very	0	1	0	33	31
	beautiful and date from	(0,0%)	(1,5%)	(0,0%)	(50,8%)	(47,7%)
	the colonial days.					
12.	Why Singapore is famous					
	for its shops and	1	0	1	25	38 (58,5)
	restaurants.	(1,5%)	(0,0%)	(1,5%)	(38,5%)	

Table 6. C-4 Analyzing phase by (Agustina, et al. 2019)

HOTS is the ability of human mind to analyze something that enable student to think critically concern the sense of text and teacher as a guidance for student allow to analyze new knowledge in generating new meaning in text. Table 6 refers that Strongly Agree (SA) scale, the tenth statements comprised 29 (44,6%) students, the eleventh statements comprised 31 (47,7%) students and the twelfth statements comprised 38 (58,5%) students. It can be found the average percentage is 50,2%. On the Agree (A) scale, the tenth statement comprised 35 (53,8%) students, the eleventh statement comprised 33 (50,8%) students and the twelfth statements comprised 25 (38,5%) students. It can be found the average percentage is 47,7%. On the Neutral (N) scale, the tenth and twelfth statements each one 1 (1,5%) students, on the Disagree (DA) 'Scale, the eleventh statement only 1 (1,5%) student. on the Strongly Disagree (SA)' the twelfth statement only 1 (1,5%) student. As final conclusion, the analysis was found in analyzing aspect present the ability of student to compare the main ideas was creative, criticize, and able to separate the information in reading comprehension into metacognitive skills was achieved.

Table 7. C-5	Evaluating	phase by	(Agustina,	et al. 2019)
--------------	------------	----------	------------	--------------

Scale						
No	Statements	SD	D	N	Α	SA
13.	Is Singapore's restaurants sell Chinese, Indian,	0	1	1	35	28
	Malay and European food, and the prices are quite reasonable.	(0,0%)	(1,5%)	(1,5%)	(53,8%)	(43,1%)
14.	Is Singapore an island city of about 4 million people.	1	0	0	32	32
	It's a beautiful city with lots of parks and open	(1,5%)	(0,0%)	(0,0%)	(49,2%)	(49,2%)
	spaces.					

	nal Pendidikan, Vol. 14, 2 (June 2022): 18					1863 of
15.	why the peoples live in					
	high-rise flats in different	0 (0.0%	0	1	34	30
	parts of the island.		(0,0%)	(1.5%)	(52,3%)	(46,2%)

This aspect refers that on Strongly Agree (SA) scale, the thirteenth statements comprised 28 (43,1%) students, the fourteenth statements comprised 32 (49,2%) students, and the fifteenth statements comprised 30 (46,2%) students. So it can be found the average percentage 46,1%. On the Agree (A) scale, the thirteenth statements comprised 35 (53,8%) students, the fourteenth statements comprised 32 (49,2%) students and the fifteenth statements comprised 34 (52,3%) students. So it can be found the average percentage is 51,7%. On the Neutral' (N)' scale, the thirteenth and fifteenth statements 1 (1,5%) each one. On the Disagree (D)' scale only 1 (1,5%) student, on the Strongly Disagree (SD)' the fourteenth statement 1 (1,5%) students. As final conclusion, the analysis was found in evaluating aspect present the ability of student to made inference and breakdown the components in reading comprehension descriptive text was achieved

Table 8. C-6 Creating phase by (Agustina, et al. 2019)

No	Statements	Scale SD	D	N	Α	SA
16.	How the business district					
	is very modern, with lots	0	1	3	34	27
	of tall new office buildings	(0,0%)	(1,5%)	(4,6%)	(52,3%)	(41,5%)
17.	How Singapore is known					
	as a city in a garden and	1	0	4	34	26 (40%)
	nearly 50 percent of the island is green space	(1,5%)	(0,0%)	(6,2%)	(52,3%)	
18.	How Singapore renowned					
10,		0	1	4	36	24
	strict local laws	(0,0%)	(1,5%)	(6,2%)	(55,4%)	(36,9%)

