Evaluating Higher-Order Thinking Skills Representation in the 2022 Quadra Arabic Language Textbooks for Indonesian Madrasah Aliyah

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ABSTRACT

Background: In today's era, where critical thinking and problem-solving are vital competencies, the integration of Higher Order Thinking Skills (HOTS) into educational resources, particularly textbooks, has become an important benchmark for quality learning.

Aims: This study aims to identify HOTS exercises in Arabic textbooks of Madrasah Aliyah class X published by Quadra in 2022 in terms of Bloom's revised taxonomy theory at the cognitive level of C4, or Analysing, C5, Evaluating, and C6 Creating.

Methods: This research employs document analysis techniques (content analysis) within a qualitative descriptive approach to examine the object in depth using primary data. The researcher directly observed the book's content and analysed the HOTS elements in the exercise questions. These were then categorised according to the levels of the revised Bloom's Taxonomy, and conclusions were drawn based on the classifications.

Results: The results revealed that although HOTS elements are present in each theme, they are relatively few. The distribution showed C4 (2.4%), C5 (5.2%), and C6 (9.1%), indicating a predominance of LOTS (Lower Order Thinking Skills) over HOTS.

Implications: The findings imply the need for improvement and development of question exercises in Arabic textbooks to include aspects of higher order thinking skills (HOTS), especially at the C4 (analyze), C5 (evaluate), and C6 (create) levels, in order to support more critical, analytical, and creative learning in accordance with the demands of the 21st century curriculum.

Keywords: Arabic language book; higher-order thinking skills; practice questions

1. INTRODUCTION

In the era of global interconnectedness and digital transformation, education systems face growing demands to equip students with critical thinking, problem-solving, and adaptability skills. To respond to these demands, many countries have begun adopting competency-based curricula. In Indonesia, this is reflected in the Merdeka Curriculum, which emphasises learner autonomy, character development, and higher-order cognitive engagement (Care et al., 2018; Hariadi et al., 2022; Yaniawati et al., 2021). In this context, textbooks function not only as repositories of information but also as pedagogical instruments that should stimulate analytical and reflective learning (Alsubaie, 2016; Bittar, 2022; Pratiwi et al., 2020). The design and content of textbooks must therefore align with the goals of 21st-century education by integrating exercises that develop Higher Order Thinking Skills (HOTS), including analysing, evaluating, and creating (Anderson & Krathwohl, 2001; Brookhart, 2010; Darling-Hammond et al., 2020). Without such alignment, textbooks risk reinforcing rote learning and impeding the development of key competencies required for students to thrive in knowledge-based societies.

HOTS is central to educational quality and student success in the modern world. Bloom's revised taxonomy categorises these skills at the C4, C5, and C6 levels, which involve the ability to critically deconstruct information, assess arguments and evidence, and generate original ideas or solutions (Anderson & Krathwohl, 2001; Rintayati et al., 2021). International frameworks such as the Programme for International Student Assessment (PISA) and the Trends in International Mathematics and Science Study (TIMSS) consistently highlight that students with strong proficiency in Higher Order Thinking Skills (HOTS) tend to perform better not only in academic contexts but also in lifelong learning and career readiness (Giannakopoulos et al., 2022; Mullis et al., 2020; OECD, 2019). These skills are essential for developing digital literacy, innovation, and adaptability traits that are now vital in globalised economies. Educational materials, especially textbooks, must thus embed HOTS elements not as supplemental features but as core instructional design principles (Basuony et al., 2021; Care et al., 2018; Mitarlis et al., 2020).

Despite this urgency, studies on textbook content show that learning materials tend to highlight Lower Order Thinking Skills (LOTS), such as recalling and understanding, while the incorporation of HOTS appears more limited (Meliala, 2023; Suvina & Ramly, 2021; Zubaidah et al., 2022). In Arabic language education, particularly in Madrasah Aliyah, where the curriculum is expected to balance linguistic, cognitive, and moral dimensions, the integration of HOTS in textbooks remains a concern. Arabic textbooks often emphasise grammar drills and vocabulary memorisation rather than reasoning, interpretation, or creative expression (Alamer, 2021; Alrabai, 2022; Tamam & Ainin, 2023). Furthermore, *tadribat lughawiyah* (language exercises), which serve as critical vehicles for practising language skills, are rarely designed to challenge students beyond basic comprehension. As a result, students may develop linguistic competence but lack the critical and analytical capacities needed for real-life communication and academic progression.

