AN EVALUATION OF INDONESIAN TEXTBOOKS USING REVISED BLOOM'S TAXONOMY

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ABSTRACT

Implementing higher-order thinking skills into teaching-learning practice has become a priority for any teaching program anywhere today. This study aims to evaluate two books of BIPA (Bahasa Indonesia bagi Penutur Asing) 7 Sahabatku Indonesia (2019) based on the Revised Bloom's Taxonomy (RBT). The content analysis approach was used in this study to analyze research data in the form of instructions and questions classified using the RBT category. First, the analysis results showed that the instructions and questions in the two BIPA books were dominated by lower-order thinking skills ('understanding' and 'remembering'). Second, although lower-order thinking skills dominated the instructions and questions in the two BIPA books, this study revealed that the majority of the instructions and questions classified as lower-order thinking skills in both textbooks analyzed can be changed into higher-order thinking skills. The findings of this study infer that the majority of instructions and questions in the BIPA 7 Sahabatku Indonesia need to be revised to encourage higher-order thinking skills-oriented teaching. These findings serve as a reminder for textbook writers of the importance of providing cognitive activities that can help learners develop both lower-order and higher-order thinking skills in textbooks.

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A. Introduction

Textbooks are important instruments in any language teaching program. In addition to the curriculum and syllabus, textbooks are useful tools for teachers and learners. A textbook for learning a foreign language is commonly written to provide language inputs and activities that learners at a particular level of language proficiency need to improve their language skills in the target language.[1] Language textbooks usually explains the

[1] Brian Tomlinson and Hitomi Masuhara, *The Complete Guide to the Theory and Practice of Materials Development for Language Learning* (Hoboken: John Wiley & Sons, 2018), 3–4.

objectives of language learning, which function as a lesson plan and working agenda for teachers and learners.[2] Most of the time, teachers follow what is presented in the textbooks to teach.[3] They use textbooks as guidance in providing language inputs and creating activities for their students in the classroom.[4]

Meanwhile, for language learners, various tasks and exercises in the textbooks can help them develop language skills: reading, writing, listening, and speaking. Therefore, textbooks are also considered as the source of useful language inputs for learners in learning a language[5] and as one of the important external factors of successful learning.[6]

Considering that textbooks are frequently used both by teachers and learners as a learning tool, textbook evaluation has become a mandatory process in selecting efficient and appropriate textbooks. Thus, recently many institutions and those involved in providing language materials, such as material developers, teachers, and language institutions, show their concern on the quality of materials they designed in the textbooks.

Amongst many aspects, the cognitive aspect has become one of the most important parts that need to be included in a textbook. The cognitive aspect deals with the knowledge and understanding of concepts or ideas.[7] In education practices, this aspect is closely related to learners' thinking ability, which guides them to have more knowledge and become active participants in various classroom activities through problem-solving and critical thinking skills. In addition to current educational needs, learners should be encouraged to give opinions about what they learn, analyze materials, produce creative ideas, evaluate materials, compare and contrast different choices, and relate what they learn with their own experiences.[8]

In many educational practices and studies, the Bloom's Taxonomy (BT) of the cognitive domain, designed by

[2] Ali Jahangard, "Evaluation of EFL Materials Taught at Iranian Public High Schools," *Asian EFL Journal* 9, no. 2 (2007): 130–50.

[3] Tzu-Ling Hua, "Textbooks for Teaching and Learning a Foreign English Language: Do They Really Facilitate Students' Acquisition of English Relative Clauses?," *International Journal of Research Studies in Language Learning* 8, no. 2 (2019):17–28, https://doi.org/10.5861/ijrsll.2019.4006.

[4] Ahmad Asakereh, Nouroddin Yousofi, and Hiwa Weisi, "Critical Content Analysis of English Textbooks Used in the Iranian Education System: Focusing on ELF Features," *Issues in Educational Research* 29, no. 4 (2019): 1016–38.

[5] Parastou Gholami Pasand and Ali Ashgar Ghasemi, "An Intercultural Analysis of English Language Textbooks in Iran: The Case of English Prospect Series," *Apples - Journal of Applied Language Studies* 12, no. 1 (2018): 55–70, https://doi.org/ 10.17011/apples/urn.201804172107.

[6] Monika Mithans and Milena Ivanuš Grmek, "The Use of Textbooks in the Teaching-Learning Process," in *New Horizons in Subject-Specific Education: Research Aspects of Subject-Specific Didactics*, ed. Alenka Lipovec, Janja Batič, and Eva Kranjec, 1st ed. (Maribor: University of Maribor Press, 2020), 201–28, https://doi.org/10.18690/978-961-286-358-6.10.

[7] Gholamreza Zareian et al., "An Evaluation of Questions in Two ESP Coursebooks Based on Bloom's New Taxonomy of Cognitive Learning Domain," *International Journal of Education and Research* 3, no. 8 (2015): 313–26.

