TELAAH BUKU TEKS PELAJARAN MATEMATIKA SMP KELAS VII KURIKULUM 2013

THE ANALYSIS OF JUNIOR HIGH SCHOOL MATHEMATICS TEXTBOOK GRADE VII CURRICULUM 2013

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Abstrak

Penelitian ini merupakan penelitian deskriptif campuran kualitatif dan kuantitatif yang bertujuan untuk mengetahui kualitas buku teks pelajaran matematika menggunakan instrumen penilaian buku teks pelajaran yang mencakup, yaitu aspek materi, penyajian, bahasa, dan kegrafikaan. Objek penelitian ini adalah buku teks pelajaran matematika SMP kelas VII semester II Kurikulum 2013 edisi revisi tahun 2016 yang digunakan di SMP Negeri 5 Yogyakarta. Teknik pengumpulan data dengan menggunakan angket untuk mengetahui kualitas buku teks pelajaran matematika yang digunakan di SMP Negeri 5 Yogyakarta. Penilaian dilakukan oleh tiga penilai, yaitu peneliti, guru matematika, dan siswa kelas VIID SMP Negeri 5 Yogyakarta. Berdasarkan hasil telaah, dapat disimpulkan bahwa buku teks pelajaran matematika SMP kelas VII semester II kurikulum 2013 edisi revisi tahun 2016 yang digunakan di SMP Negeri 5 Yogyakarta menunjukkan kriteria baik pada aspek materi dengan persentase skor 75% dan penyajian dengan persentase skor 75%, kriteria cukup pada aspek bahasa dengan persentase skor 50% dan kegrafikaan dengan persentase skor 56,25% menurut Standar Penilaian Badan Peneliti dan Pengembangan Pusat Kurikulum dan Perbukuan.

Kata kunci: *telaah, buku teks pelajaran matematika, materi, penyajian, bahasa, kegrafikaan*

Abstract

The research is qualitative-quantitative descriptive that aimed to know the quality of mathematics textbook using text book research instrument which includes material, presentation, language, and graph aspects. The object of this research is junior high school mathematics textbook second semester of grade VII curriculum 2013 revised edition in 2016 that be used in SMP Negeri 5 Yogyakarta. The data collection technique by using a questionnaire to kno the quality of matematicsh textbook that be used in SMP Negeri 5 Yogyakarta. Based on the result of analysis, can be concluded that junior high school mathematics textbook second semester of grade VII curriculum 2013 revised edition in 2016 that be used in SMP Negeri 5 Yogyakarta showed good criteria in material aspect with a percentage score is 75% and presentation aspect with a percentage score is 75%, sufficient criteria in language aspect with a percentage score is 50% and graph aspect with a percentage score is 56,25% according to Standar Penilaian Badan Peneliti dan Pengembangan Pusat Kurikulum dan Perbukuan.

Keywords: *analysis, mathematics textbook, matery, presentation, language, graph.*

FOREWORD

Education is one of the requirements to improve the quality of the nation, therefore, education should be instilled from an early age into adulthood. In the Constitution of the Republic of Indonesia Number 20 of 2003 about National Education System, explained that education is a conscious effort and planned to create an atmosphere of learning and the learning process so that students actively developing their potential to have the spiritual religion power, self-control, personality, intelligence, noble moral, and skills that be required by themselves and society.

The purpose of education is to enrich the life of Indonesian nation as stated in preamble of the 1945 Constitution of the Republic of Indonesia, conducted through quality education set out in the national education system.. The purpose of education according to Kemendiknas in the Constitution of the Republic of Indonesia Number 20 of 2003 about National Education System is developing students potential in order to be faith people and cautious of God is Almight, have noble moral, heathy, knowledgeable, skilled, creative, independent, and become democratic citizen, and also responsible.

To ensure the achievement of quality goals of education in each educational unit, the government set Government Regulation Number 19 of 2005 aboout National Education Standards (NES). In this case, the Ministry of National Education has published various regulations so that the education in the entire territory of the Republic of Indonesia can achieve the minimum standards. That various standards are content standard, process standard, graduate competence standard, standard of educators and educators, facilities and infrastructure standard, management standard, financial standard, and education assessment standard. Of that eight national education standards, content standard, process standard, graduate competence standard, facilities and infrastructure standard are closely related to the writing of textbook.

Textbook is one of the elements in the educational facilities and infrastructure standard that in the preparation and writing must be based on national education goals. The Ministry of National Education Regulation Number 2 of 2008, Article 1, Paragraph 3 explains that textbook is mandatory reference book to be used in the school that includes materi pembelajaran learning materials in order to increase faith and piety, character and personality, the ability to know the science and technology, sensitivity and aesthetic ability, physical potential and health that be arranged based on national education standard.

In the learning process in schools, textbook is factor for students and an important learning media. Textbook seen as a means of communicating science. That is, the textbook that be used in schools by teachers and students must be clearly be able to communicate information, concept, knowledge, and develop skill so that it can be understood by teachers and students.