This aspect refers that in the Strong Agree (SA)' scale, the sixteenth statements comprised 27 (41,5%) students, the seventeenth statements comprised 26 (40%) students and the eighteenth statements comprised 24 (36,9%) students. So, it can be found the average percentage is 39,4%. On the Agree (A)'scale the sixteenth statement comprised 34 (52,3%) students, the seventeenth statement comprises 34 (52,3%) students and the eighteenth 36 (55,4%) students. So, it can be found the average percentage is 53.3%. on the Neutral (N)'scale, the sixteenth statement comprised 3 (4,6%) students, the seventeenth statements comprised 4 (6,2%) students and the eighteenth statement comprised 3 (4,6%) students. So, it can be found the average percentage is 5,6%. On the Disagree (D) scale, the sixteenth and eighteenth 1 (1,5%) each one and on the Strongly disagree (SD)'scale 1 (1,5%). As final conclusion, the analysis was found in creating aspect present the ability of student to make a new product and creativity in mind that given a breakthrough to identify and describe the essence of text accurately and comprehensively

3.1. Discussions

This research revealed that HOTS phase on students' reading comprehension achievement descriptive text divided into six aspects namely Remember, Understand, Applied, Analyzed, Evaluate, Create, HOTS are very significant and it is proven by Students' conceptual variation also can be seen

from their ways of thinking and ideas to respond the statement HOTS phase could be seen by (Indriyana & Kuswandono, 2019).

 $\mathbf{M} = \sum \mathbf{F} \mathbf{x} / \mathbf{N}$

548,1 % : 65 = 84,3%

From the score above the analysis of student's level in doing HOTS of English reading comprehension

% = The number of students HOTS correctly x 100 Total students

To know the achievement of students in doing HOTS English Reading descriptive text, the researchers look for the total level of students in doing HOTS of English reading comprehension, the uses mean score as follows:

No	Indicators of HOTS	Questions number	The number answer HOTS correctly	Percentage
1	Remembering criteria			
	Recall fact	1	1	1,5%
	Duplicate	2	26	40%
	List	3	38	58,5%
2.	Understanding criteria			
	Classifying	4	1	1,5%
	Differentiate	5	28	43,1%
	distinguish	6	36	55,4%
3	Applying criteria			
	execute	7	2	3,1%
	implement	8	32	49,2%
	solve	9	30	46,2%
4	Analyzing criteria			
	differentiate	10	1	1,5%
	organize	11	35	53,8%
	relate	12	29	44,6%
5	Evaluating criteria			
	appraise	13	1	1,5%
	argue	14	35	53,8%
	defend	15	28	43,1%
6	Creating criteria			
	design	16	3	4,6%
	assemble	17	34	5,2%
	construct	18	27	41,5%
Σx				548,1%
Mean				84,3%

Table 9. Distribution free test

From the above data, the total score of 65 students is 548.1%; the mean score is 84.3%; see the table for more information Phase C1: remembering, having information recalled, recognizing, and listing are

all input processes (receptive skills). While the information is being input into their brains, the students are committing to phase, the first time they get information by reading. While this information is being processed in their brains, the students are remembering and grasping the meaning of the text they have received. In this phase, the process of explaining ideas or concepts was demonstrated, as was the interpretation of the data. C3: Using information in another familiar situation, implementing, carrying out, using, and executing the information the students obtained in any other specific situation and conditions in appropriate ways.