In light of this context, a systematic evaluation of HOTS integration in Arabic language textbooks is imperative to ascertain their alignment with educational objectives and their effectiveness in fostering higher-order cognitive development. This study investigates the content of practice questions in the Arabic textbook for Class X Madrasah Aliyah published by Quadra in 2022, focusing on the extent to which these exercises reflect HOTS as conceptualised in Bloom's revised taxonomy. The analysis is situated within broader discussions on textbook quality and curriculum alignment,

aiming to identify whether the learning tasks provided in the book truly enable students to engage in analytical, evaluative, and creative thinking (Arif et al., 2021; Basuony et al., 2021; Rahmawati, 2018). By addressing this issue, the study contributes to the ongoing discourse on instructional material reform. It provides evidence-based recommendations for improving Arabic language education in secondary Islamic schools, in line with global educational benchmarks.

1.1 Research Gap and Novelty

Although several studies have examined the integration of Higher Order Thinking Skills (HOTS) in Arabic textbooks, most remain general and lack classification by cognitive level or language skill. Zubaidah et al. (2022) and Meliala (2023), for instance, only provided a surface-level analysis without mapping questions to Bloom's revised taxonomy. HOTS in speaking activities (maharah kalam) also remain underexplored; Alenezi (2022) and Alrabai (2020) found that most speaking tasks emphasise repetition rather than critical or creative expression. Similarly, in listening sections (istima'), Alamer (2021) and Alrabai (2022) observed that items rarely require inference or analysis, instead focusing on simple information recall. While Tamam & Ainin (2023) explored HOTS in writing tasks (kitabah), their study was limited to one textbook series and lacked curriculum alignment with Indonesia's Merdeka Curriculum. This study addresses these gaps by systematically mapping practice questions (tadribat lughawiyah) in Alenezi M. (2022) work to Bloom's C4–C6 cognitive levels, categorised per language skill. To date, no research has evaluated this textbook, currently used in elite institutions like Al-Izzah Islamic Boarding School. The novelty lies in the integration of a cognitive rubric to analyse HOTS distribution, an approach both contextually relevant and methodologically rigorous. This study thus provides a more granular understanding of how Arabic textbooks promote (or neglect) higher-order thinking, while offering a replicable model for evaluating instructional materials under competency-based curricula.

1.2 Research Question

This study seeks to address the following research questions:
1. To what extent do the practice questions in the Arabic language textbook for Grade 10 (Madrasah Aliyah), published by Quadra in 2022, incorporate elements of Higher-Order Thinking Skills (HOTS)?
2. What are the forms and distribution of these practice questions across the cognitive levels of C4 (Analysing), C5 (Evaluating), and C6 (Creating) as defined in Bloom's revised taxonomy?

2. METHODS
2.1 Research Design

This study employed a qualitative content analysis approach to systematically examine the Arabic language textbook for Grade 10 (Madrasah Aliyah), published by Quadra in 2022. Content analysis is particularly suitable for investigating patterns, representations, and meanings embedded in textual or visual data, allowing researchers to interpret the presence and frequency of concepts or cognitive levels (Krippendorff, 2013; Schreier, 2012). This method enables detailed exploration of how practice questions (tadribat lughawiyah) reflect Higher Order Thinking Skills (HOTS), particularly at the C4 (Analysing), C5 (Evaluating), and C6 (Creating) levels of Bloom's revised taxonomy. Qualitative content analysis was chosen to allow inductive insights into the

degree of alignment between textbook exercises and higher-order learning objectives. As suggested by Mayring (2014), this method involves the categorisation of material using a structured coding frame grounded in theoretical constructs, in this case, the operational dimensions of Bloom's taxonomy (Anderson & Krathwohl, 2001). Each question was categorised based on its cognitive demand, verb cues, and response expectations. This approach is appropriate for educational research aiming to assess instructional quality and curriculum relevance through empirical document analysis.

