

Texts and Tasks in Indonesian Language Textbooks: Do They Support Indonesian Students in the International Reading Literacy Test?

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Abstract

Several international tests on reading literacy consistently showed poor scores for Indonesian students. Textbooks are one of the teaching tools that can contribute to the development of students' reading literacy. However, no research has examined textbooks' capacity to develop students' reading literacy skills, especially those assessed on international tests. The current study investigated the carrying capacity of texts and tasks in Indonesian language textbooks to develop students' reading literacy skills, particularly those evaluated on international tests. The data were obtained from six Indonesian language textbooks used by junior and senior high school students in Indonesia. These textbooks are officially recommended by the government and are widely used in middle schools in Indonesia. The content analysis combined with the performance framework in the International Student Assessment was used to reveal the text and task dimensions of the Indonesian Language textbooks. The results of the study show that in the aspect of text, textbooks have conformity with the international test, but are weak in infographics which are not problematic. Likewise, the underlying contexts of the texts are not evenly distributed. In the task aspect, the dominant cognitive processes are to search for and locate information, but are limited in understanding,

evaluating, and reflecting on the contents of the text. The response format is dominated by essay-type tests that do not adequately account for objective tests. From this, it can be concluded that the texts and tasks of the Indonesian textbooks do not correspond to the texts and tasks of the international reading literacy tests. This study recommends the need for adjustments in establishing guidelines for developing and evaluating textbooks to develop students' reading literacy at the international level.

Keywords: Reading literacy; teaching reading; task factor; textbook; text factor

Introduction

The international reading literacy assessment results show that 15-year-old Indonesian students perform in the low category. The average reading score of Indonesian students in the last assessment of the Program for International Student Assessment (PISA) in 2018 was only 371 (OECD, 2019c). This performance was 116 points lower than the overall average of the 79 participating countries, which achieved a score of 487. Only 0.6% of students ranked as the top performers at Levels 5 and 6, while 51.7% ranked as low achievers at Level 2. Indonesian students also showed a decline in test performance, characterized by a decrease in the average score over the three assessment periods, namely 402 in 2009, 396 in 2012, and 397 in 2015 (OECD, 2019a). These assessment results cause concern, as reading literacy describes the acquisition of the key knowledge and skills students need to actively participate in future society.

Student achievement in reading literacy is influenced by various factors, such as gender, socio-economic status, number of family members, individual characteristics, self-esteem, pressure to achieve, exertion and perseverance in reading activities, and frequency of computer use (Linnakyla et al., 2004). Student activities in the classroom after reading, reading activities outside of school, time spent on homework, attitudes towards reading activities, activities during learning, and school climate determine differences in reading achievement at school (Papanastasiou, 2008). External factors such as the language of instruction, socio-economic conditions, parental commitment, parental education, teacher qualifications and skills, availability of resources, and class size also contribute to students' poor reading literacy (Naidoo et al., 2014). Students, school (Chen et al., 2021), and other social factors can significantly predict reading achievement.

The difficulty level of the international reading literacy assessment conducted by PISA can be identified based on three factors: the reader, the text, and the task (OECD, 2019b). Motivation, prior knowledge, and cognitive abilities are factors attributed to the reader. The complexity level of the text is determined by the text's language and the number of pieces of information contained in the text. PISA consistently uses continuous, noncontinuous, and mixed text formats in the assessment. The test also includes personal, public, educational, and occupational information packaged as a descriptive, narrative, exposition, argumentative, instruction, or transaction text. The task relates to the item's complexity, which is determined based on the form of the cognitive process involved. In the PISA 2018 assessment, the cognitive processes measured included (1) finding information: accessing and retrieving information in a text, searching, and selecting relevant text; (2) understanding: presenting literal information, integrating, and generating inferences; and (3) evaluating and reflecting: assessing quality and credibility, reflecting on content and form, recognizing and dealing with conflicts. Test takers can answer test items through multiple-choice and open-constructed responses (OECD, 2019b).