In analyzed phase the students' understandings and relationships of information they received were achieved, Thus, C-5 refer the information that used to evaluate any sources of course encounter significant achievement. C-6: the ability to create a new knowledge and ideas into sensory domains revealed the quality of mind achieved. According to (Ghanizzedeh et al., 2020), who cite the study's six aspects of success. The aspect belongs to the issues of remembering, understanding, applying, analyzing, evaluating and creating, these issues are investigated concern with student achievement in reading comprehension descriptive text, the relationship with reading comprehension, the use of HOTS in descriptive text can enhance the ability of student to introduce an object to the readers in detail such as people, things, animals and the student able to identify and describe each paragraph and main ideas critically, creatively and problem solving, dealing with the assumption of reading is already fully achieved skills means that to perform text-level of cognitive task by (Abusamra, Difalcis, Formoso, Low, & Martinez, 2020). It is also in line Paez & Whalen (2020) who stated that HOTS help student to reflect cognitive skills and also think and comprehending the information that emerge from the text given. In addition, HOTS facilitate student to think independently and able to analyze the text accurately. With precise HOTS enlightenment, EFL teacher can enhance students' achievement in reading such as recall fact of the text, classifying the paragraph, implement the identification of an object, organize the main ideas, and making conclusion. Many EFL teachers employed HOTS in order to inject some variety into the lesson plan. An incision between the three highest levels of cognitive ability (analysis, evaluation, and creation) and the three knowledge dimensions is defined as HOTS (D. E. Silalahi et al., 2021).

The researchers collected and covered the percentage of each item after analyzed the results of 'questionnaires' responses from C-1-C-6 items. They responded positively to their benefit used HOTS in reading comprehension descriptive text for a number of reasons. First they responded positively to the use of HOTS in read text that assisted them with identified or remember content that included to a generic structure and language features in previous point. Second, they positively responded to their mind used HOTS in read descriptive text in which assisted them with comprehend, identified the main ideas.

Thirdly they responded to the use of HOTS in reading comprehension help them in analyzing the contents in descriptive text by comparing the main ideas and supporting sentence in reading comprehension in giving reason, strength and weakness of the text, fourthly, they responded the use of student HOTS in order to achieve their comprehension in evaluating the context of text through criticize the content of the text, lastly, they responded use of HOTS in achieve reading comprehension skills in categorizing and compiling the text that has been created

	Absorption interval	Absorption Category	Students answer HOTS correctly	k
	$85 \le x \le 100$	Excellent		
	$70 \le \times < 85$	Good		
	$50 \le \times < 70$	Fair	84,3 %	
_	$0 \le \times < 50$	poor		

Table 10. Students achievement by using HOTS of English reading comprehension by (Sesana 2020)

Based on the table above those students have 84,3% the answer of HOTS. Correctly of students' achievement of English reading comprehension it is in interval $70 \le x < 85$ its mean that categorized in good. Based on table above it could be conclude that the students' achievement in reading descriptive text by using HOTS was achieved in order to see their response through identification and description in the content of descriptive text. The purpose of analysis of the text is to find out the achievement of student in reading comprehension for grade eight in junior high school in term of HOTS structure and linguistic feature that help teacher to enhance their ability in reading comprehension descriptive text. In order to achieve was given text entitled "Singapore", this text are socially aims to descripting, showing and presenting broad information of particular person, things, plags or even based on HOTS criteria that present in reading descriptive text (Knaap & Watkins, 2005). The government expects students to achieve various competencies with the application of HOTS Looking from their ability in understanding reading descriptive text followed with cognitive domain, the teacher consider the aspect of HOTS as high order thinking that occur when student absorb new knowledge and save to their memory, this knowledge is classified, organized or evaluate to achieve a specific purpose, these skills belongs to sub skills namely analyze, evaluate and create.

The similarities that found in this research concern with the other previous researchers could be seen from the result of data that being analyzed in this research whereby there was found that in each aspect refer positive response from student to enhance their achievement in reading comprehension by using HOTS as learning strategy in descriptive text. The research from (Margana, Thamrin, & Widodo, 2018) also found the six aspect being analyzed it presented HOTS in reading comprehension seen from the C1-C6 phase of HOTS strategy. This indicates that the most of students have HOTS in comprehending the text. The next research from (Dewi & Rakhmawati, 2021) with focused to the two aspect of achievement also refers positive response from students, the last research from (Ratnawati, Said, & Sopiani , 2019) also get positive achievements in using HOTS as a learning strategy especially in the remembering, understanding, evaluating, applying aspect of achievements. Surprisingly, Based on one result of this research, the researchers found that the most students' achievement used HOTS in reading comprehension concern cognitive domain for six skills in descriptive text is remembering (C1) with average 48,6%, analyzing (C-4) and evaluating (C-5) with average 48,9% each one.

