



---

## Escaping Materials from Lower Order Thinking Skills in *Geschool*

---

Luli Sari Yustina<sup>1</sup>, Besral<sup>2</sup>, Hasnawati<sup>3</sup>

<sup>1, 2, & 3</sup> Universitas Islam Negeri Imam Bonjol Padang, Sumatera Barat, Indonesia.

\*Correspondence to: [lulisariyustina@uinib.ac.id](mailto:lulisariyustina@uinib.ac.id)

**Abstract:** The objective of this study was to determine the distribution of *Higher-Order Thinking Skills (HOTS)* of EFL materials posted in *Geschool*. The analysis was made in accordance with the revised Bloom's taxonomy including *cognitive* and *knowledge* dimension. Data of this study were collected by using document analysis method which were taken from EFL online materials and tasks in *Geschool* for grade IX at Junior High School *Adabiah* Padang. The *Geschool* online materials were analyzed by using *cognitive* and *knowledge* dimension analysis guide. The findings showed that all topics in knowledge dimensions belonged to *Lower Order Thinking Skill*. Meanwhile, in cognitive domain, there were only 14.14% tasks belonged to *higher-order thinking skill*. In the knowledge dimension aspect, most *HOTS* materials belonged to *factual knowledge*. While in cognitive aspect, most *HOTS* questions belonged to *remembering* level. It can be concluded that the majority of EFL materials in *Geschool* belonged to lower-level thinking skills, particularly *remembering* (cognitive dimension) of *factual knowledge*. Therefore, big efforts should be addressed to escape from such low level of knowledge.

**Keywords:** EFL online materials; cognitive domain; knowledge dimension; HOTS.

**How to Cite:** Yustina, L., Besral, B., & Hasnawati, H. (2023). Escaping Materials from Lower Order Thinking Skills in *Geschool*. *Al-Ta'lim Journal*, 30(1). doi:<https://doi.org/10.15548/jt.v30i1.825>

**Article info:** Submitted: 03<sup>th</sup> December 2022 | Revised: 18<sup>th</sup> February 2023 | Accepted: 28<sup>th</sup> February 2023

---

### INTRODUCTION

The shift of educational system from traditional classroom to online classes such as found in *Geschool* during Covid 19 forced all teachers to provide digital learning materials for the students' distant learning. Although the application of *Geschool* has been practiced in Indonesian Junior and Senior High Schools through the combination of digitalization of school learning based on Blended Learning, there has been almost no report on the success of students' learning, especially in EFL learning (Iqbal & Rosita, 2022). Instead of promoting digital learning or as a proof of teachers' job, one would not be able to find the strengths of this *Geschool* program since it only preserves 'presentation of materials, students' responds, and evaluation'.

Hence, analyzing and evaluating learning materials have become the center of most studies in the last few years, particularly in the field of English as a Foreign Language (EFL) learning worldwide. Some extensive evaluation of English textbooks for senior high school, to mention a few, such as (Besral, 2022; Nursyahrifa et al., 2019; Rofik, 2020; Wahyuni et al., 2019) conclude that none of the textbooks are perfect and therefore, teachers were required to adjust or modify them to the benefits of students' learning. (Li & Tsai, 2017), assert that such Online learning materials might have been damaging since they gave lack supports to students' interactions, and their learning

environment. Learning materials are collections of sources simplified by teachers to facilitate students' learnings. During the pandemic of Covid 19, the most learning materials used by the teachers were in the forms of audio, videos, and online worksheet (Lane & McAndrew, 2010; Tay & Low, 2017). However, large numbers of teachers contend that students got difficulties to process such materials. This phenomenon suggests that such materials did not function appropriately.

The obligatory use of Geschool as promoted in conjunction with local and provincial authorities in the educational field was expected to help students to learn at home even to the remote areas. The learning materials which were posted in Geschool were mostly in the form of lesson and tasks. The tasks were related to the curriculum, and they were tried out as an assessment. Finally, the results of students' learning were reported. Focusing on the materials on Geschool, the current study seeks to uncover the development of students' creativity and critical thinking skills that have been strongly gauged by the government since the last decade.