2.2 Research Objects

The object of this study is the Arabic language textbook for Grade 10 (Madrasah Aliyah) published by PT Quadra Inti Solusi in 2022, which is formally aligned with the Indonesian Ministry of Religious Affairs Regulation (KMA No. 183/2019). The analysis focuses specifically on linguistic practice questions (tadribat lughawiyah) embedded within the textbook's six thematic chapters. Each theme consists of tadribat sections designed to reinforce reading (qira'ah), writing (kitabah), and grammar (nahwiyah) skills. To ensure transparency and traceability of the analysed items, the study identifies and classifies HOTS-based questions (C4–C6 levels) from clearly defined locations in the book, as shown in the following table:

Table 1 HOTS Practice Questions in the Arabic Textbook

No	Chapter Theme (Arabic–English)	Page Range	Language Skill	Example HOTS Task (Level)
1.	التَّحِيَّاتُ وَالتَّعَارُفُ (Introduction)	pp. 7–15	Qira'ah & Kitabah	Compose a dialogue introducing oneself (C6) – p. 11
2.	الْأُسْرَةُ وَالْبَيْتُ (Family and Home)	pp. 16–28	Nahwiyah	Analyse the structure of noun phrases in a family tree (C4) – p. 22
3.	الْمَدْرَسَةُ (School)	pp. 29–40	Kitabah	Evaluate classroom rules and justify their importance (C5) – p. 34
4.	الْحَيَاةُ الْيَوْمِيَّةُ (Daily Life)	pp. 41–53	Qira'ah	Create a paragraph about daily routine (C6) – p. 50
5.	الْهِوَايَةُ (Hobbies)	pp. 54–65	Kitabah & Nahwiyah	Write a persuasive essay on productive hobbies (C6) – p. 60
6.	الطَّعَامُ وَالشَّرَابُ (Food and Drink)	pp. 66–78	Kitabah	Create a weekly meal plan based on health recommendations (C6) – p. 73

2.3 Research Procedures

The research procedures were carried out through the following systematic steps:
1. Textbook Identification
   The object of analysis was determined as the Arabic language textbook for Grade 10 (Madrasah Aliyah) published by Quadra in 2022. The study focused specifically on the linguistic exercises (tadribat lughawiyah) found within the textbook chapters.
2. Data Extraction
   All practice questions were identified and extracted manually from the textbook. Each question was recorded in a coding table that included the item number,

type of task, and linguistic context.
3. Categorisation of Cognitive Levels
   Each extracted question was analysed and classified according to Bloom's revised taxonomy, focusing on three higher-order cognitive domains: C4 (Analysing), C5 (Evaluating), and C6 (Creating). Classification was guided by a set of operational indicators adapted from Anderson and Krathwohl's (2001) cognitive process dimensions, which include verb cues, task demands, and response formats. These indicators served as the coding criteria to ensure consistency and objectivity.
4. Validation and Triangulation
   To ensure the accuracy of classification, the categorisation process was reviewed by two experts in Arabic education and curriculum studies. Inter-rater agreement was calculated, and discrepancies were resolved through discussion.
5. Data Tabulation and Interpretation
   The frequency and distribution of questions across the three HOTS levels were tabulated and interpreted qualitatively to determine the depth of cognitive engagement reflected in the textbook's exercises.

2.4 Research Instruments

This study employed a structured analytical rubric as the primary research instrument to classify and evaluate the cognitive levels of linguistic practice questions (*tadribat lughawiyah*) in the Arabic textbook. The rubric was designed based on Bloom's revised taxonomy (Anderson & Krathwohl, 2001), focusing specifically on Higher-Order Thinking Skills (HOTS) levels: C4 (Analysing), C5 (Evaluating), and C6 (Creating). Each exercise was assessed using multiple indicators, including the operational verb used, the type of task, the expected student response, and the implied level of cognitive processing. The rubric ensured a consistent and transparent coding process across all items. Expert validation was conducted to enhance the instrument's reliability and applicability to Arabic language instruction. The rubric used is shown in the table below:

Table 2 Rubric for HOTS Classification in *Tadribat Lughawiyah*

Aspect	Assessment Indicator	Scoring Criteria	Bloom's Taxonomy Category
Operational Verb	The verb used in the exercise reflects a specific cognitive demand	Examples: analyse, evaluate, create, design, critique, etc.	C4 – Analysing C5 – Evaluating C6 – Creating
Type of Task	The task format encourages complex thinking processes	Tasks involving comparison, argument evaluation, synthesis, or creative production	According to the classification
Expected Response	Student responses require analysis, evaluation, or creation rather than recall or summary	Answers are argumentative, involve original writing, critique, or synthesis of ideas	C4, C5, C6
Cognitive Level Indication	Evident reasoning, decision-making, or original product is	Determined by analysing task instructions and the	Assigned by the researcher

	required in the task	level of cognitive demand implied	
Category Justification	The rationale for assigning a question to a specific cognitive category	Based on verb analysis, task context, and expected student output	--

2.5 Data Analysis

The data analysis in this study followed a qualitative content analysis approach with systematically defined stages. First, a unitising process was carried out by identifying each *tadribat lughawiyah* (practice question) as a discrete unit of analysis. Second, categorising was applied by grouping exercises based on their cognitive focus in accordance with Bloom's revised taxonomy. Third, coding was conducted using the structured analytical rubric developed by the researcher, enabling the assignment of each question to a specific HOTS level (C4–C6). Fourth, an interpretation stage involved analysing patterns, frequencies, and types of tasks to understand how higher-order thinking skills were embedded in the textbook.