Textbooks are learning tools that can serve as a medium for improving students' reading competence and achieving better results on international tests. Through textbook-based learning activities, students practice dealing with various texts and their complexities and responding in

various formats. Anwas et al. (2022) found a significant and positive relationship between early-grade elementary school students' basic literacy skills (reading, writing, and arithmetic) and the textbooks' quality. Teachers' choice of textbooks significantly impacts student achievement. Textbook selection is essential to student success in achieving educational goals (van den Ham & Heinze, 2018). Other research confirms that textbook content correlates strongly with student performance on items in the Trend in Mathematics and Science Survey (TIMSS) (Törnroos, 2005). These earlier studies have confirmed the important role of textbooks in helping students obtain better learning outcomes. However, no studies have been conducted on textbooks' role in developing students' reading literacy, mainly Indonesian Language textbooks.

The vital role of textbooks in supporting student achievement is in line with the intensity of their use among teachers and students. About 92% of students reported spending three hours or less reading textbooks (Berry et al., 2010). Culver & Hutchens (2021) study shows that students who read textbooks usually achieve 63% in almost all subjects. The results of student interactions with textbooks were revealed through research by French et al. (2015), who found that students who frequently used textbooks for study achieved better final grades than those who used textbooks occasionally. Previous research highlights the high intensity of textbook use among teachers and students. These studies also prove that the use of textbooks can lead to better learning outcomes. Therefore, this study hypothesized that textbooks could encourage students to achieve better reading literacy if the content of the textbooks is correlated with the items tested on international tests.

Past studies have confirmed the gap between textbooks and the PISA reading test. Anagnostopoulou et al. (2012) also found a gap between the visual images in the PISA assessment items and the visual images in school textbooks. This condition contributed to students' low achievement in the PISA survey. Gaps were also found in the message delivery mode between the school-based tests and the PISA test, where the PISA test items utilize the visual mode to convey messages, while the school-based tests in Greece prioritize the linguistic mode (Anagnostopoulou et al., 2013). These earlier studies form the basis for a comprehensive examination of Indonesian language textbooks' content to demonstrate their capacity to help students succeed in international reading literacy tests.

The literature review shows that no textbook research has focused on examining the suitability of textbook substance with international reading literacy test items. Existing studies instead focus on accuracy, the adoption process, and the textbook publishing industry (Juban & Lopez, 2013). Other studies focus on multicultural values of discourse in textbooks (Sultan et al., 2020), readability of textbooks (Bansiong, 2019; Morales, 2019; Srisunakruea & Chumworatayee, 2019), gender roles, academic achievement, and socio-economics status of the level of readability of textbooks (Sultan & Rapi, et al., 2020), pedagogic aspects of textbooks (Mena, 2019), textbook exercises and examples (Glasnovic Gracin, 2018), gender issues raised in textbooks (Channa et al., 2017; Moreno-Fernández et al., 2019), the quality of textbook content (Asakereh et al., 2019), potential use of digital sources for reading material (Medley-Rath, 2018), and textbook and student performance in online courses (Peng, 2015).

Unlike previous studies, the current study attempted to reveal the capacity of Indonesian Language textbooks to prepare Indonesian students to face the PISA international reading literacy test. This study focused on finding the texts and tasks from the textbooks suitable with the characteristics of the PISA international reading test items. Specifically, this study analyzed the text format, contexts underlying the texts, cognitive processes accommodated by the texts and the task response format in the textbooks. Texts and tasks are two aspects that build the framework

for the PISA reading literacy test items. The texts in the PISA reading literacy test include linguistic representations accompanied by visual displays such as diagrams, pictures, maps, tables, graphs, and comic strips (OECD, 2019b). The texts are used as the task stimulus. In the PISA reading literacy test, test takers are challenged to find information based on text through cognitive processes that include locating, understanding, evaluating, and reflecting information.

The focuses of the present study were formulated into two questions as follows:

- How can Indonesian Language textbooks support students' reading literacy achievement on international reading literacy tests, represented by text format and context?
- How can Indonesian Language textbooks support students' reading literacy achievement on international reading literacy tests, represented through cognitive processes and response format?.