In conclusion, HOTS on students' reading comprehension were able to remember, analyze and evaluate to the course content and could also help student to read more critically in descriptive text, this has been proven true by evidence of data that has been analyzed by researchers, the benefit of HOTS is very useful to achieve the HOTS criteria of students in reading comprehension descriptive text.

29 4. CONCLUSION

Based on the result and discussion concern analysis of HOTS on students' reading comprehension achievement at grade VIII Yayasan Perguruan Keluarga The researchers can show the resolution as follow: there were two main kinds of variation in reading comprehension through HOTS in reading descriptive text, which involved the phase of HOTS they were on the way of remembering, understanding, applying, analyzing, evaluating, and creating (C1-C6 phase of HOTS) and descriptive text they are identification, description that explicate generic structure and language feature. The student tend connect their ideas to describe something such as persons, place, or things that involved level of cognition ability on criterions. HOTS after they had known about the characteristic of descriptive text and HOTS criteria delivered by the teacher in teaching and learning process. In this research, the students classified as LOTS AND HOTS students based on the consideration of how much of student involved their cognition ability in think critically, logically, creatively and meta-cognitive in responding and comprehending descriptive text that given by the teacher.

REFERENCES

- Ary, D., Jacobs, L. C., Sorensen, C., & Razavieh, A. (2010). Introduction to Research in Education. Wadsworth: Cengage Learning.
- Ahmadi, M. R. (2013). The Relationship Between Students Reading Motivation and Reading Comprehension. Journal of education and practice, 4(18), 8-17.

Araujo, L. (2014). Reading Literacy Achievement. Research Centre, European Commission, 5404-5406.