[8] Ibtihal R. Assaly and Oqlah M. Smadi, "Using Bloom's Taxonomy to Evaluate the Cognitive Levels of Master Class Textbook's Questions," *English Language Teaching* 8, no. 5 (2015): 100–10, https://doi.org/10.5539/elt.v8n5p100.

Benjamin S. Bloom and his colleagues in 1956, has been widely used by teachers in various fields of science. This taxonomy has influenced teachers in how they design their courses, describe learning outcomes, and create learning assessments.[9] Thus, this taxonomy is considered one of the most popular educational frameworks used for instruction, assessment, and material development.

Furthermore, in 2001, Anderson et al. modified the taxonomy, which was later called the Revised Bloom's Taxonomy (RBT). According to Krathwohl, as in the previous taxonomy, the cognitive domains in the RBT are ordered hierarchically, starting from simple to complex levels and from concrete to abstract.[10] The taxonomy is not just a scheme of classification of educational objectives, but a possibility of hierarchical organization of cognitive domain according to levels of complexity and development of cognitively expected objectives.[11] The level of expertise is organized in terms of increasing complexity, such that higher levels of expertise involve more sophisticated measurement of learners outcomes.[12] In other words, learners must understand the concept of a subject before they can apply or analyze the subject they learn.

The RBT of cognitive domains consists of six categories: ' remember,' 'understand,' 'apply' (known as lower-order thinking skills - LOTS) and 'analyze', 'evaluate,' and 'create' (also known as higher-order thinking skills - HOTS). The order of each cognitive domain from simple remembering to higher-order critical and creative thinking processes is depicted in Figure 1.

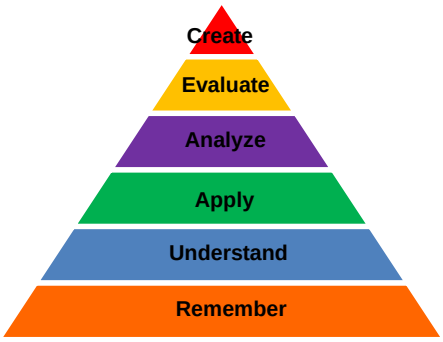

Fig. 1. Distribution of Lower and Higher-order Thinking Skills in the *BIPA 7 Sahabatku Indonesia*

The modification of the six categories names in the taxonomy changes the noun to verb forms to adjust the statements of objectives which typically consist of a noun or noun phrase (the subject matter content) to a verb or verb phrase (the cognitive process)[13] provides a clear, concise visual representation of the alignment between standard

[9] Claudia J. Stanny, "Reevaluating Bloom's Taxonomy: What Measurable Verbs Can and Cannot Say about Student Learning," *Education Sciences* 6, no. 4 (2016): 1–12, https://doi.org/10.3390/educsci6040037.

[10] David R. Krathwohl, "A Revision of Bloom's Taxonomy: An Overview," *Theory Into Practice* 41, no. 4 (2002): 212–18, https://doi.org/10.1207/s15430421tip4104_2.

[11] Hong Yuh Ching and Edson Coutinho da Silva, "The Use of Bloom's Taxonomy to Develop Competencies in Students of a Business Undergrad Course," *Academy of Management Proceedings* 1 (2017): 107–26, https://doi.org/10.5465/AMBPP.2017.10153 abstract.

[12] Sirous Tabrizi and Glenn Rideout, "Active Learning: Using Bloom's Taxonomy to Support Critical Pedagogy," *International Journal for Cross-Disciplinary Subjects in Education* 8, no. 3 (2017): 3202–9, https://doi.org/10.20533/ijcdse.2042.6364.2017.0429.

[13] Krathwohl, "A Revision of Bloom's," 213.

and educational goals, objectives, products, and activities.[14] Thus, this revised taxonomy can be used as an effective criterion for evaluating learning activities that can help learners develop their cognitive domains.[15]

In language teaching, the implementation of critical thinking practices through tasks and activities may stimulate learners' creativity in creating new ideas and solving problems. Various materials available in the textbooks, supported by an appropriate teaching approach, can help teachers stimulate their students' motivation and creativity in language classes. Learners' capabilities will also develop when they have problems that they are not familiar with, or encounter a new phenomenon that requires solutions that have never been thought of before.[16]

Öztürk confirms this by saying that the development of higher-order thinking skills is closely related to the application of certain teaching strategies and instructional activities that allow learners to elaborate on problems, conceptualize ideas, and defend their views. According to him, a learning environment that facilitates debate and discussion can encourage learners to develop their higher-order thinking skills.[17] Meanwhile, Zohar & Dori state that cognitive activities such as building arguments, asking research questions, making comparisons, solving complex problems, handling controversies, and identifying hidden assumptions can train learners in developing their higher-order thinking skills.[18] Thus, it can be concluded that through higher-order thinking skills-based learning, learners can sharpen their cognitive abilities in learning something through various activities that require them to think critically and creatively. It is the responsibility of teachers and those involved in the education system to provide a learning environment that allows the development of students' potential to acquire knowledge and higher-order thinking skills as the core of classroom learning.[19]

With the aforementioned factors in mind, a number of studies have been conducted to reveal the impacts of instructions and questions on the language learning process based on cognitive aspects using the BT or the

[14] Mary Forehand, "Bloom's Taxonomy: Original and Revised," in *Emerging Perspective on Learning, Teaching, and Technology*, ed. Michael Orey, 2010, 41–47, https://textbookequity.org/Textbooks/Orey_Emergin_Perspectives_Learning.pdf.