Research method

Content analysis was used in this study. Reviewing a wide range of documents to produce a systematic and objective analysis is a characteristic of qualitative research that uses content analysis (Krippendorff, 2013). This study examined the Indonesian language textbooks used at all levels of junior and senior high schools in Indonesia. Therefore, there were six textbooks used as research data sources. The six textbooks consist of Indonesian language textbooks used in grades seven, eight and nine in junior high school (one textbook each) and Indonesian language textbooks used in grades ten, eleven and twelfth in senior high school (one textbook each). Textbooks selected as data sources are textbooks officially recommended by the government, published by the Ministry of Education and Culture. These textbooks are student books prepared by the Indonesian government in the context of implementing the 2013 Curriculum. The textbooks were published in 2017 and 2018 as revised and second printing editions.

The data collection procedures consisted of: (1) selecting and determining the textbooks used as data sources; (2) reading the texts and tasks contained in the textbooks carefully, thoroughly, and repeatedly; and (3) placing texts and tasks in one category (Table 1). Based on Table 1, each text book discourse was examined based on its text format, discourse context, cognitive level of questions, and response format while referring to the PISA assessment framework (OECD, 2019b). The characteristics of the texts in each book were examined, followed by determining the text format and context. We also sorted texts based on the number of texts displayed in one presentation and examine the infographics. Texts that have infographics were analyzed further. The infographics for each text were then grouped into two categories, problematic and non-problematic. Data collection on the task dimension was carried out by examining all items used to respond to text. In the first stage, each question item was classified based on the cognitive process it tests, using the item's operational verbs, such as identifying, explaining, concluding, or assessing. Furthermore, the question items were grouped based on the response format. To ensure the accuracy and validity of the data, the selected data was checked and read repeatedly by researchers who are experts in this field.

Table 1. Format of the data collection instrument

Dimension	Category	Subcategory
Text Format	Text format based on the number of texts	<ul style="list-style-type: none"> • Single • Single + infographics • Multiple • Multiple + infographics

	Text format based on the information organization	<ul style="list-style-type: none"> • Continuous • Non-continuous • Mixed
	The infographics characteristics	<ul style="list-style-type: none"> • Non-problematic • Problematic
Text context	<ul style="list-style-type: none"> • Personal • Public • Education • Work Professional 	
Cognitive level of the task	Locating Information	<ul style="list-style-type: none"> • Accessing and retrieving information within a text • Searching and selecting relevant text
	Understanding	<ul style="list-style-type: none"> • Representing literal information • Integrating and generating inferences
	Evaluating and reflecting	<ul style="list-style-type: none"> • Assessing quality and credibility • Reflecting on content and form • Detecting and dealing with conflict
Response Format of the Task	<ul style="list-style-type: none"> • Multiple choice • Complex multiple choice • True/False • Matching • Short Answer • Agree/Disagree + Reason • Essay 	

Data analysis was descriptive and quantitative. Data analysis began with sorting and calculating the frequency of text and task dimensions from each category/subcategory. Each type of category found was given the number 1. Then, all text and task categories and sub-categories in textbooks were accumulated based on the junior and senior high school levels and presented in frequency and percentage form. Finally, the analysis results were presented in tables and descriptive presentations.

Results

Text format in Indonesian language textbooks

There are two categories of text formats on the PISA international reading literacy test: single and multiple. Multiple text can be a combination of two texts or a text that is equipped with infographics. Text formats in this study were also grouped based on the organization of information, namely continuous texts, non-continuous texts, and mixed texts. The use of challenging texts helps develop students' thinking capacity in reading. The analysis of text formats in six Indonesian Language textbooks is presented in Table 2.

Table 2. Text Format based on the number of texts

Text Format	Junior High		Senior High	
	f	%	f	%
Single text	46	49.50	24	31.17
Single text + Infographics	23	24.70	34	44.16
Multiple text	13	14.00	9	11.69
Multiple text + Infographics	11	11.80	10	12.99

Table 2 shows that the texts in Indonesian language textbooks have a variety of formats, namely single text, single text with infographics, multiple text, and multiple text with infographics. Based on a comparison between formats, single text (single text and single text accompanied by infographics) is dominantly used in textbooks with a percentage of 74.20 in junior high school and 75.33 in senior high school. The frequency of infographics to supplement texts appears especially high in the discourses used in senior high school textbooks.