The significance of critical thinking skills being emphasized to the current students is in line with the fact that in the Updated Curriculum 2013 in which the teachers are required 'to assist students in the development of their noble thinking skills through the Educational Quality Insurance Institution (LPMP)'. practitioners believe that it can be done through assessing, examining, and generating HOTS (*Higher Order Thinking*). Thus, by practicing tasks on questions that contain HOTS, students' critical thinking skills is expected to improve. However, many practitioners doubted that the current curriculum would improve students' critical thinking skills as many tasks involving higher-order thinking ability were still problematic in EFL teaching (Akatsuka, 2019; Ichsan et al., 2019; Nguyễn & Nguyễn, 2017).

Bloom as cited in Forehand et al. (2011) divides cognitive processes into two levels or categories such as *lower-level thinking ability (LOTS)* and *higher-level thinking skills (HOTS)*. Lower-level thinking skills (LOTS) consist of '*remembering, understanding, and applying*'. While higher-level thinking skills (HOTS) include '*analysing, evaluating, and creating*'. The previous study is directed to prove that course tend to focus on Lower Order Thinking Skill (LOTS). Meanwhile, the Higher Order Thinking Skill has important role for the process of learning a new language. In accordance with Graduate Competency Standard (SKL) proposed by the Minister of National Education Regulation Number 23 of 2006 that SMP/MTs students should apply pedagogic competence critically so that they are more creative, and innovative.

The novelty of this study lies in our efforts to identify the aspects that need to be improved so as to achieve students' higher-order thinking skills. The goals of Curriculum 2013 that is oriented to Higher Order Thinking Skills (HOTS) demands to be investigated whether or not these learning materials were provided to develop students' critical thinking skills.

Relevant to the issues above, the current study was addressed to answer the following research questions namely (1) What level of knowledge was presented in EFL online learning materials in Geschool at ninth grade at Private Junior High School *Adabiah* Padang? (2) What level of cognitive domain was presented in EFL online learning materials in Geschool at ninth grade of Private Junior High School *Adabiah* Padang?

## METHODS

As this was a non-hypothesis research, the data were sought to find the relevance of materials (in GeSchool) to the current curriculum, material accuracy, learning supports, and language appropriateness for grade IX. Observation by using checklist was used to identify level of cognitive process as promoted in Revised Bloom's Taxonomy. Referring to Sugiyono (2010), we created observation checklist pertaining to six components of the cognitive process. The researcher provided thick mark (✓) in the columns of the checklist if the task was using the component of the cognitive process of Revised Bloom's Taxonomy.

Two raters (researcher and co-researcher) gathered the data. The checklist of the Cognitive domain contains *remembering level*, *understanding level*, *applying level*, *analyzing level*, *evaluating level*, and *applying level*. The tasks were analysed and evaluated by using components of cognitive process and operational verb proposed by Krathwohl and Anderson in Revised Bloom's Taxonomy. Finally, the result of the checklist was transformed into percentage by using the cognitive domain of Revised Bloom's Taxonomy by using the following formula:

$$P = \frac{F}{N} \times 100 \%$$

P = Percentage

F = the number of chapter

N = the number all of chapter

## RESULT AND DISCUSSION

### Knowledge dimension of materials on Geschool

The Knowledge Dimensions of Revised Bloom's Taxonomy (2021) of EFL online materials on Geschool of ninth grade of Private Junior High School *Adabiah* Padang is displayed in the following table:

**Table 1.** Knowledge Dimensions on EFL Online Materials on Geschool

TOPIC	KNOWLEDGE DIMENSIONS			
	Factual Knowledge	Conceptual Knowledge	Procedural Knowledge	Metacognitive Knowledge
I	✓			
II	✓	✓		
III	✓			
IV	✓			
V	✓	✓		
VII	✓			
VII	✓	✓		
Total	7	3	0	0

The data showed that there were 7 topics involved in Geschool for ninth grade of Private Junior High School *Adabiah* Padang. All of the topics were in the factual and conceptual level of knowledge. Three topics were in the conceptual level, but there was no topic indicated procedural and metacognitive level. It can be concluded that the knowledge dimensions were dominated by factual knowledge. In other words, the

knowledge dimensions on EFL online materials in Geschool which were designed by MGMP English teachers Junior High School *Adabiah* Padang were on the *Lower Order Thinking Skill* of the cognitive domain.

