



ANALYSIS OF STUDENTS THINKING SKILLS IN ENGLISH LANGUAGE CLASSROOM: STUDENTS' PERCEPTIONS

Zahratul Aeni^{1*}, Ika Harianingsih², Zurina Khairuddin³

Universiti Sultan Zainal Abidin^{1,2,3}

zahratulaeni3344@gmail.com^{1*}, ikaharianingsih@gmail.com², zkzurina@unisza.edu.my³

INFO ARTIKEL

Diterima : 10-09-2022

Direvisi : 20-09-2022

Disetujui : 21-09-2022

Keywords: thinking skills, students' perceptions, english language classroom.

ABSTRACT

The advancement of education in the twenty-first century is now confronted with significant challenges. Accordingly, it is essential to train students to think critically. Moreover, thinking creatively and critically will have a significant impact on preparing future generations. This study was conducted as a result of observations revealed that students struggle with learning activities when teachers integrate the thinking skills process in the classroom. The purpose of this study is to examine students' perceptions of the integration of thinking skills theory in English language classroom. The research method applied in this study is quantitative. The data were collected by distributing the questionnaire to 30 students in grade 9 at the secondary school level. Through the descriptive statistical analysis, the calculation of the mean and std. Deviation confirmed "very high" and "high" responses out of 14 questions based on the mean Interval Score Interpretation proposed by Kinay and Ardiç (2017). It indicated that students positively perceive the use of thinking skills in English language classrooms. This study concludes that integrating thinking skills in English language classroom could develop students' critical thinking.

*Correspondent Author: Zahratul Aeni

Email: zahratulaeni3344@gmail.com

Introduction

Nowadays, we live in an interconnected world in which globalization, information and communication technology, and knowledge explosion have shrunk the world into a global village. The main pillars of a knowledge society are education, ICT, innovation, and science technology (Malik, 2018). Therefore, English language proficiency is essential in future job competitions to face the challenges in this 5.0 era. The presence of English language subjects in secondary schools aims to develop the potential of students to have communicative competence as well as to instill the noble values of the nation's character in the context of life in order to increase the nation's competitiveness in a global society (Ministry of Education and Culture, 2014). Furthermore, in article 14 verse 2 of Presidential Decree Number 28 of 1990, it is declared that English is taught as a mandatory subject in junior high school, senior high school, and vocational high school under the authority of the Ministries of Education and Culture and Religious Affairs. Therefore, English language generally became either the second language for Indonesians who

merely spoke Indonesian or the third language for those who already spoke both Indonesian and a vernacular language ([Zein et al.](#), 2020).

One of the government's efforts to prepare future generations is establishing a 2013 curriculum aimed at producing creative, productive, and innovative students ([Surawati & Sudyana](#), 2019). Besides, to enhance the quality of learning, the skill level of graduates, and strengthen the educational character, the Ministry of Culture and Education of Indonesia (2018) has established a program called the development of learning-oriented to Higher-Order Thinking Skills. [Chinedu et al.](#) (2015) stated that HOTS is a crucial part of creative and critical thinking that helps students develop innovative ideas. Apart from Indonesia, several countries have also added thinking skills to the curriculum ([Ziguang & Heng](#), 2020). For example, The Qualification and Curriculum Authority (1999) adds thinking skills to education policy in England. The Malaysian Ministry of Education (2015), in the latest Education blueprint and the Ministry of Education (2001) in China, announced that it is important to increase the focus of teachers on critical thinking in order to innovate Chinese Education.

The cognitive processes classify thinking abilities ([Kelly](#), 2011). Bloom proposed a theory about thinking skills in 1946, which was revised by [Anderson et al.](#) (2001), namely, Taxonomy Bloom. It provides educators with a framework for identifying educational outcomes in the cognitive domain by incorporating activities from six significant categories: Remembering, Understanding, Applying, Analyzing, Evaluating, and Creating. These categories classified into Lower Order Thinking Skills and Higher Order Thinking Skills. The following is a table of cognitive processes by [Anderson et al.](#) (2001).