To ensure analytical rigour and validity, several verification strategies were employed. These included peer debriefing with fellow researchers to refine interpretation consistency, expert review from curriculum and Arabic language specialists to assess the clarity and accuracy of cognitive classifications, and coder triangulation, whereby two independent coders reviewed the classification results. Discrepancies in coding were resolved through discussion until consensus was reached. Finally, the results were synthesised and concluded to answer the research questions regarding the extent and forms of HOTS integration within the textbook.

3. FINDINGS AND DISCUSSION
3.1 Findings

The findings of this study are organized in direct response to the research questions: (1) the extent to which the Arabic language textbook for Grade 10 (Madrasah Aliyah), published by Quadra in 2022, integrates Higher Order Thinking Skills (HOTS), and (2) the distribution of these HOTS elements across the cognitive levels of Bloom's revised taxonomy (C4–Analyzing, C5–Evaluating, and C6–Creating). This section presents both quantitative and qualitative data. First, it outlines the overall frequency and percentage of HOTS-based questions per thematic chapter. Second, it details the classification of tasks according to their cognitive levels, and finally, it describes representative examples of HOTS implementation in each chapter and skill domain. The analysis focuses on *tadribat lughawiyah* (linguistic exercises), which form the core of student language engagement in the textbook.

Table 3 Identity of Arabic textbooks

Title	Arabic 1 for MA Class X / اللغة العربية 1 للفصل عاشر مدرسة عالية
Author	Ulya, S.Ag., M.Pd.I
Book Editor	Ghina Azizah
Book Content Designer	M. Nurdin
Cover Design	Iwan Gunawan
Publisher	PT Quadra Inti Solusi
Year of Publication	2022
City of Publication	Bogo, West Java

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The Arabic textbook for MA class X, published by Quadra in 2022, explains in the preface page that the book is in accordance with KMA 183 of 2019, and there are clear learning objectives at the beginning of each chapter. On the next page, it explains the contents of the book, which contains the beginning of the chapter, learning objectives, concept maps, materials, homework, exercises, evaluations and scans or is equipped with a QR Code that contains enrichment questions, audio and learning videos, as well as additional material related to Arabic grammar structures. However, in practice, the QR Code cannot access its contents.

The Arabic textbook for class X contains six themes, and each theme has a *tadribat* that contains HOTS for *Qira'ah, Kitabah* and *Nahwiyah*. This research identified practice questions or *tadribat* at the C4 to C6 level. Thus, the results of the research analysis of all question exercises in class X Arabic textbooks published by Quadra in 2022 are shown in the following table:

Table 4 Classification of Problem Exercises in Grade X Arabic Textbooks

Theme	Total number of HOTS			Total Percentage of HOTS
	C4	C5	C6	
التَّحِيَّاتُ وَالتَّعَارُفُ (Introduction)	6	5	2	17,8%
الأُسْرَةُ وَالْبَيْتُ (Family and Home)	1	5	2	7,6%
الْمَدْرَسَةُ (School)	2	5	2	11,3%
الْحَيَاةُ الْيَوْمِيَّةُ (Daily Life)	0	5	12	17,8%
الْهِوَايَةُ (Hobbies)	5	5	17	31,7%
الطَّعَامُ وَالشَّرَابُ (Food and Drink)	0	5	17	28,2%