[15] Zareian et al., "An Evaluation of Questions," 314.

[16] I Wayan Widana, "Higher Order Thinking Skills Assessment (HOTS)," *Journal of Indonesian Student Assessment and Evaluation (JISAE)* 3, no. 1 (2017): 32–44, https://doi.org/10.21009/jisae.v3i1.4859.

[17] Esra Öztürk, "An Evaluation of Secondary School 9th Grade English Program and 9th Grade Coursebook Activities from the Perspective of Bloom's Revised Taxonomy" (Master Thesis, Ankara, Turkey, Gazi University Graduate School of Education, 2019).

[18] Anat Zohar and Yehudit J. Dori, "Higher Order Thinking Skills and Low-Achieving Students: Are They Mutually Exclusive?," *Journal of the Learning Sciences* 12, no. 2 (2003): 145–81, https://doi.org/10.1207/S15327809JLS1202_1.

[19] Afandi Afandi et al., "Pre-Service Science Teachers' Perception About High Order Thinking Skills (HOTS) in the 21st Century," *International Journal of Pedagogy and Teacher Education* 2, no. 1 (2018): 107–14, https://doi.org/10.20961/ijpte.v2i1.18254.

RBT. As a result, since one of the purposes of today's educational systems is to develop our learners' thinking skills, and textbooks are considered as one of the major instruments that can assure development in classrooms, the RBT may be an effective means of evaluating textbooks.

Gordani, for example, evaluated English textbooks *Right Path to English* used by elementary, intermediate, and upper-level learners in Iran using the BT.[20] His study revealed that out of 351 items and exercises in the English textbooks, the concentration on the first three levels of cognitive aspects categorized as lower-order thinking skills was more dominant than higher-order thinking skills. Zareian, et al. investigated two English for Specific Purposes (ESP) textbooks; namely, English for the Students of Sciences (ESS) and English for the Students of Engineering (ESE) taught in Iranian universities using the RBT. Their study reported that the three lower-level categories of the RBT were the most prevalent categories in these books.[21]

In a somehow similar vein, using the RBT, Ebadi & Mozafari evaluated two series of young and adult teaching Persian to Speakers of Other Languages (TPSOL) textbooks in Iran. The overall findings demonstrated that materials categorized as lower-order thinking skills ('remembering' and 'understanding') as the most represented levels in these books. They emphasized the need for adapting some of the activities and exercises in the analyzed TPSOL textbooks particularly those at advanced levels in order to engage learners more in higher order thinking skills.[22] Similarly, Ulum's study, which employed the RBT as the research instrument in the reading comprehension questions of an EFL reading textbook in Turkey, reported that the analyzed textbook lacked the higher-level cognitive skills highlighted in the revised version of the taxonomy. According to his observations, the sub-dimensions of analyzing, evaluating, and creating were not highlighted in the coursebook.[23]

Sunggingwati & Nguyễn conducted a study of a number of English teachers in Indonesia through observations, interviews, and questionnaires revealed that the teachers practiced more questions on lower-order thinking skills in the classroom. Other findings from this study also revealed that teachers have difficulty practicing questions that allow learners to practise lower-order thinking skills.[24]

[20] Yahya Gordani, "An Analysis of English Textbooks Used at Iranian Guidance Schools in Terms of Bloom's Taxonomy," *The Journal of Asia TEFL* 7, no. 2 (2010): 249–78.

[21] Zareian et al., "An Evaluation of Questions," 313–26.

[22] Saman Ebadi and Vida Mozafari, "Exploring Bloom's Revised Taxonomy of Educational Objectives in TPSOL Textbooks," *Journal of Teaching Persian Language to Non-Persian Speaker* 5, no. 1 (2016): 1–29.

[23] Ömer Gökhan Ulum, **"**Is the revised Bloom's Taxonomy revisited in the EFL/ESL reading textbooks?" *OPUS– Journal of Society Research,* no. 19 (2022): 170-177.

[24] Dyah Sunggingwati and Hoa Thi Mai Nguyen, "Teachers' Questioning in Reading Lessons: A Case Study in Indonesia," *Electronic Journal of Foreign Language Teaching* 10, no. 1 (2013): 80–95.

Assaly & Smadi also evaluated '*Master Class'* textbook using the BT and found that 52% of the questions are at the level of 'comprehension,' and 40% of the textbook's questions are on the cognitive levels of Evaluation and Analysis. The finding indicated that the textbook author of '*Master Class'* succeeded in increasing the number of questions that require higher-order thinking skills.[25] A similar result was reported by Shuyi & Renandya, who conducted a study on English textbooks in Singapore. They revealed that there is a good mix of higher-order thinking skills and lower-order thinking skills questions in the books analyzed.[26]

Such studies would shed light upon the importance of evaluating textbooks to develop the higher-order thinking skills of language learners. In evaluating textbooks, the cognitive levels should be one of the basic criteria to be used. Accordingly, in the present study, the researchers focus on the textbook activities, that is, instructions and questions, which play an important role in developing higher-order thinking skills of language learners.