Table 1: Cognitive process for educational purpose

Cognitive process			Definition
C1	LOTS	Remembering	Retrieve relevant knowledge from long-term memory
C2		Understanding	Construct meaning from instructional messages, encompassing oral, written, and graphic communication
C3		Applying	Conduct or use a procedure in a provided situation
C4	HOTS	Analyzing	Break material into its constituent parts and determine how the parts relate to one another and an overall structure or purpose
C5		Evaluating	Propose a judgment based on criteria or standard

C6	Creating	Apply elements together to form a coherent or functional whole; reorganizing elements into a new pattern or structure
----	----------	---

Source: (Anderson et al., 2001)

The objective of this research is to analyse students' perception of thinking skills implementation in English language classroom. Eventhough many researchers were investigated teachers' perceptions, behavior, attitude, and strategies in teaching, few research were reported about the students' perceptions of thinking skills implementation during learning. The following researchers reported their findings on the teachers perceptions; [Kusumastuti et al.](#) (2021) studied teachers' beliefs about higher order thinking skills while teaching reading in a junior high school in Central Java, Indonesia. [Ansori et al.](#) (2019) investigated teachers' beliefs and practices regarding the integration of Higher Order Thinking skills in reading instruction at a senior high school in East Java, Indonesia. They both discovered that the teacher's belief in HOTS was incompatible with their respective teaching methods. [Ardini](#) (2017) also looked into teachers' perceptions, knowledge, and behaviors regarding higher order thinking skills (HOTS) in Semarang, Indonesia. Teachers' perceptions, knowledge, and behaviors regarding HOTS were discovered to be favorable. Furthermore, [Singh and Marappan](#) (2020) reviewed 20 studies that used various research methods related to thinking skills; the studies mostly discussed the teacher's perspective. As a result of their findings, they conclude that teachers lack expertise and motivation in implementing thinking skills.

There are similar studies discussed the students' perceptions of thinking skills, such as research conducted by [Febria](#) (2021), she intends to discover students' perceptions of critical thinking pedagogical techniques in Universitas International Batam. The result showed that students agree with learning that integrates critical thinking skills and support teachers' efforts to put new methods or tactics into practice in the classroom. Another was conducted by [Syafryadin et al.](#) (2021) about students' perceptions of thinking skills implementation in one of the state universities in Bengkulu, Indonesia. The findings revealed that the majority of students had positive perceptions toward implementing HOTS because it trains their brains to think critically, creatively, and innovatively. However, several students are uncertain to put it into practice due to a lack of knowledge, grammar, and vocabulary in formulating questions and arguing an issue. The two previous studies showed the similar topic that studied at university level, but the current researchers are interested in studying the secondary level students' perceptions of applying thinking skill theories in English language classrooms.

Method

This study employed a quantitative research design using a survey technique. This study used a quantitative research design that intends meanings within individuals' behavior patterns, points of view, and perceptions on specific issues ([Dixon-Woods et al.](#),

2005). The primary objective of using this design is to comprehend Indonesian students' perspectives and practices in incorporating thinking skills into their learning process. Furthermore, as [Sugiyono](#) (2018) stated that a survey is a method for gathering data from a specific area by disseminating survey tools such as questionnaires. Based on this, a questionnaire was used as the main instrument to collect the data. The questionnaire was adopted from [Jusnaeni](#) (2020) and comprised 14 items in the form of positive statements. Then, a five-point Likert scale with values of strongly disagree, disagrees, uncertain, agree, and strongly agree was devised to replace a two-point value (Low to High score) that encompassed a range of 5 options (1-5). The respondents were given explicit instructions regarding completing specific items throughout the questionnaire. The question items were then translated and formed in a bilingual language aimed to make students easier to understand the questions. Demographic items such as gender and the name of institution are also included in this questionnaire to provide a demographic characteristic of respondents selected for the current study.

The convenience of the data collection process led to selecting Secondary School in Mataram academic year 2021/2022, West Nusa Tenggara, Indonesia, as the research site. This study's participants included 30 students selected randomly in grade 9, as a reason that they are the highest level in secondary school and have more experience in learning English language. Before collecting the data from the participants, the principal of the schools granted ethical approval to conduct this study. The data obtained were tabulated and analyzed using the Statistical Package for Social Science (SPSS 26) to quantify the data gathered. The data was then analyzed quantitatively and described using mean and standard deviation.

Results And Discussion

This section presents the result of the data analysis and further provides a brief discussion of the findings to answer the main research question of this study through the subsequent points, which are students' viewpoints on thinking skills and how they incorporate their understanding of thinking skills in their learning process in the classroom. In order to interpret the students' viewpoint, the data were analyzed descriptively using mean and standard deviation. Therefore, this study used the interpretation of [Kinay and Ardıc](#) (2017) to interpret students' perceptions. Table 2 below illustrates the mean interval score interpretation.