### Cognitive Domain of Online Task Materials presented in Geschool

The final analysis of the Cognitive Domain of Revised Bloom's Taxonomy from Online Learning Materials on Geschool of ninth grade of Private Junior High School *Adabiah* Padang is displayed in the following table.

**Table 2.** Percentage of Cognitive Domain of Learning Materials in Geschool

Topic	COGNITIVE DOMAIN						TOTAL
	C1	2	3	4	5	6	
I	16						25
II	11						15
III	26						32
IV	2						5
V	6						14
VI	22						30
VII	31						49
TOTAL	114	3		9			170
Percentage	67,05	3,52	29	17	35	58	100

Table (Table 1) shows that there were 170 activities of EFL Online Materials in Geschool for ninth grade of Private Junior High School *Adabiah* Padang. C1 level was occupied by 67,05% activities namely *remembering*. While 13,52% activities indicated that the tasks were in the level of C2 namely *understanding*. Furthermore, there were 5,29% activities belonged to C3 (applying). Next, 11,17% activities belonged to C4 (analysing), 2,35% activities were in the category of C5 (evaluating), and 0,58 % of the activity were in the category of C6 (creating).

Taken together, eighty-point fifty-seven (80,57) percents of the EFL online materials in Geschool was in the Low Order Thinking Skill (LOTS) level, while five-point twenty-nine (5,29) percents was in Middle Order Thinking Skill (MOTS), and there were only fourteen-point fourteen (14,14) percents was in the High Order Thinking Skill (HOTS) level. Therefore, it can be concluded that EFL Online Materials were dominated by LOTS level especially remembering level. In other words, the EFL Online Materials were still in the Low Order Thinking Skill of the cognitive domain of Revised Bloom's Taxonomy. As mentioned above, *remembering* and *understanding*, constituted 80,57% which was 137 out of 170 activities. The level of applying on MOTS was found to be 5,29% which was 9 of 170 activities. The good news is, fortunately, the tasks covered the whole components of Higher Order Thinking Skill which involved analysing, evaluating, and creating (14,14% or 24 out of 170 activates).

The absence of procedural knowledge, and metacognitive knowledge while over emphasizing on factual and conceptual knowledge as found in EFL online materials of the Geschool clearly sounds the red lights for the tasks toward the 4Cs skills being promoted in the last few years. The domination of factual knowledge over the other the others suggests that the knowledge dimensions on EFL online materials on Geschool were still in the *Lower Order Thinking Skills*. This finding confirmed the previous study (Febriyani et al., 2020) that *remembering* (C1) was the most composition in whole tasks of book being

investigated. Unlike Febriyani (2020) who found 40.40 percent of LOTS in “Bahasa Inggris SMA/MA/SMK/MAK Kelas XII Edisi Revisi 2018”, we found 67.05 percents in the current study of Geschool. Other study by Erdiana & Panjaitan (2023) also found this unconducive condition as she states that LOTS occupied 54% in C1 and 80.6% in C2 of English Language SMA/MA/SMK/MAK for Grade 12.

The problem now is how to escape from teaching Lower Order Thinking Skills in the classroom (Punjani, 2014). First of all, interactions as the most determinant factors in language learning, must be maximized through contextual learning. Bicer (2013), maintains that there were seven underlining philosophies that make up Contextual Teaching and Learning (CTL) such as *constructivism, inquiry, questioning, learning community, modeling, reflecting, and authentic assessment*. In addition, (Haerazi et al., 2019) and other practitioners assert that Contextual teaching and learning was an approach aiming at helping students ‘understand the meaning of teaching materials based on the context of personal, social and cultural’ so that they have ‘the knowledge/skills to actively construct their own understanding regarding the material given’ (Haerazi, 2019; Wandasari, 2011; Satriani & Emilia, 2012). In sum, the application of student-centered approach is in line with the Contextual Teaching and Learning approach.