Table 3. Text Format based on information organization.

Text Format	Junior High		Senior High	
	f	%	f	%
Continuous texts	58	62.37	33	42.86
Non-continuous texts	10	10.75	0	0.00
Mixed texts	25	26.88	44	57.14

Table 3 shows the use of texts based on their organization in Indonesian language textbooks. Most texts used in junior high schools are in the form of continuous texts, whereas the majority of texts in senior high schools are mixed texts. A striking finding is that textbooks in senior high schools do not contain non-continuous texts. Continuous text prioritizes presenting information through exposure, while non-continuous text focuses on conveying information through visualization. The lack of use of non-continuous texts, as in senior high school textbooks, can lead to students being unprepared for non-continuous texts on international reading literacy tests.

The use of problematic infographics will stimulate students' high order thinking skills. According to textbook authors, problematic infographics help develop question items that prompt test takers to associate discourse content with the infographic. Infographics can be categorized into two, namely problematic and non-problematic.

Table 4. Infographics in Indonesian language textbooks

Infographics	Junior High		Senior High	
	f	%	f	%
Non-problematic	25	73.53	41	93.18
Problematic	9	26.47	3	6.82

Based on Table 4, it is revealed that the infographics used to complement the discourse in Indonesian textbooks are generally non-problematic. This condition can be interpreted that infographics do not support the texts and do not become an integral part of the texts to facilitate reading comprehension. Infographics used in textbooks are usually only a complement that fulfills the illustrative function and in no way providing additional information to the textbook discourse.

One example of the use of supporting elements in textbook discourse in junior high schools is shown in Figure 1. The image that follows the discourse is only illustrative. The presence of the image does not add to the wealth of information provided by the discourse. Furthermore, the illustration does not become more problematic information and provokes the emergence of questions that can be asked to test takers. The presence of images as to accompany a text is optional. The questions in the reading exercise also have nothing to do with the picture. In contrast to the texts used in international tests, images and other supporting elements in discourse are complementary, where the information contained in these images is problematic. Reading questions are also associated with the picture or illustration.

Laporan Percobaan Membuat Pelangi

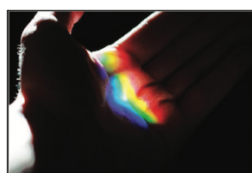
Dengan eksperimen "Membuat Pelangi", kamu akan memahami proses pelangi. Sebab, kamu akan membuat pelangi sendiri.

Pelangi sangat indah dan menakjubkan untuk dilihat. Melihat tujuh garis warna lengkung di langit membuat anak-anak takjub. Bagaimana pelangi terjadi dan apa penyebabnya? Kamu akan membuat adikmu takjub dengan melakukan percobaan sederhana ini di rumah. Kamu berlatih membuat laporan percobaan.

Bahan

Untuk membuat pelangi, kamu memerlukan bahan-bahan berikut.

- Air



Sumber: <https://www.flickr.com/photos/68134078@N00/117003508>

Translation:

Rainbow Making Experiment Report

With the "Making a Rainbow" experiment you will understand the Rainbow process, because you will make a Rainbow yourself.

Rainbows are very beautiful and amazing to look at. Seeing the seven colored curved lines in the sky amazes the children. How do rainbows occur and what causes them? You will amaze your little sister or brother by doing this simple experiment at home. You practice making an experiment report.

Materials

To make a rainbow, you will need the following materials.

- water

Figure 1. Example of text with image

Contexts underlying texts in Indonesian language textbooks

The context of the discourse is reflected through the information and topics conveyed as a reading stimulus. The context of the discourse can have implications for the difficulty level of the reading stimulus. Discourse with a context that is close to students' lives will be easier to understand than discourse with a context that is foreign to them. Based on the reading stimulus on the PISA international reading literacy test, the discourse contexts of Indonesian language textbooks are grouped into four: personal, public, educational, and work professional. The inter-context comparison mapping is shown in Table 5.