Table 2. Mean Interval Score Interpretation

No	Mean Score	Interpretation
1	1.00-1.80	Very Low
2	1.81-2.60	Low
3	2.61-3.20	Medium
4	3.21-4.20	High
4	4.21-5.00	Very High

Source: (Kinay & Ardiç, 2017)

Table 3. Descriptive Statistics of Students' Responses Based on Mean and Std. Deviation

No	Items	N	Mean	Std. Deviation	Interpretation
1	I am able to compare someone's opinion with someone else's opinion in the class	30	4.0	0.587	high
2	I am able to find the main ideas contained in a text during class	30	3.9	0.481	high
3	I am able to analyze the main idea of a text during class	30	3.87	0.507	high
4	I am able to find information from other sources to increase my knowledge	30	4.53	0.507	very high
5	I am able to answer the questions given by the teacher based on my own perspective when carrying out group discussion activities	30	4.03	0.669	high
6	The teacher gives me guidance to ask questions in the learning process	30	4.63	0.49	very high
7	By asking questions in the class, I am able to obtain new information to increase my knowledge	30	4.77	0.43	very high
8	The teacher gives me guidance in order to be able to conclude the material in my own words based on what I have learned	30	4.23	0.774	very high
9	I will ask the teacher if I do not understand the material being studied	30	4.5	0.82	very high
10	I am able to relate the material based on what I already know with the material that I have learned	30	4.03	0.556	high
11	The teacher gives me opportunity to express my opinion about the material being studied	30	4.13	0.819	high
12	I am able to provide input, feedback and criticism when asked by the teacher	30	3.67	0.844	high
13	I am able to express my own opinion in the class	30	3.8	0.925	high

14	I am able to explain again the material that had been learned in the class	30	3.7	0.596	high
----	--	----	-----	-------	------

According to the Table 3. descriptive statistics of students' responses based on the mean and std. Deviation, the students have two responses to the statement; the first is "very high" and the second one is "high" out of 14 items. 10 of the items rated as high, and the remaining four items as very high. Based on the interpretation of the mean score and std deviation, students expressed positive perceptions towards the use of thinking skills in the classrooms. This finding is in line with the study conducted by [Syafryadin et al.](#) (2021) that university students have positive perceptions on thinking skills implementation. Additionally, research conducted by [Jusnaeni](#) (2020) with the same topic in SMA Negeri 2 Wajo showed that students were respond well in participating in the learning based on higher order thinking skills. It can be seen from student activities such as asking questions, making conclusions, and being able to solve problems.

Furthermore, there are the top 3 items that received highest confirmation from students, including the items no 7. *By asking questions in the class, I am able to obtain new information to increase my knowledge*, (M=4.77, SD=0.43) followed by no 6 *The teacher gives me guidance to ask questions in the learning process*, (M=4.63, SD=0.46) and no 4 *I am able to find information from other sources to increase my knowledge* (M=4.53, SD=0.46). Seen from the results as mentioned above, students' responses to items in the questionnaire include cognitive processes at the LOTS level as described by [Anderson et al.](#) (2001) in table 1. Furthermore, if seen from levels C1-C6, secondary school students have already could develop the cognitive processes up to the level of Applying (C3). Meanwhile, the development of cognitive processes at the level C4-C6 can be seen from the results of students' responses to items no 12 *I am able to provide input, feedback and criticism when asked by the teacher* (M=3.67, SD=0.844), and items no 14. *I am able to explain again the material that had been learned in the class* (M=3.7, SD=0. 059). The results of students' responses to these two items show the lowest endorsement, which may be attributed to a number of issues, including students' lack of understanding, grammar, and vocabulary, as indicated in earlier research by [Syafryadin et al.](#) (2021). Or, the teachers use inappropriate methods or strategies in incorporating thinking skills in classrooms. Because, according to [Jusnaeni](#) (2020), the students can reach the level of analyzing, evaluating, and creating if the teachers carry out learning using appropriate strategies or methods.

In short, the finding of this research showed that the students have a fovaorable perceptions toward the use of thinking skills which can be confirmed by the suddents' rate with very high at the level of LOTS "Remembering, Understanding, and applying" and high at the level of HOTS.

Conclusion

The education curriculum in Indonesia has shown a significant improvement after several times changes the type of curriculum. Currently, the 2013 curriculum is still

implementing. The purpose of this curriculum is to create competitive and communicative students to face the challenges of the 21st century. Therefore, learning English plays an important role in improving the communicative skills of future generations. Thus, learning needs to be designed by integrating thinking skills. Apart from the objectives mentioned earlier, the government's goal to add thinking skills in the curriculum is in order students are able to think creatively, critically, and innovatively.

After reviewing several studies on the topic of thinking skills, the researcher finally conducted the same research, specifically regarding secondary school students' perceptions of the implementation of thinking skills in learning English based on the taxonomy boom's description of cognitive process activities. After conducting research, the researchers discovered that students' perceptions of the use of thinking skills in English language teaching was favorable. Overall, further research on this topic could be beneficial to investigate both teachers and students' perception of thinking skills implementation on the broader samples so that the findings can be generated to broader populations.

