

Merdeka Curriculum Better than K13 Curriculum? (Comparative Analysis of Merdeka Curriculum Mathematics Textbooks with the K13 Curriculum)

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Abstract

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The latest textbooks from the Merdeka curriculum are only available for the first year, namely 2022 for the first level. However, many people still doubt its effectiveness because the Merdeka curriculum is still in the socialization period. This study wants to dig deeper into the latest curriculum textbooks compared to the previous curriculum. This study was conducted using the comparative method of primary data. The K13 and the Merdeka Curriculum Textbooks were analyzed using textbook standards from the BSNP, which consisted of 4 aspects: Material Content, Material Presentation, Language, and Graphical elements. Then, do the scoring to measure suitability. The study results show that the Merdeka Curriculum textbooks get a higher score than the K13 textbooks as a whole and in every assessment aspect

INTRODUCTION

Education as a measure of a country's progress means that every country continuously updates its education curriculum, including Indonesia. KTSP, K13, and Merdeka curricula are already the newest ones. Textbooks published by the government as the primary key in the teaching and learning process must be continuously reviewed to ensure they progress and the results are maximized.

Nowadays, even though learning media is widely available (including internet network technology), textbooks are still the most critical component in learning. It could even be said that textbooks are the basic foundation that must be present in the learning process so that the main learning objectives are more easily implemented with textbooks as the leading guide. In line with the results of Ratna's research, the effectiveness of textbooks on students' ability to master teaching material and the power of textbooks to help teachers teach material to students is excellent.

Suppose you compare a textbook to a glass filled with water ready to be given to students who need the water. This water will be mixed with the water filler and given to students, which can be healthy or harmful. Considering that textbooks are the main thing that will be absorbed, it is a burden to be adequately prepared per existing basic principles

to provide maximum results. Minister of National Education Regulation number 2 of 2008 states that textbooks are mandatory handbooks in primary, secondary, and tertiary educational institutions. The curriculum and national education standards must prepare this textbook.

The dynamics of education in Indonesia have changed with every change in cabinet in the last 15 years. The latest educational trends are continually improving the curriculum implemented. Of course, the assumption is that the newest curriculum is more effective than the previous curriculum in creating a better educational environment. Along with these changes, textbooks also experience dynamics that align with the implemented curriculum.

It is still fresh in memory that some of the distinctive characteristics of the previous curriculum by the presentation of the Deputy Minister of Education in 2014, namely K13, which, among other things, focused on learning outcomes and learning activities aimed at developing attitudes and character. What can be seen in the preparation of the textbook is that the learning materials are arranged in such a way as to create learning that is integrated to form characters that are by the Pancasila ideology.

The Merdeka Curriculum is the latest curriculum launched by the Minister of Education and Technology in February 2022. According to the information on the Ministry of Education and Culture's main page, this curriculum focuses on improving the quality of human resources. Hopefully, this curriculum will provide efforts to answer future challenges and new steps in the teaching and learning process that encourage students to be more independent in thinking, acting, and asking questions. Several schools have implemented this curriculum for the earliest level since the odd semester of the 2022/2023 academic year. This is because the textbooks provided are new for the initial group of each level. The following classes will begin to be accessible each time the new school year approaches. Therefore, advanced levels still use K13 as a reference for their curriculum.

Judging from the characteristics, of course, the textbooks are structured differently. Reporting from the kejarcita.com page, teachers face several obstacles when becoming facilitators of the Merdeka curriculum. These include lack of experience with learning freedom, limited references and access to education, time management, and adequate skills. The limitations of contacts, which are none other than textbooks, are considered inadequate to support the expected learning independence. Using K13 curriculum textbooks or even KTSP (2006 curriculum) to teach the Independent Curriculum is not wise, considering that the general competency targets differ.

In addition, several subjects are considered boring for most students, including mathematics. When the issue of Mathematics has been printed as a scourge for students, supported by textbooks that the teacher finds inadequate, this is a challenge. To answer this problem, the author wants to examine mathematics textbooks at the junior high school level, both mathematics textbooks for the K13 curriculum and Merdeka curricula. The

author hopes to find essential points that must be maintained, that must be corrected, or even that must be eliminated from the latest textbooks to improve textbooks that the Merdeka curriculum has not published.

So far, no similar research has compared textbooks between the two curricula. A study by Baqiya (2019) compared Indonesian readers with Singaporean texts in terms of content structure and the cognitive level of practice questions, resulting in the result that the Indonesian books were richer in material, but the Singaporean books were richer in enrichment questions. Kaerudin (2021) also compared the K13 textbook with the Cambridge curriculum textbook, concluding that the completeness of the material content of both books was the same. Still, the presentation of the layout of the Cambridge book material was more varied (not monotonous).