- Cahyaningati. (2018). The use of multimodal text in enhancing engineering students' reading skill. International Journal of Language Education, 3(1), 65–73.
- Fikri, Z., Padmadewi, N. N., & Suarnajaya, I. W. (2014). Mood Structure Analysis of Teacher Talk in EFL Classroom: A Discourse Study Based on Systemic Functional Linguistic Theory. Jurnal Pendidikan Bahasa Inggris Indonesia, 2(1), 86–95. https://doi.org/10.23887/jpbi.v2i1.1361
- Ghanizadeh, A., Al-Hoorie, A. H., & Jahedizadeh, S. (2020). Higher order thinking skills in the language classroom: A concise guide. Saudi Arabia: Springer Nature Switzerland.
- Herman, Purba, R., Thao, N. Van, & Purba, A. (2020). Using genre-based approach to overcome students' difficulties in writing. Journal of Education and E-Learning Research, 7(4), 464–470. https://doi.org/10.20448/JOURNAL.509.2020.74.464.470
- Herman, Shara, A. M., Silalahi, T. F., Sherly, & Julyanthry. (2022). Teachers' Attitude towards Minimum Competency Assessment at Sultan Agung Senior High School in Pematangsiantar, Indonesia. Journal of Curriculum and Teaching, 11(1), 1–14. https://doi.org/10.5430/jct.v11n2p1
- Indriyana, B. S., & Kuswandono, P. (2019). Developing Students' Higher Order Thinking Skills (HOTS) in Reading: English Teachers' Strategies in Selected Junior High Schools. JET (Journal of English Teaching), 5(3), 204–216. https://doi.org/10.33541/jet.v5i3.1313
- Lumbantobing, S. R. A. H., Pardede, H., & Herman, H. (2020). The Effect of Herringbone Technique on the Students' Ability in Reading Comprehension on Recount Text. Journal of English Educational Study (JEES), 3(2), 91–100. https://doi.org/10.31932/jees.v3i2.656
- Manullang, R. A., Sianipar, E., Herman, H., & Sinurat, B. (2022). The Application of Phonics Instruction in Reading Text at Grade X SMK N . 1 Pematangsiantar. Journal of Modern Philosophy, Social Sciences and Humanities, 4, 25–31.
- Shafeei, K. N., Hassan, H., Ismail, F., & Aziz, A. A. (2018). Incorporating Higher Order Thinking Skill (HOTS) Questions in ESL Classroom Contexts. LSP International Journal, 4(1), 101–116. https://doi.org/10.11113/lspi.v4n1.49
- Sihombing, P. S. R., Silalahi, D. E., Saragih, D. I., & Herman, H. (2021). An Analysis of Illocutionary Act in Incredible 2 Movie. Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences, 4(2), 1772–1783. https://doi.org/10.33258/birci.v4i2.1850
- Silalahi, D. E., Sihombing, P. S. R., Herman, & Purba, L. (2021). High order thinking skill (HOTS) questions on learners' writing ability of report text at EFL of FKIP Universitas HKBP Nommensen. Jurnal Dinamika Pendidikan, 14(2), 17–32. https://doi.org/10.33541/jdp.v14i1.1295
- Silalahi, R., Silalahi, Dumaris, E., & Herman. (2021). Students Perception of Using Google Classroom as English Teaching Media During Corona Virus 2019 at SMA Negeri 4 Pematangsiantar. JEELL (Journal of English Education, Language and Literature), 7(2), 12–30. https://doi.org/10.32682/jeell.v7i2.1730
- Sirait, M. F., Hutauruk, B. S., & Herman. (2020). The Effect of Using Speed Reading Technique to the Students' Ability in Comprehending a Text. Cetta: Jurnal Ilmu Pendidikan, 3(3), 485–498. Retrieved from http://jayapanguspress.penerbit.org/index.php/cetta/article/view/545
- van Thao, N., Herman, Napitupulu, E. R., Hien, N. T., & Pardede, H. (2021). Code-switching in learning via zoom application: A study in an EFL context. Asian ESP Journal, 17(3), 91–111.
- Van Thao, N., Herman, & Purba, R. (2020). An Illocutionary Acts Analysis on Barack Obama's Speech. Education Journal, 3(3), 30–37. https://doi.org/10.31058/j.edu.2020.33003

Al-Ishlah: Jurnal Pendidikan, Vol. 14, 2 (June 2022): 1853-1868

1868 of 1868

An Analysis of Students' Achievement in Reading Comprehension through Higher Order Thinking Skills (HOTS)

8% 7% 5% 5% 5% SIMILARITY INDEX 7% 5% 5% STUDENT PARTY SOURCES PRIMARY SOURCES 1 Mundir Mundir. "Implementing Video-Based Online Learning in an Asynchronous Setting: A Case Study at Madrasah Aliyah", AL-ISHLAH: Jurnal Pendidikan, 2022 Publication 2 1 Ib.unnes.ac.id Internet Source 3 Submitted to University of Limpopo Student Paper 2 Submitted to University of Bolton Student Paper 4 Submitted to University of Bolton	
 Mundir Mundir. "Implementing Video-Based Online Learning in an Asynchronous Setting: A Case Study at Madrasah Aliyah", AL-ISHLAH: Jurnal Pendidikan, 2022 Publication Ib.unnes.ac.id Internet Source Submitted to University of Limpopo Student Paper Submitted to University of Bolton 	PERS
 Online Learning in an Asynchronous Setting: A Case Study at Madrasah Aliyah", AL-ISHLAH: Jurnal Pendidikan, 2022 Publication Iib.unnes.ac.id Internet Source Submitted to University of Limpopo Student Paper Submitted to University of Bolton 	
 Internet Source 3 Submitted to University of Limpopo Student Paper 4 Submitted to University of Bolton 	2%
Student Paper Submitted to University of Bolton	<1 %
	<1%
	<1 %
5 iopscience.iop.org Internet Source	<1 %
6 Submitted to Liberty University Student Paper	<1%
7 ejournal.polbeng.ac.id	<1%