Based on the researchers' knowledge, studies that focus on evaluating higher-order thinking skills in Indonesian language textbooks for foreign learners have been rare. In addition, none of the previous studies above provided alternative activities which can be classified as higher-order thinking skills for the textbooks they analyzed.

Because of these two reasons, the researchers consider it important to analyze one of the BIPA textbooks that BIPA teachers and learners have widely used. *BIPA Sahabatku Indonesia* was published by the Language and Book Development Agency, Ministry of Education and Culture of Indonesia. These books were published in two series, *BIPA Sahabatku Indonesia for General User*s intended for general learners and *BIPA Sahabatku Indonesia for Students* whose target readers are school-age students.

The researchers found the textbooks to be an appropriate case to be evaluated in light of the Indonesian language for foreign learners based on two reasons. First, the textbooks enjoy popularity and are used both by BIPA teachers and learners at home and abroad. Second, as the BIPA textbook series were newly-published and developed, it could be enlightening to ascertain to what extent recent findings inform the book writers about cognitive skills in the textbooks.

Consequently, this study aims to reveal which cognitive level of the six existing levels based on the RBT, namely 'remember,' 'understand,' 'apply,' 'analyze,' 'evaluate,' and 'create,' is more dominant in the *BIPA Sahabatku Indonesia*. In addition to that, with the guidance of the taxonomy, this study aims to improve instructions and questions in the textbooks that focus on lower-order

[25] Assaly and Smadi, "Using Bloom's Taxonomy," 100-10.

[26] Natalie Soong Shuyi and Willy A Renandya, "An Analysis of the Cognitive Rigour of Questions Used in Secondary School English Language Textbooks in Singapore," *Asian Journal of English Language Studies (AJELS)* 7 (2019): 169–89.

thinking skills into higher-order thinking skills.

B. Method

This research is a content analysis study. The data source is in the form of books. According to Krippendorff, content analysis is a research technique for establishing repeatable and accurate judgments about the settings in which texts (or other significant materials) are used.[27] The content analysis in this study was carried out on *BIPA 7 Sahabatku Indonesia* based on the RBT. Meanwhile, the data were analyzed using a mixed-method technique that combines qualitative and quantitative data.[28] The qualitative data are the results of the analysis of the classification of instructions and questions based on the RBT category. The quantitative data is the calculation of each RBT category displayed in the form of frequency and percentage.

For the purposes of the current study, two BIPA textbooks *Sahabatku Indonesia for General Users* and *for Students* published by the Ministry of Education and Culture in 2019 were used as the research data. Each book from these two series contains 10 units with different topics that are structured, starting with pre-activities that present pictures and illustrations on the topic of each book unit, followed by materials for each language skill presented sequentially, starting from listening, speaking, reading, and writing skills, as well as knowledge of vocabulary and grammar. For each language skill, these books encompass activities that discuss one particular topic with various instructions and questions that learners must perform and answer at the end of each of the activities.

In this study, the RBT table containing the dimensions of the cognitive domains (‘remember,' ‘understand,' 'apply,' 'analyze,' ‘evaluate,' and ‘create,') was used to classify each instruction and question contained in the textbooks analyzed.

The RBT framework has been widely used as an instrument in research in a wide variety of disciplines for many years. Several studies such as Gordani in 2010; Zareian, Davoudi, Heshmatifar, & Rahimi in 2015; Ebadi & Mozafari in 2016; and Sadiqhi, Yamini, Bagheri, & Zamanian in 2018 have proven the validity of the RBT as a research instrument that can be used to analyze learning objectives in a textbook evaluation. As Anderson et al. have argued, the taxonomy can be used to develop learning objectives, lesson plans, and assessment designs and harmonize these three activities.[29]

In this study, the researchers were assisted by an assessor who has a lot of experience in language teaching and

[27] Klaus Krippendorff, *Content Analysis: An Introduction to Its Methodology*, 2nd ed. (Thousand Oaks: SAGE, 2004), 18.

[28] John W. Creswell, *Educational Research: Planning, Conducting and Evaluating Quantitative and Qualitative Research* (Boston: Pearson, 2012), 535.

[29] Lorin Anderson et al., *Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives* (New York: Longman, 2001). 3-6.

sufficient knowledge of the use of the taxonomy in education. The two analyses were carried out separately on the same sample of activities. The inter-rater reliability coefficient was calculated using the Holsti method in 1956 through the formula PAo = 2A / (N1 + N2). The Holsti coefficient calculation result shows the number 0.90, indicating that the instrument used has high reliability.