From Table 4, it can be seen that the Arabic textbook consists of six thematic chapters, each containing a varying number of questions and supplemented with mid-semester questions (muroja'ah nisfi sanah) and end-of-semester questions (muroja'ah akhiru sanah). In the first chapter, *At-Tahiyyat wa Ta'aruf* (Greetings and Introductions), there are 53 linguistic exercises (tadribat, i.e., skill-based drills) and 20 review questions (tamrinat, i.e., reinforcement tasks), making a total of 73 items. This chapter includes HOTS questions at the C4 level (6 items), C5 (5 items), and C6 (2 items). In the second chapter, *Al-Usrah wa al-Bayt* (Family and Home), the textbook features 83 *tadribat* and 21 *tamrinat*, totalling 104 questions. Of these, only 1 question falls under C4, five under C5, and two under C6 cognitive levels. In the third chapter, with the theme *Al-Madrasatu*, there are 59 questions on *tadribat* and 20 questions on *tamrinat*; the total number of questions from theme three is 79, including HOTS questions at the C4 level (two questions), C5 (five questions), and C6 (two questions). In the fourth chapter, with the theme *Al-Hayatu Yaumiyyah*, there are 75 questions on *tadribat* and 20 questions on *tamrinat*, for a total of 95 questions from theme one. It contains HOTS questions at level C5 (5 questions) and C6 (12 questions), and there are no questions at level C4. In the fifth chapter, with the theme *Al-Hiwayatu*, there are 65 questions on *tadribat* and 20 questions on *tamrinat*, so the total number of questions from theme one is 85, including HOTS questions at the C4 level (5 questions), C5 (5

questions), and C6 (17 questions). In the last chapter, which covers the theme *At-To'amu was Sharobu*, there are 58 questions on *tadribat* and 20 questions on *tamrinat*, so the total number of questions from theme one is 78. There are no questions that contain HOTS at the C4 level, at the C5 (5 questions) and C6 (17 questions) levels. While in the mid-semester questions (*muroja'ah nisfi sanah*), there are 27 questions, and in the end-of-semester questions (muroja'ah akhiru sanah), there are 30 questions, both of which do not contain HOTS at all at the C4, C5 and C6 levels.

The Arabic textbook analysed in this study contains six thematic chapters, each with varying numbers of *tadribat* and *tamrinat*, along with mid- and end-semester assessments (*muroja'ah*). In Chapter 1 (*At-Tahiyyat wa Ta'aruf*), from 73 questions, HOTS items include 6 C4 questions, such as comparing formal and informal introductions, 5 C5 questions evaluating appropriate expressions in a social context, and 2 C6 questions asking students to create original self-introduction dialogues. Chapter 2 (*Al-Usrah wal Bait*) includes only 1 C4 (analysing household layouts), 5 C5 (evaluating essential furniture), and 2 C6 (designing a dream house in Arabic). In Chapter 3 (*Al-Madrasah*), among 79 questions, C4 tasks analyse classroom rules, C5 require judgment on disciplinary fairness, and C6 involve creating a school event poster using target vocabulary.

Chapter 4 (*Al-Hayat al-Yaumiyyah*) lacks C4, but contains C5 (evaluating daily routines) and C6 (composing personal routine paragraphs). Chapter 5 (Al-Hiwayah) presents 5 C4 (analysing types of hobbies), 5 C5 (evaluating their benefits), and 17 C6 (writing persuasive texts about productive hobbies). Chapter 6 (At-To'am wa Asy-Syarab) lacks C4 but offers C5 (comparing meal choices) and C6 (creating a weekly meal plan). However, both *muroja'ah nisfi sanah* (27 items) and *muroja'ah akhiru sanah* (30 items) show no HOTS elements. The distribution of HOTS-based questions is uneven: 17.8% in Chapter 1, 7.6% in Chapter 2, 11.3% in Chapter 3, 17.8% in Chapter 4, 31.7% in Chapter 5, and 28.2% in Chapter 6. Notably, HOTS elements are absent from *istima'* and *kalam* components, which consist of lower-order skills such as remembering and recognising. These findings highlight the textbook's limited emphasis on higher-order thinking, signalling the need for educators to integrate supplemental resources or develop HOTS-oriented materials to support students' critical and creative competencies in Arabic learning.

Table 4 is a classification of *tadribat lughawiyah*, which contains levels C4 (analyse), C5 (evaluate), and C6 (create), so that the findings of *tadribat* containing HOTS questions are known. It can be concluded that the percentage of *tadribat* containing HOTS questions from the textbook in theme one totals 17.8%, in theme two totals 7.6%, in theme three totals 11.3%, in theme four totals 17.8%, in theme five totals 31.7% and in chapter six totals 28.2%. HOTS was not found in the questions of *istima'* and *kalam* in the Arabic language book. The questions on *maharah istima'* and *kalam* are not included in the HOTS category. They are still in the LOTS category, because they are just remembering and understanding, even many are just knowing. The results of the book analysis explain that HOTS content is present in each theme, but the amount is very small.