Second, the implementation of CLT in our current curriculum requires that students to be familiar with noble characters and most teaching materials especially in Geschool must be adjusted to be relevant with students’ personal, social and cultural values. As Erdiana & Panjaitan (2023) claims that the ‘ability to apply a number of broad cognitive processing skills such as the levels of analyzing, evaluating, and developing new ideas or things’ and is what Kivunja (2015) characterized as critical thinking. This capacity allows students to think deeply to approach problems that are unfamiliar to them in novel ways. Therefore, it is crucial to ‘integrate HOTS into educational materials since this will help students in developing their critical thinking skills’ Kivunja (2015a). Alghamdi (2022), suggested teachers should ‘avoid using questions with a clear ‘Yes or No response’ in order to encourage students to use their critical thinking skills’, but we can ask ‘How do you know..., What tells you..., and Why...’ instead. Instead of just giving a one-word response that can be found in a dialogue or book, these questions allow students to show that they have understood the material. Such inquiries, as opposed to those that only encourage simple recollection and reporting, can encourage higher order thinking skills of analysis and interpretation.

Third, while applying CTL approach in the class, teacher may try the following steps for teaching reading comprehension such as: 1) building relevant knowledge, 2) hypothesizing while constructing knowledge, 3) testing knowledge, 4) communicating the knowledge, and 5) developing knowledge. These elements direct students to be more active to learn in the class. Contextually, reading activities based on this approach help students to develop their ideas from the text being read. In short, CTL approach can be used to create ‘learning activities to be more meaningful and real.

## CONCLUSION

The analysis of HOTS in the Geschool brings about several consequences and implications to local authority or stakeholders in the field. The adjustment or modification does not only deal with relevant materials for the Geschool, but also



practical approaches to be implemented, as well as models and techniques in EFL instructions.

In terms of learning materials and tasks, the *cognitive dimension* of Bloom's revised taxonomy should be upgraded from the lower to higher critical levels by considering students' learning preference and socio-cultural values. Maximizing students' interactions through optimum involvement in the materials is a high time to realize so that students are trained to self-regulate their learnings. To do that, the cognitive process dimensions of the task in each chapter should be explored so as to focus on students' tradition, hobbies or culture.

The most prevalent knowledge dimension and cognitive processes were factual knowledge and *remembering* which are the lowest order category in Bloom's revised taxonomy. It indicates that the task emphasized on retrieving relevant knowledge from long-term memory or recalling previous information as a dominant without encouraging students to think more critically. Since it does not enhance students' higher thinking skills due to the imbalance portion among the six levels of Bloom's revised taxonomy in the task, therefore, it tends to provide low level of tasks which do not help them develop higher thinking skill. It demonstrates that the lower-level processes of the cognitive domain within Bloom's Revised Taxonomy are more frequently represented than those higher-level. In other words, the majority of the task assessed the three lower levels of the cognitive domain, and only a few tasks were found to address higher cognitive processes among the six levels of Bloom's revised taxonomy.

The following suggestions are worth considering for the school to pay more attention to the compatibility of the cognitive levels of the *Geschool*. Therefore, the teachers are required to be more adaptive in modifying the inappropriate materials either in the form of textbook or *Geschool* that can develop students' competence. As the materials lead the students to *rote learning*, they should be guided to apply their knowledge, not only to remember the lessons but also to create new things that are useful for the rest of people in the globe. By relating the topics to the context from the inside and outside the classroom, the learning process becomes more enjoyable and therefore, develop students' critical thinking skills. Only through focusing on the changes and adaptations the materials in the *Geschool*, one can escape students from low critical thinking skills.