In collecting data, each instruction and question found in each book unit was marked and entered into the data identification worksheet in the form of a table containing serial numbers, units, page numbers, activities (question or instruction sentences), and the RBT categories of the cognitive domain. The collected data were then analyzed based on the cognitive domain. The analysis results were then classified and codified based on the RBT category scheme. A Chi-square test was carried out to determine the significance of the difference in the frequency of categories between the two BIPA textbooks. Meanwhile, instructions and questions classified as lower-order thinking skills were converted into higher-order thinking skills by analyzing each instruction and question in the book material. In addition, the results were then presented in tables and graphics and were interpreted descriptively.

The codification stage was carried out by categorizing each sentence of instruction and question in the textbooks based on the cognitive domain category of the RBT. The coding schemes are labeled as A) remember, B) understand, C) apply, D) analyze, E) evaluate, and F) create.

C. Results

This research aimed to reveal the manifestations of higher-order thinking skills in the *BIPA 7 Sahabatku Indonesia for General Users* (*BIPA for General Users*) and *BIPA 7 Sahabatku Indonesia for Students* (*BIPA for Students*) based on the RBT. Therefore, each instruction and question in the textbook activities were analyzed based on the RBT cognitive domain.

1. Lower-order and Higher-order Thinking Skills in the Two *BIPA* Textbooks

The results obtained from data collection, codification, and analysis of the two books of *BIPA* show that among 236 instructions and questions identified, 112 instructions and questions for the *BIPA for General Users* and 124 instructions and questions for the *BIPA for Students*.

Table 1. presents the frequency and percentage of lower-order and higher-order thinking skills in the *two textbooks analyzed*.

Table 1.
Lower-order and Higher-order Thinking Skills in the *BIPA* Textbooks

Cognitive Domain Category	BIPA for General Users		BIPA for Students		Category
	Freq.	%	Freq.	%	
A) Remember	38	33.93%	15	12.10%	*LOTS*
B) Understand	49	43.75%	73	58.87%	
C) Apply	9	8.04%	0	0.00%	
D) Analyze	8	7.14%	20	16.13%	*HOTS*
E) Evaluate	4	3.57%	8	6.45%	
F) Create	4	3.57%	8	6.45%	
Total	112	100.00%	124	100.00%	

As Table 1. displays, based on the category of the RBT cognitive domain, of the total number of 112 instructions and questions contained in the *BIPA for General Users*, instructions and questions belong to Category B) Understand which has the highest frequency and percentage of 49 (43.75%). The second category is Category A) Remember with 38 data (33.93%). Furthermore, in other categories, the number of frequencies and the percentages shows a relatively small number, namely C) Apply 9 (8.04%), D) Analyze 8 (7.14%), E) Evaluate 4 (3.57%), and F) Create 4 (3.57%).

Meanwhile, in the *BIPA for Students*, out of 124 instructions and questions, Category B) Understand also shows a relatively high frequency of 73 (58.87%). Furthermore, in Category D) Analyze, has the frequency and percentage of 20 (16.13%), A) Remember 15 (12.10%), E) Evaluate 8 (6.45%), and F) Create 8 (6.45 %).

Comparing the distribution of lower-order and higher-order thinking skills in the *BIPA for General Users* and *BIPA for Students* gives us the following results as shown in Figure 2. below.

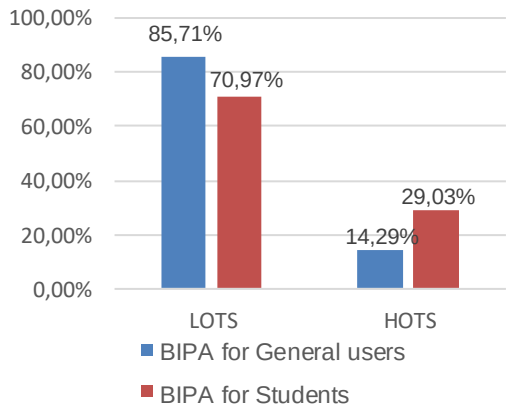

Fig. 2. Distribution of Lower and Higher-order Thinking Skills in the *BIPA* Textbooks

As can be seen in Figure 2. above, the distribution of instructions and questions in the two BIPA textbooks analyzed shows a large number of differences between lower-order and higher-order thinking skills. In the *BIPA for General Users*, the distribution of lower-order thinking skills category shows a percentage of 85.71%, while higher-order thinking skills shows a percentage of

14.29%. Meanwhile, in the *BIPA for Students*, lower-order thinking skills also show a high percentage of 70.97%, while the percentage for higher-order thinking skills categories is 29.03%. The percentage of higher-order thinking skills in the *BIPA for Students* shows a higher number when compared to the percentage of the same category in the *BIPA for General Users* (14.29%). Thus, the high range of percentage differences highlights the fact that the instructions and questions in both textbooks analyzed are dominated by lower-order thinking skills.