3.2 Discussion

In various classroom assessments, HOTS questions are highly recommended. The Ministry of Education and Culture describes the characteristics of HOTS questions, namely: (a) Measuring high-level thinking skills that are not just remembering, knowing, or repeating, (b) Based on contextual problems, by expecting students to be able to apply classroom learning concepts to solve problems. (c) Non-recursive (not familiar), HOTS assessment is not used repeatedly on the same students, so it is like a

memory assessment (recall). HOTS assessment is an assessment that has never been done before to lead students to fully think creatively, because the problems encountered have never been encountered. (d) Using a variety of questions in HOTS test instruments, such as those used by PISA. To provide more detailed information related to student competence. This is important for teachers to pay attention to so that the assessment carried out is objective, accurately reflects student competence (Fanani, 2018).

Application of C4 (Analysis) Competence in Arabic Language Exercises

Competency level C4 (*mustawa at-tahlil*) is the activity of sorting out information and explaining the relationship between components. According to Anderson and Krathwohl (2001), analysis competence is related to the ability to sort and organise material (information or teaching material) into several parts (constituents) and be able to determine how the relationship between parts with the overall structure and purpose. There are three sub-categories related to this analytical competence, namely (a) *distinguishing* (*differentiating*), namely distinguishing parts that are appropriate from those that are not, distinguishing important from not important in the material presented. (b) *organising, which is related to the ability to identify elements of communication or situations and recognise* suitability and coherence in a structure. Students first identify elements that are appropriate or important and then determine the overall structure that is appropriate. (c) attribution, which is a competency related to determining the point of view, values, intentions underlying the communication, and the ability to deconstruct the author's motivation. Usman (2005) revealed that level 4 competence is the ability to distinguish conclusions and facts, discriminate and distinguish, diagramming, dividing, illustrating, classifying, selecting and separating.

In learning reading skills, examples of measuring the competence of analysing include distinguishing implied and explicit meanings, explaining relevant and less relevant elements, distinguishing facts and opinions or fantasies, and finding the primary meaning or theme (Ainin, 2023). At the C4 (Analysing) level, a limited number of questions asked students to distinguish parts of a text, categorise vocabulary, or compare usage across contexts. However, several of these items failed to engage students in genuine analytical processes, as they often required surface-level recognition rather than more profound text deconstruction. According to Anderson & Krathwohl (2001), true analytical thinking involves examining relationships and identifying motives or causes, which was largely absent.

The exercise presented in the Arabic textbook reflects a C4 level task within Bloom's Taxonomy, as it requires students not only to understand the meaning of the dialogue but also to analyse its content and linguistic components. In the first part, students are asked to determine the topic of the dialogue, which involves identifying and classifying the communicative function of the exchange about nationality. This demonstrates an analytical process where learners distinguish between possible themes, such as name, hobby, address, or profession, and select the most accurate one. The second part deepens the analytical demand by asking students to break down the structure of the sentence قَرَّرَ مُحَمَّدٌ أَنْ يَسْكُنَ فِي الْمَعْهَدِ نُورُ الْأَمَلِ الْإِسْلَامِي, requiring them to categorise each word into its grammatical type—noun, verb, or particle. This engages learners in dissecting the sentence, recognising the function of each word, and classifying it according to Arabic grammar rules. Together, these tasks move beyond mere recall or comprehension (LOTS) and guide learners to higher-order thinking skills (HOTS), as they must interpret, differentiate, and classify linguistic elements to arrive at accurate conclusions.

Application of C5 (Evaluating) Competence in Arabic Language Exercises

Competency level C5, according to Bloom's revised taxonomy, is the ability to evaluate, which requires students to be able to make justifications based on criteria and standards. What includes this evaluating competency according to Anderson and Krathwohl (2001) is (a) checking *checking*) which includes coordinating (*coordinating*), *detecting (detecting*, *monitoring (monitoring*, and *testing (testing*). Examples of assessing or evaluating competencies are criticising, supporting, contradicting, and justifying (Ainin, 2023). In the C5 (Evaluating) category, more questions were available, typically involving opinion-based responses or judgment. However, many lacked sufficient scaffolding or justification prompts, which, as Brookhart (2010) emphasises, are critical to elicit evaluation. Several tasks superficially resembled evaluative tasks but actually only asked for choices without requiring justification or comparison, thus falling short of HOTS standards.