Table 5. Contexts underlying texts in Indonesian language textbooks

Context	Junior High		Senior High	
	f	%	f	%
Personal	30	30.30	40	47.06
Public	60	60.60	31	36.47
Education	9	9.10	8	9.41
Work professional	0	0.00	6	7.06

The analysis shown in Table 5 reveals that private and public contexts dominate the discourses used in Indonesian language textbooks at both junior high and senior high school levels. More than 90% of text contexts in junior high school textbooks and 80% of text contexts at the senior high school level are private and public. In contrast, educational and work professional contexts are rarely found in Indonesian textbooks. A challenging stimulus is needed to stimulate

students' thinking processes and involve students in responding to discourse at a higher level of thinking. Discourse contexts that differ from students' personal and reading experiences will pose a challenge. In addition, contexts that are foreign to students also carry out the function of developing students' insights. The students' knowledge, cognition and information acquisition develops with the increasing intensity of the reading discourse with the presentation of new topics as a stimulus.

Cognitive level of tasks in Indonesian language textbooks

The PISA international reading literacy test was constructed to measure students' proficiency in understanding the overall meaning contained in texts. To measure the carrying capacity of question items in Indonesian language textbooks, cognitive processes are grouped into three levels: seeking and locating information, understanding to integrate and interpret information, and reflecting and evaluating. The results of the cognitive task level analysis in Indonesian language textbooks are shown in Table 6.

Table 6. Cognitive level of tasks in Indonesian language textbooks

Cognitive Processes		Junior High		Senior High	
		f	%	f	%
Locating Information	Accessing and retrieving information within a text	112	39.72	106	44.35
	Searching and selecting relevant text	8	2.84	8	3.35
Understanding	Representing literal information	47	16.67	35	14.64
	Integrating and generating inferences	42	14.89	27	11.30
Evaluating and reflecting	Assessing quality and credibility	11	3.90	14	5.86
	Reflecting on content and form	57	20.21	48	20.08
	Detecting and handling conflict	5	1.77	1	0.42

Table 6 indicates that reading question items in Indonesian language textbooks are distributed based on cognitive processes. Questions that ask students to find information are more dominant than questions to understand, evaluate, and reflect on texts. If accumulated, there are 42.55% reading questions "finding information" in textbooks in junior high school and 47.70% in high school. On the other hand, there were 18.79% "understanding" questions in junior high school and 25.94% in high school. In addition, there were 21.99% "evaluating and reflecting" questions in junior high school and 26.36% in senior high school. Searching for and locating information is categorized into low-level cognitive abilities, integrating and interpreting involve moderate cognitive processes, while reflecting and evaluating involve high-level cognitive processes. Thus, it can be concluded that the questions asked to respond to discourse in Indonesian textbooks are dominated by questions with a low cognitive level, namely seeking and finding information.

Response format to tasks in Indonesian language textbooks

Students' responses to the reading literacy test questions measure the level of students' reading comprehension. Adapting the response format used in the PISA international reading literacy test, an analysis of Indonesian language textbooks anticipates various possible questions that may arise in the textbooks. The response format to tasks in the Indonesian language textbooks are shown in Table 7.

Table 7. Response format to tasks in Indonesian language textbooks

Format Response	Junior High		Senior High	
	f	%	f	%
essay	212	75.18	215	89.96
short-answer question	52	18.44	3	1.26
true/false	15	5.32	19	7.95
agree/disagree + reason	3	1.06	2	0.84
multiple choice	0	0.00	0	0.00
complex multiple choice	0	0.00	0	0.00
matching (question answer relation)	0	0.00	0	0.00

The response format analysis shows that the Indonesian language textbooks slightly represent the form of the questions measured in the PISA international reading test. The forms of questions used are not evenly distributed. The format of responses to readings in SMP and SMA textbooks is dominated by essay questions, followed by true/false questions and short-answer questions. In contrast, multiple choice, complex multiple choice, and matching questions were not found in the textbooks at all. This finding indicates that students have little or no experience with the various response formats used in the PISA international reading literacy test.