Table 2 below presents some examples of instructions and questions on the *BIPA* textbook activities, which are classified into lower-order and higher-order thinking skills:

Table 2.
Examples of Instructions and Questions in the *BIPA* Textbooks

No.	Instructions/Questions	RBT Category	LOTS/HOTS
1.	Prestasi apa yang diraih Anjani Rahma Putri dan Muhtaza Aziziya Syafiq? *(What achievements did Anjani Rahma Putri and Muhtaza Aziziya Syafiq bring about?)*	A) Remember	LOTS
2.	Siapa yang membangun lokasi bersejarah tersebut? *(Who built the historic site?)*	A) Remember	LOTS
3.	Simak kembali Audio 3, tentukan benar atau salah pernyataan ini dengan memberi tanda centang (√)! *(Please listen again to Audio 3, determine whether this statement is true or false by ticking (√)!)*	B) Understand	LOTS
4.	Buatlah dialog tentang ajakan kepada teman Anda untuk mengerjakan karya tulis ilmiah dengan topik berikut ini. *(Make a dialogue about asking your friend to write a scientific paper with the following topics.)*	F) Create	HOTS
5.	Bedah strukturnya (teks) dan tuliskan hasilnya! *(Analyze the text structure and write down the results!)*	D) Analyze	HOTS

The findings of this study revealed that instructions and questions in both the *BIPA for General Users* and *for Students* are dominated by lower-order thinking skills. The categories of B) understand and A) remember as the two lowest categories based on the classification of the cognitive domain of RBT are the categories that most often appear in instructions and questions, both in the *BIPA for General Users* and *for Students*. The focus of learning lower-order thinking skills in the "understand" category of the book material under study implies that the authors of the book prioritize the transfer of knowledge which aims to make learners understand what they need to learn from the material provided. Because it is considered as a starting point for thinking skills at a higher level, as

Anderson et al. demonstrated, the ability to "understand" is the basis of knowledge transfer that is most widely practiced in a number of schools and universities to date.[30] However, in the current context of teaching, the ability to understand alone is not sufficient to meet educational needs that require learners to have the skills and abilities required in real-world practice, such as making decisions, solving problems, and analyzing. As has been discussed earlier, from classroom situations to practical situations in real life, learners should be equipped with the ability to think critically and solve problems, which are the hallmarks of higher-order thinking skills. For this reason, the material contained in the books should focus more on teaching learning skills at higher level categories.

The findings of this study are in line with several previous research results from Gordani in 2010;[31] Ebadi & Mozafari in 2016;[32] Sadiqhi et al. in 2018[33] which reported that the material in language textbooks they evaluated, ranging from intermediate to higher-level proficiency, using the RBT was dominated more by lower-order thinking skills than higher-order thinking skills. Ebadi & Mozafari, for example, reported that lower-order thinking skills were the most represented level in Persian textbooks for young learners and adult learners for foreign speakers in Iran. The study revealed that the books they studied could not make learners into critical thinkers because the activities and exercises contained in the books were not sufficient to train learners to think at a high level.[34]

The researchers of the present study identify that the low proportion of instructional materials and questions classified as higher-order thinking skills in the two *BIPA* textbooks analyzed is at least influenced by two factors. First, because the main purpose of writing the BIPA textbooks, as one of the diplomacy tools, is an effort to introduce Indonesia to the international world, the materials presented put forward the provision of knowledge and information to learners who are classified as having lower-order thinking skills. Second, the dominance of the teaching of lower-order thinking skills compared to higher-order thinking skills in the *BIPA* textbooks is influenced by the common practice in many places in Indonesia, which makes those who are involved in the field of education, including teachers and book writers, prioritize learning oriented to teach knowledge to be understood by learners rather than training them to be able to think critically. As a result, more learners are trained to do tasks that involve lower-order thinking skills, such as "remember" and "under-stand" the knowledge given rather than

[30] Anderson et al., *A taxonomy,* 70.

[31] Gordani, "An Analysis of English Textbooks Used at Iranian Guidance Schools in Terms of Bloom's Taxonomy", 249-278.

[32] Ebadi and Mozafari, "Exploring Bloom's Revised Taxonomy of Educational Objectives in TPSOL Textbooks", 1-29.

[33] Shiva Sadighi et al., "Using Bloom's Revised Cognitive Skills Taxonomy to Evaluate Iranian Students' Pre-university English Textbook and University Entrance Exams," *Journal of Studies in Learning and Teaching English,* 7, no. 13, (2018): 69-97.

[34] Ebadi and Mozafari, "Exploring Bloom's", 1—29.

doing activities that encourage them to develop their potential and their language skills in solving problems, such as analyze, evaluate, and create new ideas.

However, given the fact that the *BIPA* textbooks users are expected to achieve a hight level of Indonesian language proficiency, learners should be exposed to materials that can facilitate learning higher-order thinking skills. For this reason, the BIPA textbooks should be revised to include some more challenging tasks and exercises, so that learners are encouraged to use higher levels of cognitive abilities, such as analyzing, evaluating, and creating new ideas.