The C5-level exercise in the Arabic language textbook for grade X MA, published by Quadra in 2022, requires students to engage in higher-order thinking by evaluating the accuracy of given sentences and providing corrections where necessary. The task presents five sentences about a student named Salma, covering aspects such as her identity, hobbies, residence, address, and daily activities. For example, the sentences state that "Salma is a new student," "Salma's hobby is reading books," "Salma lives with her family," "Salma's address is on Jalan Sultan Agung number 12," and "Salma goes to school on foot with her friend." Students are instructed to mark each sentence as correct (ص) or incorrect (خ), and, in the case of errors, to rewrite the sentence accurately. This exercise exemplifies the C5 level of Bloom's Taxonomy (evaluation), as learners are not merely comprehending or analysing, but also making judgments about the correctness of language use and demonstrating their ability to apply grammatical and contextual knowledge in providing accurate revisions.

Application of C6 (Creating) Competence in Arabic Language Exercises

Competency level C6 is the competence of creating or creating is the ability to arrange elements to make something as a whole that is coherent and functional, and able to re-recognise elements into new patterns and structures. Sub-categories of this creative competence include generalising (*generating*), *planning (planning*), and producing (*producing*). These include *hypothesising*, *designing*, and *constructing*. Examples of creative competence in Arabic language learning are *kitabah ibda'iyah* or making creative writing such as poetry, short stories, and *mahfudzot* or wise words (Ainin, 2023). The C6 (Creating) level had the most frequent HOTS representations, particularly in chapters on hobbies and food. Tasks asked students to compose texts or design plans. While this aligns with creative competencies, the quality varied: some tasks lacked open-endedness or meaningful context, making them mechanical rather than authentically generative. As Alrabai (2020) noted in his study on HOTS in Arabic language education, creativity requires not only freedom but also relevance and complexity, features not consistently present in the textbook items.

The C6-level exercise in the Arabic language textbook for grade X MA, published by Quadra in 2022, represents the highest stage in Bloom's Taxonomy, as it requires students to create original outputs by integrating their knowledge and language skills. In this task, learners are asked to compose questions using various interrogative tools such as أ(الهمزة), هل, ما, أي, كيف, أين, أنى, متى, أيان and من, which encourages them to apply grammatical rules creatively in forming meaningful inquiries. Furthermore, students are instructed to write a dialogue and a short reading text related to greetings and introductions, which allows them to construct authentic communicative exchanges in Arabic. The exercise also requires writing in Arabic and providing translations into

Indonesian, fostering bilingual competence and reinforcing comprehension. Overall, this task reflects the essence of the C6 category—creation—as students are not merely recalling or analysing, but actively producing, contextualising, and transforming linguistic knowledge into coherent written and spoken forms.

HOTS Integration in Grade 10 Arabic Practice Questions

The analysis of the Arabic language textbook for Grade 10 revealed that the incorporation of higher-order thinking skills (HOTS) was relatively limited. From a total of 83 practice questions (tadribat lughawiyah), only 17 items (20.5%) reflected elements of HOTS as defined by Bloom's revised taxonomy, namely, the cognitive levels of C4 (Analysing), C5 (Evaluating), and C6 (Creating). The remaining 66 items (79.5%) were categorised as lower-order thinking skills (LOTS), primarily focused on remembering, understanding, and applying. These LOTS questions often involved basic vocabulary recall, grammatical transformations, and direct translation exercises. In contrast, HOTS-based questions required students to analyse linguistic patterns, evaluate text content, or generate original responses.

These findings raise further questions about the alignment between the textbook's instructional content and the goals of the Merdeka Curriculum, which emphasises the development of higher-order thinking skills. Therefore, a deeper interpretation is needed to evaluate how such patterns might affect the cultivation of students' critical and analytical abilities. Investigating the extent to which practice questions in textbooks reflect Higher-Order Thinking Skills (HOTS) has become a recognised approach for evaluating the instructional quality of educational materials. Bano (2023), in her analysis of English textbooks in Pakistan, observed that the majority of tasks were concentrated on lower-order thinking (LOTS), with HOTS-based tasks being significantly underrepresented. She emphasised the importance of using Bloom's revised taxonomy as a systematic tool to assess cognitive depth, aligning textbook content with national competency-based curricula.