BSNP (National Education Standards Agency) provides standards related to textbooks, which consist of 4 aspects: appropriateness of material content, suitability of secular presentation, decency of language, and propriety of graphics. To present complete comparative data, the author will carry out an analysis of several things: appropriateness of material content, appropriateness of presentation of material, suitability of language, and appropriateness of graphics.

METHOD

Researchers carry out several parts of the research process, including determining the approach and type of research, data source, data collection technique, and data analysis techniques.

1. Approaches and Types of Research

The approach used is a descriptive qualitative approach with library research.

2. Data source

The primary data source was taken from mathematics textbooks provided by the Ministry of Education and Technology for the K13 curriculum and the Merdeka curriculum for class VII at the junior high school level and equivalent as the primary reference for this research. Meanwhile, secondary data sources come from books, journals, and notes by the title above, emphasizing textbooks.

3. Data collection technique

The documentation method is used in this research as a data collection method, namely by collecting existing data adapted to the research focus in books, journals, scientific notes, and documents. In this case, the author collects scientific record data appropriate to this research.

4. Data analysis technique

The data analysis technique used is content analysis, namely analyzing and reviewing the content of a text based on a particular theory and then comparing the two research objects to conclude as a result of the research. In this case, the comparative analysis of class VII mathematics textbooks published by the government for the K13

curriculum with the Independent Curriculum will be examined in the aspects of (1) Content of Material, (2) Presentation of Material, (3) Language, and (4) Graphics.

RESULTS

The researcher scored the two textbooks, which were compared by paying attention to the aspects and indicators for each element using a scale of 1-10 to widen the differences so that the results could be more measurable. Fadli (2017) mentions the four aspects of appropriateness: appropriateness of material content, suitability of material presentation, decency of language, and appropriateness of graphics. These four elements can be seen as follows:

1. Contents of the material

For the appropriateness aspect of the material content, six indicators are used to see the appropriateness of the textbook material content. The six indicators are 1) Conformity of material with Core Competencies (KI) and Basic Competencies (KD), 2) Accuracy of Material, 3) Update of Material, 4) Cultural Conformity, 5) Training and Evaluation, and 6) Enrichment.

2. Presentation of material

For the feasibility aspect of presenting material, four indicators can be used to see the feasibility of presenting textbook material. The four indicators are 1) Presentation Technique, 2) Presentation Support, 3) Strategy for presenting learning material, and 4) Coherence and sequence of thought flow.

3. Language

For the language suitability aspect, four indicators can be used. The four indicators are 1) Accuracy, 2) Communicativeness, 3) Conformity to language rules, and 4) Suitability for student development.

4. Graphic

For the feasibility aspect of graphics, three indicators must be considered, namely 1) Book size, 2) Book design, and 3) Book content design.

Below are presented the scoring results from the study of each indicator:

Aspect	Indicator	K13 Cur.	Merdeka Cur.
Material Contents	Material compatibility with KI and KD	10.00	10.00
	Accuracy of Material	9.00	10.00
	Update of Material	10.00	10.00
	Cultural Fit	6.00	10.00
	Practice and Evaluation	8.00	8.00
	Enrichment	9.00	9.00
	Average	8.67	9.50
Presentation of Material	Presentation Techniques	9.00	10.00

	Presentation Support	9.00	10.00
	Learning Material Presentation Strategy	9.00	9.00
	Coherence and Sequence of Thought Flow	10.00	10.00
	Average	9.25	9.75
Language	Accuracy	10.00	10.00
	Communicative	9.00	10.00
	Conformity to Language Rules	9.00	10.00
	Student Developmental Appropriateness	9.00	9.00
	Average	9.25	9.75
Graphic	Book Size	10.00	10.00
	Book Design	8.00	9.00
	Book Content Design	7.00	8.00
	Average	8.33	9.00
Overall average		8.88	9.53

DISCUSSION

The first aspect studied was the content aspect of the material. Indicators of material suitability with KI (Core Competencies) and KD (Basic Competencies) or Learning Outcomes in terms of the Merdeka curriculum. In this case, the two books being compared received the maximum score by the CP, considering that the state has prepared both as the primary reference books for the curriculum in force.

The next indicator is the accuracy of the material. The targets in this indicator include the accuracy of concepts and definitions (presented accurately so that there are no misconceptions and formulated well-defined). Other targets are principle accuracy (compiling a large theory and not giving rise to multiple interpretations), procedural accuracy (the steps given do not make students make systematic mistakes), the accuracy of examples, facts, and illustrations (able to make students understand more than just the verbal concept), accuracy questions (can measure students' mastery of the ideas, principles, procedures, and algorithms studied). Concept maps and material charts are presented in the books published by the K13 and Merdeka curricula to help students get accurate concepts and systematics.

Regarding up-to-date, both books were at the same level as up-to-date when they were released. Both are the daily issues raised and the introduction to each chapter. However, in the K13 book, the delivery of concepts does not provide up-to-date matters, unlike the Merdeka curriculum book, where almost every discussion is a contemporary topic.