Discussion

The research results suggest that the discourse in Indonesian language textbooks in junior and senior high schools has been developed in various formats: single text, single text and infographics, multiple texts, and multiple texts and infographics. Based on the information presentation model, Indonesian language textbooks contain continuous, non-continuous, and mixed texts. Thus, based on the diversity of text formats, it can be said that the discourse in Indonesian textbooks has supported the reading literacy of Indonesian students at the international test level. However, a fundamental weakness was found in the infographics used in the texts. In general, infographics found in the Indonesian Language textbooks are not problematic, so they cannot enrich discourse information. The infographics are only complementary; they tend to only function as accessories. Based on the context, the discourse in Indonesian language textbooks has not accommodated the entire underlying context of the texts on the international reading literacy test. Education and work are contexts that are rarely found in these textbooks. Professional contexts are not even found in junior high school textbooks. The cognitive level of reading questions in Indonesian language textbooks is not always aligned with the cognitive level of reading questions in the PISA international test, marked by the predominance of low-level questions “seeking and finding information”. The response format for tasks in the Indonesian language textbooks has not been able to support students’ reading literacy required at the international test level, as the questions are dominated by subjective questions in the form of essays, while objective questions are very rare. Based on these results, in general, texts and tasks in Indonesian textbooks cannot support Indonesian students’ reading literacy skills required at the international test level.

This study’s first finding demonstrates the strengths of the Indonesian Language textbooks in terms of the diversity of text formats and weaknesses in infographic functions. Infographics in the Indonesian Language textbooks have not been used to communicate scientific concepts and explanations. The infographic content does not complement the text content, so its presence can be omitted. High textual complexity in reading comprehension tests will trigger challenging

questions (Anggia & Habók, 2023). It is also important to note that infographics in the Indonesian language textbooks are not properly used as a source of problems with text questions that require student responses. Meanwhile, in the international reading literacy test, the infographics displayed are not just complementary or merely function as accessories, but are used to elicit student responses, in which some questions are asked based on the infographics.

The findings suggesting that infographics have not supported Indonesian students in the international reading literacy test are in line with Anagnostopoulou et al. (2012), who found that infographics in Greek textbooks used visual images that could not communicate scientific information. Infographics in the Indonesian textbooks do not have a significant role and are only used to assist in answering low-level questions. Instead, the PISA test shows that infographics may bridge the gap between everyday life and scientific knowledge and trigger questions at three cognitive levels: seeking and finding information, understanding information, and evaluating and reflecting on information (Anagnostopoulou et al., 2012). In short, this study's findings confirm that Indonesian Language textbooks use linguistic mode instead of the visual mode in conveying information.

The discrepancy between modes of presenting the text content in the textbooks and international reading tests, such as PISA, is a gap that make it difficult for Indonesian students to succeed in international tests. This discrepancy can potentially be one of the factors that explains the low level of student achievement on the PISA test (Hatzinikita et al., 2008). It was confirmed by the 2018 PISA test results which revealed that one of the most difficult questions in PISA could only be answered by one in 30 students in Indonesia. These questions refer to those that use infographics with maps (Kemdikbud, 2019). The finding is consistent with the results of research by Anagnostopoulou et al. (2013) who also found disparities between assessment discourse in Greek and PISA regarding linguistic and visual messages. Therefore, this study recommends a shift in the practice of textbook writing and evaluation, particularly regarding the use of visual messages to develop students' reading literacy, which is required at the international test level. Textbooks need to be developed to prioritize problematic infographic presentations, so that the questions that arise can reach three cognitive levels (low, medium, high). Meanwhile, the feasibility assessment of textbooks needs to consider the problematic content of visual/infographic messages.