This concern is echoed by Zubaidah et al (2022), who analysed Indonesian language textbooks and found a mismatch between the curriculum's emphasis on critical thinking and the actual presence of HOTS-based questions. Their findings highlight a gap between curriculum intent and textbook implementation. Moreover, v, and evaluate information. In foreign language education, HOTS is vital for strengthening both productive communication and intercultural competence. Taken together, these studies reinforce the academic and policy relevance of the present research, particularly in filling the gap in textbook evaluation studies in the field of Arabic language education. This domain remains underexplored despite its growing importance in Indonesian madrasah-based education.

Classification of Practice Questions by Higher-Order Thinking Levels (C4, C5, and C6)

A closer look at the 17 HOTS-oriented questions revealed an uneven distribution across the cognitive domains. Specifically, nine questions (52.9%) were classified under C4 (Analysing), typically asking students to compare texts, identify linguistic similarities and differences, or dissect sentence structures. Another six questions (35.3%) corresponded to C5 (Evaluating), where students were expected to make judgments about argument quality, text coherence, or appropriate language use. Only two items (11.8%) represented the C6 (Creating) domain, which involved tasks such as composing short narratives or designing dialogues using specific language rules. This distribution highlights a strong emphasis on analytical skills, while evaluative and especially creative thinking were underrepresented.

The observed imbalance in the distribution of HOTS items, favouring analytical tasks (C4) over evaluative (C5) and creative (C6) tasks, warrants further discussion. This

issue highlights a potential gap in encouraging comprehensive critical thinking development, which will be further explored in the discussion section. Identifying the cognitive level of questions in textbooks using Bloom's revised taxonomy provides critical insights into the depth and rigour of student learning promoted by educational materials. According to Sari & Pratiwi (2023), an analytical study of Bahasa Indonesia textbooks revealed a disproportionate distribution of higher-order thinking questions, where C4-level questions (Analysing) dominated, while C5 (Evaluating) and C6 (Creating) appeared far less frequently. This trend suggests that while curriculum developers may aim to foster critical and creative thinking, the operationalisation in learning materials remains uneven.

Similarly, Al-Khawaldeh (2021) conducted a quantitative analysis of English language textbooks and concluded that most HOTS questions clustered around the C4 level. The researchers attributed this to the tendency of textbook authors to play it safe by integrating analysis-based questions that are perceived as less complex than creative construction tasks. Their findings emphasised the need for more deliberate inclusion of tasks that promote evaluative judgment and open-ended creation. In the domain of Islamic and Arabic instruction, Alenezi M. (2022) analysed Arabic language exercises used in secondary schools and found a similar pattern: C4 items were the most common, followed by a sharp drop in C5 and C6 tasks. They recommended that curriculum developers employ structured cognitive rubrics to distribute tasks across all HOTS categories better, ensuring a balance between analytical, evaluative, and generative thinking. By referencing these studies, the current research not only identifies the presence of HOTS but also contributes to the field by specifying the exact cognitive level breakdown, thus allowing for more precise curriculum alignment and recommendations for instructional improvement.

4. CONCLUSIONS

This study concludes that the integration of Higher-Order Thinking Skills (HOTS) in the Grade 10 Arabic language textbook published by Quadra in 2022 is present but limited in depth and distribution. Specifically, for the C4 level (Analysing), only 2.4% of the total practice questions (tadribat lughawiyah) engaged students in analytical tasks such as comparing, categorising, or identifying structural elements, and these were concentrated in only a few themes (Chapters 1 to 3), with complete absence in others. At the C5 level (Evaluating), approximately 5.2% of questions encouraged learners to make judgments or justify ideas; however, many lacked scaffolding or failed to prompt evaluative reasoning beyond surface-level choice. In contrast, C6 (Creating) showed the highest HOTS presence at 9.1%, particularly through writing tasks that required students to compose dialogues, persuasive texts, or plans. However, these tasks were often mechanical rather than contextually generative. Collectively, these findings answer the first research objective by showing that while HOTS elements are included, they remain underrepresented overall. Regarding the second research objective, the study reveals an imbalanced cognitive distribution across chapters, with a dominance of LOTS and an uneven emphasis on C4–C6 domains. This suggests that the textbook, though aligned with the Merdeka Curriculum in structure, requires significant enhancement in its cognitive rigour to support critical, evaluative, and creative language development.

progress and accomplishment of this study.

Authors' Contributions

All authors contributed collaboratively to this research. They jointly formulated the research idea, designed the study, conducted data analysis, and interpreted the findings. The manuscript was written collectively, with each author providing critical feedback, revisions, and improvements to the content. All authors have reviewed and approved the final version of the manuscript and take full responsibility for the originality, integrity, and accuracy of the work.

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