As for indicators of cultural suitability, the two books present them differently. The K13 curriculum book presents it directly integrated into the material, whereas in the Merdeka curriculum book, it is shown in the "Character Strengthening" menu. "Environmental Awareness," "Financial Literacy," "Digital Security," and "Let's Work

Together" so that these indicators of cultural suitability are better captured in the Merdeka curriculum book.

Further analysis found that the Merdeka curriculum book provides examples of problems that are more contemporary and contextual. Providing concepts is relatively straightforward and easier to understand, but the "let's think critically" section's issues are more in the enrichment realm. The terms used are more "mathematical," so they seem more complex than those in the K13 curriculum book.

These two books present enrichment material in almost the same way. In the K13 book, enrichment material is provided in the "Let's Ask" and "Let's Dig Up Information" menus, while in the /Merdeka curriculum book, enrichment material is found in the "Let's Use Technology," "Do You Know?", "Let's Think Critically" menus. And also "Let's Explore".

Each book has a different way of presenting its contents. Even in this case, these two mathematics textbooks have different ways of presenting their work. The K13 book presents the beginning of each chapter with a chapter cover containing illustrations and short, exciting descriptions related to the chapter material. Apart from that, the essential competencies and learning experiences students will achieve at the beginning of the chapter are also presented. There is a keyword rubric, which is the core discussion of the material. The beginning of each lesson contains the context or problem related to the activity. In every class, we follow a scientific approach, namely observing, asking, digging up information, reasoning, and communicating, which are presented with specific icons, namely "Let's Observe," "Let's Ask," "Let's Dig Up Information," "Let's Go Try,"

Meanwhile, the Independent Curriculum Mathematics book covers each chapter, starting with the learning objectives, followed by a chapter opener that contains a big picture of the topic to be studied. Next, Ignition Questions are presented as guiding questions throughout studying the chapter. Also shown are the exact keywords in the K13 book as the chapter's core theme. From here, a material chart presents the relationships between materials as a broad overview of the material to be studied. Apart from that, several icons are shown: "Let's Remember," "Let's Explore," "Come on, Think Critically," "Come on, Think Creatively," "Let's Try," "Strengthening Character," "Environmental Awareness," "Financial Literacy," "Security Digital," "Let's Communicate," "Let's Work Together," "Guidelines," "Did You Know?", "Let's Reflect," "Let's Use Technology." Each material includes examples of problems, exercises, reflections, and competency tests.

From a linguistic perspective, four indicators will be studied: accuracy, communicativeness, suitability of language rules, and suitability of student development. The accuracy of the K13 book's language can be assessed as good; the choice of words is appropriate to the context of the sentence. Likewise, the Merdeka curriculum book presents language with the right choice of words. In contrast to communicative indicators, some of the language and terms used in the K13 curriculum book are classified as less

communicative, such as "Teaching," which is the title of each icon regarding the theory taught in that chapter. Most of the language used is direct in command sentences, so reading it seems full of work. In contrast to the Merdeka curriculum book, which has more varied sentences,

Linguistic rules relate to the suitability of the text to language rules. In the K13 curriculum book, several punctuation marks that should have been included were not included, and several writing errors were also found. Meanwhile, in the Independent Curriculum book, the language rules are appropriate and more flexible (not monotonous).

The final indicator in the linguistic aspect is the appropriateness of student development. In this case, both books use a lot of pure mathematical language, considering that they refer to international standards, so if they are not given a more straightforward explanation of these mathematical terms, students will not understand them.

Graphically, in terms of book size, both books comply with BNSP standards. Regarding book design, both books have the same level of attractiveness, and the images presented are also more contemporary and varied.

The K13 curriculum book presents a chapter cover at the beginning of each chapter, which contains an interesting short description of the branch to be studied. Appropriate presentation of images is also displayed in this book so that it does not feel monotonous when reading. However, the placement of the photos looks irregular, so it is less comfortable when reading. The Merdeka curriculum book is read more quickly because the images and icons are presented regularly from top to bottom, so the focus does not change to the right and left.

From the scoring results with the explanation above, it was found that the average score for each aspect of the K13 curriculum book was lower than the average score for each element of the Independent Curriculum book. Likewise, the general average also shows that the Merdeka Curriculum book score is higher than the K13 book score.

These results were discussed further using the Focus Group Discussion method with three members: Dr. Arif Effendi, Minatin Charizah, M.Pd., Herida P, M.Pd. By agreeing on the process and results obtained

CONCLUSION

From the results of the critical analysis of the class VII junior high school mathematics textbook above, it can be concluded that the latest Curriculum textbook, the Merdeka Curriculum, is better than the K13 Curriculum textbook. This means that if we look at the curriculum development in Indonesia, especially in terms of the books provided, Indonesia is experiencing growth in a better direction. Therefore, we hope that the results of this critical study can stabilize education actors in Indonesia to maximize the process of implementing the Merdeka curriculum.

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