The current study's second finding indicates that Indonesian language textbooks' discourse context is not evenly distributed. The lack of educational and work contexts can make it difficult for students to deal with textual contexts in international reading literacy tests. OECD (2019b) places the context of the text as a difficulty factor in developing tests. Students' broad reading experience with various contexts can familiarize them with various texts. This experience also provides prior knowledge for students. In reading texts, students will connect their prior experience of reading textbooks with the information they are reading and develop positive attitudes towards the texts (Keskin, 2014). This statement is reinforced by research by Kaivan et al. (2015) who found that students obtained high scores in reading comprehension tests because they had high prior knowledge of topics and linguistic knowledge. Through textbooks that can accommodate various contexts, students get the opportunity to practice reading various texts, preparing them to meet the demands of reading literacy text standards (Brugar & Roberts, 2014). Besides, reading in different contexts equip students with prior and linguistic knowledge. In this regard, this study hypothesizes the need to incorporate a variety of contexts in Indonesian Language textbook discourse to enrich students' reading experiences. Textbook authors and policy makers need to ensure an even distribution of textbook discourse contexts.

Based on the cognitive task level, it was revealed that locating information is more dominant than understanding, evaluating, and reflecting. This finding correlates with Indonesian students' international test results, where only 0.6% of Indonesian students were at levels 5 and 6, while 51.7% were below level 2 (OECD, 2019c). The situation where many textbooks are dominated by tasks that facilitate the ability to locate information can be interpreted as being more accustomed to practicing low-level cognitive skills. In contrast, the results of the international PISA test indicate that countries that perform better in reading, such as Norway, train the ability to evaluate and reflect on information up to 37%. In comparison, the ability to locate information contributes only as much as 6% to reading comprehension learning activities, manifested through teacher questions (Magnusson, 2022). It suggests that the mastery of high-level cognitive processes is related to the process of learning to read. Textbooks dominated by exercises at low cognitive levels are identified as one of the factors contributing to Indonesian students' poor performance in the international reading literacy test.

The research results related to the task cognitive level in Indonesian language textbooks are in line with the findings of Glasnovic Gracin (2018), who also found that argumentation, interpretation, and reflection activities are underrepresented in Mathematics textbooks. In the PISA international literacy test, the percentage of evaluating and reflecting questions reached 30%, while the questions of locating information were only 25% (OECD, 2019b). The problem and the challenge of writing textbooks is how to facilitate students' high-level cognitive processes, especially the ability to assess and reflect. Such a situation exists not only in Indonesia, but also in developed countries such as the Netherlands, where textbooks still contain 30% of tasks that train low-level cognitive processes (Krause et al., 2022). For this reason, this research has policy implications for cross-country textbook writers. This research suggests that students are given the space to reflect on their textbooks, assess weaknesses, point out strengths, assess content quality, reflect on textual content, relate it to other texts and broader reading experiences, and deal with differences in information. Reading activities that encourage students to think at a higher cognitive level are necessary in a scientific context, as these activities can help students develop their future career potential (Krause et al., 2022).

The response format analysis revealed that the textbooks relied too heavily on essay questions to measure students' reading comprehension levels. Short-answer questions are the second alternative, especially in junior high schools. True/false and agree/disagree response formats appear with very low frequency. In contrast, these textbooks did not find response formats in the form of multiple choice, complex multiple choice, and short-answer questions. One possible explanation identified for this situation is that the authors of the textbooks put forward to explore responses in the form of long explanations, which are only suitable for measuring writing competence (OECD, 2019b). Another factor relates to efficiency in item construction. The dominant essay questions in these textbooks can be constructed more easily than with other response formats.

The absence or lack of response format types in these textbooks can cause problems for students. Because the answer formats were less varied, the students had less experience taking the international test, which requires different responses than the essay questions. This factor may also contribute to Indonesian students' reading performance on international tests. The PISA report shows that response format significantly impacts test-taker performance (OECD, 2019b). Therefore, variations in text response formats are required to accommodate students' characteristics, including their different ranges of abilities.

Multiple choice and complex multiple-choice questions are response formats that are not used at all in the Indonesian textbooks. Past studies have confirmed that these response formats can be used for learning and assessment purposes (Bailey et al., 2012). Haataja et al., (2023) reported that multiple choice questions can be used to measure both low and high cognitive processes. Tests in Finland can accommodate up to 40% of high-level cognitive processing. Multiple choice effectively leads students to think. They will facilitate learning if accompanied by feedback (Butler, 2018). Research shows that multiple choice tests can even be used for specific purposes (Riener & Wagner, 2018), which confirms that men are more interested in solving multiple choice questions than women. However, these advantages are not utilized by textbooks in Indonesia to prepare students for multiple choice responses.