References

- Anderson, L. W., Krathwohl Peter W Airasian, D. R., Cruikshank, K. A., Mayer, R. E., Pintrich, P. R., Raths, J., & Wittrock, M. C. (2001). *cy for learning teaching and assessing.pdf*
- Ansori, M., Nurkamto, J., & Suparno, S. (2019). Teacher's beliefs and practices in the integration of higher order thinking skills in teaching reading. *ELS Journal on Interdisciplinary Studies in Humanities*, 2(4), 541–555. <https://doi.org/doi.org/10.34050/els-jish.v2i4.8164>
- Ardini, S. N. (2017). Teachers' perception, knowledge and behaviour of higher order thinking skills (hots). *ETERNAL (English Teaching Journal)*, 8(2). <https://doi.org/doi.org/10.26877/eternal.v8i2.3045>
- Chinedu, C. C., Olabiyi, O. S., & Kamin, Y. Bin. (2015). Strategies for improving higher order thinking skills in teaching and learning of design and technology education. *Journal of Technical Education and Training*, 7(2), 35–43.
- Dixon-Woods, M., Agarwal, S., Jones, D., Young, B., & Sutton, A. (2005). Synthesising qualitative and quantitative evidence: A review of possible methods. *Journal of Health Services Research and Policy*, 10(1), 45–53. <https://doi.org/10.1258/1355819052801804>
- Febria, D. (2021). English Students' Perception on Critical Thinking Pedagogical Techniques. *Jurnal Smart*, 7(1), 7–14. <https://doi.org/10.52657/js.v7i1.1332>
- Jusnaeni. (2020). *Students' perception toward higher order thinking skills (hots) used by english teacher at SMA Negeri 2 Wajo*. https://digilibadmin.unismuh.ac.id/upload/11256-Full_Text.pdf
- Kelly, U. A. (2011). Theories of intimate partner violence: From blaming the victim to acting against injustice: Intersectionality as an analytic framework. *Advances in Nursing Science*, 34(3), E29–E51.
- Ministry of Education and Culture. (2014). Pedoman Guru Mata Pelajaran Bahasa Inggris. In Pusat Kurikulum Dan Perbukuan Badan Penelitian Dan Pengembangan Kementerian Pendidikan Dan Kebudayaan (pp. 1–103).
- Kinay, İ., & Ardiç, T. (2017). Investigating teacher candidates' beliefs about standardized testing. *Universal Journal of Educational Research*, 5(12), 2286–2293. <https://doi.org/10.13189/ujer.2017.051219>
- Kusumastuti, I., Fauziati, E., & Marmanto, S. (2021). Revealing teachers' beliefs of higher order thinking skills in teaching reading at junior high school. *English Language and Literature International Conference (ELLiC) Proceedings*, 3, 155–162.
- Malik, R. S. (2018). Educational challenges in 21 st century and sustainable development. *Journal of Sustainable Development Education and Research*, 2(1),

9–20.

- Singh, C. K. S., & Marappan, P. (2020). A review of research on the importance of higher order thinking skills (HOTS) in teaching english language. *Journal of Critical Reviews*, 7(8), 740–747.
- Sugiyono, P. D. (2018). Quantitative, qualitative, and R&D research methods. Bandung:(ALFABETA, Ed.).
- Surawati, N. M., & Sudyana, D. K. (2019). Pengembangan rancangan pembelajaran berbasis higher order thinking skill (hots) dalam kurikulum 2013 pendidikan agama hindu. *Widyanatya*, 1(2), 44–55. <https://doi.org/doi.org/10.32795/widyanatya.v1i2.496>
- Syafriyadin, Wardhana, D. E. C., Noermanzah, Rofi'i, A., & Awalludin. (2021b). Students' perspective and problems in implementing higher order thinking skill (HOTS) in speaking for presentation class. *Journal of Language and Linguistic Studies*, 18(1), 477–487. <https://doi.org/10.52462/jlls.196>
- Zein, S., Sukyadi, D., Hamied, F. A., & Lengkanawati, N. S. (2020). English language education in Indonesia: A review of research (2011-2019). *Language Teaching*, 53(4), 491–523. <https://doi.org/10.1017/S0261444820000208>
- Ziguang, Y., & Heng, C. S. (2020). Infusing Thinking Skills in the Classroom : Perceptions of Undergraduates in China Public Universities. *Journal of New Advances in English Language Teaching and Applied Linguistics*, 2(September), 374–397.

© 2022 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY SA) license (<https://creativecommons.org/licenses/by-sa/4.0/>).