## REFERENCES

- Akatsuka, Y. (2019). Awareness of Critical Thinking Attitudes and English Speaking Skills: The Effects of Questions Involving Higher-Order Thinking. *Journal of Pan-Pacific Association of Applied Linguistics*, 23(2), 59–84.
- Alghamdi, A. (2022). Empowering EFL students with 21st-century skills at a Saudi University: Challenges and opportunities. *International Journal of Education, Learning, and Development*, 10(3), 39–53.
- Besral, B. (2022). Getting Higher Critical Thinking Skills Through Analyzing and Responding to Text. *English Education: Jurnal Tadris Bahasa Inggris*, 15(1), 22–44.
- Bicer, B. (2013). Philosophy group teacher candidates' preferences with regard to educational philosophies of teaching and learning activities. *The Anthropologist*, 16(3), 427–434.

- Erdiana, N., & Panjaitan, S. (2023). How is HOTS integrated into the Indonesian high school English textbook? *Studies in English Language and Education*, 10(1), 60–78.
- Febriyani, R. A., Yunita, W., & Damayanti, I. (2020). 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*, 4(2), 170–183.
- Forehand, M. R., Perkins, A., & Reed II, A. (2011). When are automatic social comparisons not automatic? The effect of cognitive systems on user imagery-based self-concept activation. *Journal of Consumer Psychology*, 21(1), 88–100.
- Haerazi, H., Prayati, Z., & Vikasari, R. M. (2019). Practicing Contextual Teaching And Learning (CTL) Approach To Improve Students' reading Comprehension In Relation To Motivation. *English Review: Journal of English Education*, 8(1), 139–146.
- Ichsan, I. Z., Sigit, D. V., Miarsyah, M., Ali, A., Arif, W. P., & Prayitno, T. A. (2019). HOTS-AEP: Higher Order Thinking Skills from Elementary to Master Students in Environmental Learning. *European Journal of Educational Research*, 8(4), 935–942.
- Iqbal, A. N. U., & Rosita, N. (2022). Students' Perception Toward the Use of Geschool in Learning English. *Journal of English Language Teaching*, 11(3), 295–309.
- Kivunja, C. (2015a). Innovative methodologies for 21st century learning, teaching and assessment: A convenience sampling investigation into the use of social media technologies in higher education. *International Journal of Higher Education*, 4(2), 1–26.
- Kivunja, C. (2015b). Teaching students to learn and to work well with 21st century skills: Unpacking the career and life skills domain of the new learning paradigm. *International Journal of Higher Education*, 4(1), 1–11.
- Lane, A., & McAndrew, P. (2010). Are open educational resources systematic or systemic change agents for teaching practice? *British Journal of Educational Technology*, 41(6), 952–962.
- Li, L.-Y., & Tsai, C.-C. (2017). Accessing online learning material: Quantitative behavior patterns and their effects on motivation and learning performance. *Computers & Education*, 114, 286–297.
- Nguyễn, T. M. T., & Nguyễn, T. T. L. (2017). Influence of explicit higher-order thinking skills instruction on students' learning of linguistics. *Thinking Skills and Creativity*, 26, 113–127.
- Nursyahrifa, N., Mukhaiyar, M., & Jufrizal, J. (2019). Textbooks Evaluation: To what Extent Do the English Textbooks Provide Learning to Promote Cognitive Skill? *Metathesis: Journal of English Language, Literature, and Teaching*, 3(1), 78–91.
- Punjani, N. S. (2014). My Teaching Learning Philosophy. *Journal on Educational Psychology*, 7(3), 9–12.

- Rofik, A. (2020). An An EFL Textbook Evaluation for Grade Ten Used in Takhassus Alquran Vocational School Wonosobo. *CLLiENT (Culture, Literature, Linguistics, and English Teaching)*, 2(1), 42–53.
- Sugiyono, S. (2010). *Metode penelitian kuantitatif dan kualitatif dan R&D*. Alfabeta Bandung.
- Tay, H. L., & Low, S. W. K. (2017). Digitalization of learning resources in a HEI—a lean management perspective. *International Journal of Productivity and Performance Management*.
- Wahyuni, Y. D., Rizkanisa, N., Samad, I. A., & Daud, B. (2019). Experiencing English: A textbook evaluation on the cultural loads. *Al-Ta Lim Journal*, 26(3), 254–266.