Submitted to Trident University International

Student Paper

8

		<1%
9	vidyaprasar.dei.ac.in	<1%
10	www.coursehero.com	<1%
11	Submitted to University of Southampton Student Paper	<1%
12	journal.upgris.ac.id	<1%
13	repository.iainpalopo.ac.id	<1%
14	researchonline.jcu.edu.au	<1%
15	Dumaris E. Silalahi, Haposan Siallagan, Bangun Munthe, Herman Herman, Partohap Saut Raja Sihombing. "Investigating Students' Motivation toward the Use of Zoom Meeting Application as English Learning Media During Covid-19 Pandemic", Journal of Curriculum and Teaching, 2022 Publication	<1 %



eprints.unhasy.ac.id

<1 %

17	Rezita Ayu Febriyani, Wisma Yunita, Indah Damayanti. "An Analysis on Higher Order Thinking Skill (HOTS) in Compulsory English Textbook for the Twelfth Grade of Indonesian Senior High Schools", Journal of English Education and Teaching, 2020 Publication	<1%
18	www.atlantis-press.com	<1%
19	A Fatmawati, S Zubaidah, S Mahanal, Sutopo. "Critical Thinking, Creative Thinking, and Learning Achievement: How They are Related", Journal of Physics: Conference Series, 2019 Publication	<1 %
20	ejournal.unib.ac.id	<1%
21	Jon Helmi. "THE PRINCIPAL'S LEADERSHIP STYLE IN IMPROVING TEACHER PERFORMANCE", AL-ISHLAH: Jurnal Pendidikan, 2019 Publication	<1%
22	Ippm.uhn.ac.id	<1%
23	repository.lib.ncsu.edu	<1%



24

<1 %

<1%

- Haerazi Haerazi, Lalu Ari Irawan. "The Effectiveness of ECOLA Technique to Improve Reading Comprehension in Relation to Motivation and Self-Efficacy", International Journal of Emerging Technologies in Learning (JET), 2020 Publication
- 26 Mukhtarul Anam, Anik Hidayanti. "The Use of Semantic Mapping to Improve The Students' Vocabulary in Seventh Grade Students of SMP NU Sabilunnaja Babat", EDULIA: English Education, Linguistic and Art Journal, 2021 Publication
- 27 Yustina Selong. "IMPROVING STUDENTS' READING COMPREHENSION THROUGH THE USE OF NUMBERED HEAD TOGETHER (NHT) TECHNIQUE", Journal of English Educational Study (JEES), 2019 Publication
- Herman Herman, Dewi Sri Lumbantobing, Bloner Sinurat. "AN ANALYSIS OF FIGURATIVE LANGUAGE IN MICHAEL JACKSON SONG LYRICS", Edu-Ling: Journal of English Education and Linguistics, 2021 Publication

29	Minatul Azmi, Fitri Pangestu Noer Anggrainy. "The Andragogical Approach for Teaching English Speaking Skill for College Students", Journal of Applied Science, Engineering, Technology, and Education, 2020 Publication	<1%
30	Scales, Peter. "EBOOK: Teaching in the Lifelong Learning Sector", EBOOK: Teaching in the Lifelong Learning Sector, 2012 Publication	<1%
31	earsiv.anadolu.edu.tr	<1%
32	mail.mjltm.org Internet Source	<1%
33	Herman ., Nguyen Van Thao, Naomi Anggraini Purba. "Investigating Sentence Fragments in Comic Books: A Syntactic Perspective", World Journal of English Language, 2021	<1%

Exclude quotes	On	Exclude matches	Off
Exclude bibliography	On		