2. The Differences in RBT Distribution at *BIPA for General Users* and *BIPA for Students*

To see the statistical differences in the distribution of RBT contained in the *BIPA for General Users* and *BIPA for Students*, a Chi-Square test was conducted. The Chi-square test was used to see the statistical significance of the differences between the two books studied based on the cognitive domain of RBT. The results of the Chi-square test can be seen in Table 3 below.

Tabel 3.
Chi-square Test Result

	BIPA for General Users	*BIPA for Students*
Pearson Chi-Square	205.065[a]	125.213[a]
Df	15	12
Asymptotic Significance (2-sided)	.000	.000

*p≤.05)

As depicted in Table 3, the results obtained from the Chi-square analysis show a significant figure (Sig = .000) in the two-book data analyzed. These results confirm that statistically, the frequency of occurrence of each RBT category on instructions and questions in the two books analyzed was randomly distributed and did not follow a specific pattern based on the RBT. In other words, the distribution of categories in the two books has the same pattern, namely being dominated by lower-order thinking skills. In contrast, the higher-order thinking skills have a relatively small percentage. The results of this study are in line with a study conducted by Zareian, Davoudi, Heshmatifar & Rahimiwhich, which revealed that there was no statistically significant difference between two English textbooks for students majoring in science and engineering in Iran in terms of the frequency of emergence of cognitive skills.[35] The only difference between the two books in the present study is the absence of the category C) Apply in the book *BIPA for Students.* This indicates that the instructions and questions in this book series do not train learners at all to apply the information they get from their learning process.

3. Modifying Instructions and Questions into Higher-order Thinking Skills

Since the materials in the two BIPA books analyzed are more dominated by instructions and questions which are

[35] Zareian, et al., "An Evaluation of Questions," 313-326.

classified as lower-order thinking skills, as well as answering the third research question, namely "how to change instructions and questions that are still classified as lower-order thinking skills into higher-order thinking skills?", the analysis was carried out on each instruction and question which are classified as lower-order thinking skills. The analysis was carried out to see the potential changes in instructions and questions from lower-order thinking skills to higher-order thinking skills.

Since the instructions and questions are spread in each textbook activity, modifications were made based on the activities in the units of the book. Instructions or questions that fall into the lower-order thinking skills category were divided into two categories, namely the "modifiable" and "unmodifiable." The "modifiable" category means that instructions and questions on activities classified as lower-order thinking skills can be modified into higher-order instructions and questions. Meanwhile, the "unmodifiable" category means that instructions and questions in activities that are classified as lower-order thinking skills cannot be changed at all into higher-order instructions and questions. This judgment was determined based on an assessment of the complexity of the text or assignments (monologues, dialogues, discourses, letters, etc.) contained in each activity of the book unit. The higher the level of complexity of the given text, the more likely it is that changes can be done. Table 4 presents the categories of activities that fall into the lower-order thinking skills category.

Table 4.
Lower-order Thinking Skills on the Textbooks Activities

Instructions/ Questions Category	***BIPA for General users***		***BIPA for Students***	
	Freq.	**%**	**Freq.**	**%**
Modifiable	34	91,89%	27	96,43%
Unmodifiable	3	8,11%	1	3,57%
Total	37	100,00%	28	100,00%

In general, instructions and questions, both in the *BIPA for General Users* and BIPA *for Students,* which are classified as the lower-order thinking skills category, can be turned into higher-order instructions and questions. As Table 4 displays, in the *BIPA for General Users*, out of a total of 37 activities, 34 activities (91.89%) were categorized as "modifiable," while the other 3 activities (8,11) were categorized into “unmodifiable.” Meanwhile, in the *BIPA for Students*, out of a total of 28 activities, 27 activities (96.43%) were categorized as "modifiable," while only 1 activity (3.57%) was categorized as "unmodifiable."

Table 5 presents an example of an activity containing lower-order thinking skills questions in the BIPA textbooks.

Table 5.
Example of Questions Categorized as LOTS

Kegiatan 2 (*Activity 2*)
Jawablah pertanyaan berikut ini sesuai informasi Audio 3!
(Answer the following questions according to the Audio 3 information!)
Contoh (*example*)
Di manakah lokasi wawancara itu berlangsung?

(Where will the interview take place?) Di sebuah perusahaan alat Kesehatan. *(At a healthcare company.)*	
No	**Questions**
1	Kapan wawancara dalam Audio 3 berlangsung? *(When does the interview in Audio 3 take place?)*
2	Di bidang apakah wanita dalam Audio 3 ingin melamar pekerjaan? *(In what field do the woman in Audio 3 want to apply for a job?)*
3	Mengapa pelamar tertarik bekerja pada perusahaan itu? *(Why is the applicant interested in working for that company?)*
4	Apakah pelamar memiliki pengalaman yang cukup? *(Does the applicant have sufficient experience?)*
5	Sebutkanlah kompetensi apa saja yang dimiliki pelamar dalam wawancara itu! *(Mention what competencies the applicant has in the interview!)*

In general, questions 1 to 5 in Activity 2, Unit 3, in the BIPA *for General Users* are classified into lower-order thinking skills. In questions 1, 2, 4, and 5, learners are only required to use their comprehension skills to answer the questions. Meanwhile, to answer question 3, learners can use the memories they have, based on the information they have read that is explicitly mentioned in the audio. The ability to understand and remember existing information is classified in the cognitive category of 'understand' and 'remember,' which are categorized as lower-order thinking skills. For this reason, based on the existing text, the following are alternative instructions that oblige learners to use the higher-order thinking skills.