Question-answer and short-answer questions are two other forms of response format which are not utilized in the Indonesian Language textbooks. Previous research in science reading shows that students become more strategic, confident, and able to understand expository texts because they are used to practicing using the question-answer response format (Kinniburgh & Shaw, 2009). Meanwhile, short-answer questions have been proven to measure various situations and levels of reading comprehension (Weigle et al., 2013). Therefore, this study emphasizes the importance of incorporating various response formats in textbooks to familiarize students with formats that can help them face international reading literacy tests. A variety of response formats can also accommodate the diversity of student characteristics and abilities as well as improve students' reading comprehension.

Based on the findings described about texts and tasks in Indonesian textbooks, changes are needed in writing practices and textbook assessment guidelines. As international tests are seen as the standard measure of students' competency readiness for future challenges, this study recommends the need for alignment in the creation of textbooks and assessment guidelines with international standards for reading literacy tests. Textbook authors need to make adjustments when developing textbook texts and tasks. Textbooks must be able to accommodate texts with demanding formats and contexts in different areas of life and tasks with a high cognitive level and different response formats. Policy makers need to create a framework for textbook writing (Surma et al., 2018) to support students' reading literacy achievement. The framework must highlight texts and tasks that textbook authors can refer to. The indicators used to assess the adequacy of textbooks need to be changed to adapt to the need to improve students' reading skills. Regulatory bodies can regulate textbooks according to the requirements of the latest curriculum, students' cognitive level, abilities, and their use in the classroom (Milligan et al., 2017). Evaluation of the textbooks in circulation is required, as was done by Saudi Arabia, which evaluated textbooks in order to improve the quality of education after the textbook assessment was carried out (Alharbi, 2015).

Conclusion

The study results show a gap between the texts and tasks in Indonesian textbooks and the texts and tasks assessed in the international reading literacy test. Textbooks circulating in junior and senior high schools have not fully supported students' ability to achieve reading literacy competence as tested in international tests. The textbook response format has shown relevance and conformity with that of international tests but requires fundamental development in using problematic infographics. The presentation of information in Indonesian language textbooks relies on the linguistic aspect. It ignores the visual aspect, in contrast to international reading literacy tests which utilize both to convey text information and develop text responses. The text contexts are not evenly distributed, so the knowledge contained in the texts as future information for

students is not fully represented in the textbooks. The tasks in the textbooks are dominated by tasks with a low cognitive level, so that students do not have the opportunity to practice higher order thinking skills. Finally, the format of the task response in the textbooks is not varied, so they cannot accommodate the task response in the international reading literacy test. The format responses in the textbooks cannot completely represent students' characteristics and various ability levels. Based on these findings, it can be identified that textbooks are one of the factors contributing to the unsatisfactory achievement of Indonesian students in the international reading literacy test. Even though this research was conducted in the Indonesian context, we believe the findings are relevant for developing students' literacy competence across countries.

The findings of this study also provide benefits in supporting the practice and policy of writing textbooks that should support students' reading literacy achievement. At a practical level, we recommend developing a framework for writing a textbook. Likewise, textbook assessment indicators need to be developed specifically to accommodate students' characteristics and reading literacy represented through texts and tasks. Teachers can also use the results of this study in evaluating and selecting textbooks to be used in class to facilitate students' reading process.

The present study used textbooks recommended and published by the Indonesian government for students in junior and senior high schools. Further research must explore textbooks in circulation and used as learning resources in elementary schools. In this study, only the PISA reading literacy test was used as a benchmark for reading literacy testing. In the future, the PIRLS framework must also be considered so that readers can get a comprehensive insight on reading literacy tests. The carrying capacity of textbooks to help students attain scientific literacy and numeracy is a topic that needs to be explored in the future. Finally, to obtain a comprehensive picture of the carrying capacity of learning practices towards attaining reading literacy, it is also necessary to examine the reading activities in the classroom carried out by teachers, especially concerning students' success in international tests.

Declaration of conflicting interest

The author declares that there is no conflict of interest in this work.

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