6) Berdasarkan wawancara tersebut, menurut Anda, hal-hal apa saja yang dapat meyakinkan pewawancara untuk menerima si pelamar?

   (Based on the interview, in your opinion, what are the points that can convince the interviewer to accept the applicant?)

7) Berdasarkan wawancara tersebut, menurut Anda, apakah si pelamar akan diterima dalam perusahaan itu? jelaskan berikut alasannya.

   (*Based on the interview, do you think the applicant will be accepted into the company? Please explain*!

8) Diskusikan dengan teman Anda, informasi apa saja yang seharusnya ditanyakan oleh pewawancara dalam wawancara tersebut!

   (Discuss along with your friends what information the interviewer should ask in the interview!)

Examples 6), 7), and 8) above provide alternative questions that encourage learners to use higher-order skills to answer those questions. In Example 6), learners are required to identify certain details that are related to the content of the interview. The activity of identifying material relevant to a certain topic based on the RBT category is classified as the 'analyze' category. Likewise, Example 7) asks learners to make predictions of the outcome of a conversation. To make a prediction, a person not only has to understand the information he has already known, but also has to be able to see the relationship between this information and other information before making a decision. Thus, the predicting activity in Example 7) above is categorized into the 'analyze'

category. Meanwhile, in Example 8) learners are required to discuss the information that the interviewer should ask in the interview. The discussion activity was classified into the 'analyze' category based on the RBT cognitive domain category because it requires learners to use higher-order thinking skills in carrying out these activities.

The findings of this study revealed that although the instructions and questions in the two BIPA books analyzed were dominated by lower-order thinking skills such as the "remember" and "understand" categories, further analysis of the existing learning material showed that the majority of the instructions and questions could be transformed into higher-order thinking skills. Given the fact that the two BIPA textbooks analyzed are dominated by lower-order thinking skills, the researchers changed some of the instructions and questions that were previously classified as lower-order thinking skills to higher-order thinking skills. The results indicate that the two BIPA books analyzed have the potential to teach higher-order thinking skills, i.e., analyzing, evaluating, and creating, which are appropriate to the needs of advanced BIPA learners.

Eventually, representations of lower-order and higher-order thinking skills are required in textbook materials as teaching tools inside and outside the classroom. As stated by Shuyi & Renandya, lower-order thinking skills material can help learners increase the attainment of factual knowledge and strengthen the foundation for them to achieve higher cognitive levels, while materials containing higher-order thinking skills should be used to stimulate learners' thinking and enhance the development of their intellectual skills for problem-solving and decision-making.[36] In other words, to reach higher cognitive levels such as 'analyze,' 'evaluate,' and 'create,' a learner must have a sufficient knowledge base so that they can solve problems and make decisions when needed.

D. Conclusion

This study reveals that the types of questions posed in the textbooks dominantly belong to lower-order cognitive processes of the RBT categories, that is, *remembering* and *understanding.* Only few questions were found to address higher cognitive processes among the six levels of the RBT. The authors of these textbooks place emphasis mainly on the lower-order of cognitive domains. This contrasts with today's education system that emphasizes learners' problem-solving and critical thinking abilities. However, the majority of instructions and questions belonging to lower-order thinking skills in the textbooks can be changed to higher-order thinking skills. This implies that the content in the textbooks has the potential to be used as critical thinking-based teaching materials. Hence, it is suggested that multilevel instructions and questions are designed and implemented at each unit of the textbooks in order to strengthen the content of the coursebooks and strike

[36] Shuyi and Renandya, " An Analysis", 169-189.

a balance between lower-order and higher-order questions.

The limitation of the study lies in the fact that this study only focused on analyzing the representation of higher-order thinking skills in the textbooks. Therefore, a follow-up study that expands the scope of the study to focus on the representation of each RBT category at each level of the existing BIPA textbooks would be very useful for improving the quality of the textbooks.

In addition to this, further studies need to be carried out in the following respects. Firstly, since this study only focuses on analyzing the materials contained in the books based on the RBT, it would be interesting to carry out field observations on the textbooks used in BIPA classes to reveal the implementation of higher-order thinking skills-based learning. In this way, we can get another perspective, both from teachers and learners, on how materials containing higher-order thinking skills are delivered in real classroom practice. Secondly, it is also interesting to see how higher-order thinking skills are manifested in exam questions as a form of assessment given to BIPA learners. In such a way, there is an ideal correlation between what is taught and the assessment procedure implemented. Ultimately, this study might raise consciousness and serve as reflection for those involved in providing textbooks such as material developers and policymakers in education on the importance of integrating cognitive aspects in the textbooks they design to help learners attain higher skill levels better.

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