Mathematics is a branch of science that is considered by most people, including teachers and students, as a difficult subject for many uses symbols and abstract. Therefore, many teachers and students encountering errors in understanding of using mathematics textbook. Moreover, is the science which is considered very important and needed in the learning process and in the daily life. as a basis for other sciences is one of the subjects in the school that can improve the students intelectual with the ability to think logically, analytically, critically and creatively. It is like the definition of mathematics according tov Herman Hudojo (2003: 40-41) that mathematics is a tool to develop a way of thinking, abstract, deductive reasoning and related with structured ideas that be arranged logically. Therefore, mathematics must be learned by students from the stage of development of intuitive, concrete operational and formal operational. Given that mathematics is essentially a deductive science, reasoning ability can not be separated from the truth of mathematics material when someone builds mathematics skill.

A good mathematics textbook has a good criteria on material, presentation, language, and graph aspects. Material aspect has an important role for students in learning mathematics. The truth of the science that is in the mathematics textbook must be accountable. No less important, presentation aspect is also has an important role for students in learning mathematics. The presentation of materials in the mathematics textbook that coherently, systematically, and straightforwardly will facilitate the students in learning mathematics. Moreover, language aspect is also has an important role for students in learning mathematics. Math textbook that use raw language and in accordance with the learners target will facilitate the students in understanding the contents of the book. Moreover material, presentation, and language aspects, there is graph aspect. Grapg aspect in the mathematics textbook determine whether the book is interesting or not. The interesting mathematics textbook will motivate the students to learn the contents of the book.

The errors in the mathematics textbook concerning material, presentation, language, and graph aspects can lead the students get the wrong comprehension. One example of errors in the mathematics textbook is a miscalculation on the answer of the question. That error is contained in the mathematics textbook that is published by Kemendikbud that has been revised three time. Therefore, be needed to do the analysis of mathematics textbook to find out the errors in the mathematics textbook and fix it. In this research, the errors identification of material, presentation, language, and graph aspect in the junior high school mathematics textbook second semester of grade VII curriculum 2013 revised edition in 2016 that be used in SMP Negeri 5 Yogyakarta. SMP Negeri 5 is the best junior high school in Yogyakarta,

so the textbook that be used should be a good textbook.

RESEARCH METHODS
Kind of Research
The kind of research that be used in this research is qualitative-quantitative descriptive.

Research Object
The research object in this research is a junior high school mathematics textbook second semester of grade VII curriculum 2013 revised edition in 2016 that be used in SMP Negeri 5 Yogyakarta.

Instrument and Data Collection Technique
The research instruments in this research is the assessment sheets of mathematics textbook. This instrument is used as a tool of decidingthe truth of material, presentation, language, and graph aspects in junior high school mathematics textbook grade VII curriculum 2013.

The data collection technique is use the assessment sheets of mathematics textbook that consisting of assessment sheet of mathematics textbook, mathematics teacher assessment sheet against the mathematics textbook, and students assessment sheet against the mathematics textbook.

Data Analysis Technique
The data is obtained from the assessment sheets of mathematics textbook that be calculated in this following way.

$$p = \frac{the\ sum\ of\ average\ score\ each\ instrument\ indicator}{the\ sum\ of\ maximum\ score} \times 100\%$$

Explanation : p is the percentage of the book quality

Table 1 Criteria of the book

No.	Percentage	Criteria
1.	$80\% \leq p < 100\%$	Very Good
2.	$65\% \leq p < 80\%$	Good
3.	$50\% \leq p < 65\%$	Sufficient
4.	$p < 50\%$	Less

RESULT OF RESEARCH AND PEMBAHASAN
The research resut of analysis of junior high school mathematics textbook grade VII curriculum 2013 revised edition in 2016 reviewed of material aspect is consisted of five assessment indicators of assessment sheet that be done by researcher, five assessment indicators of assessment sheet that be done by mathematics teacher, and two assessment indicators of assessment sheet that be done by students. In this material aspect is obtained 75% score percentage from researcher, 65% score percentage from mathematics teacher in SMP Negeri 5 Yogyakarta that use the book, and 70,56% score percentage from the average of students class VIID SMP Negeri 5 Yogyakarta that in total 31 students. From the three assessors, both researcher, teacher, and students give a good criteria in the material aspect of the mathematics textbook.

The research resut of analysis of junior high school mathematics textbook grade VII curriculum 2013 revised edition in 2016 reviewed of presentation aspect is consisted of six assessment indicators of assessment sheet that be done by researcher, six assessment indicators of assessment sheet that be done by mathematics teacher, and five assessment indicators of assessment sheet that be done by students. In this persentation aspect is obtained 75% score percentage from researcher, 70,83% score percentage from mathematics teacher in SMP Negeri 5 Yogyakarta that use the book, and 68,71% score percentage from the average of students class VIID SMP Negeri 5 Yogyakarta that in total 31 students. From the three assessors, both researcher, teacher, and students give a good criteria in the material aspect of the mathematics textbook.

The research resut of analysis of junior high school mathematics textbook grade VII curriculum 2013 revised edition in 2016 reviewed of language aspect is consisted of two assessment indicators of assessment sheet that be done by each assessors. In this language aspect is obtained 50% score percentage from researcher, 62,50% score percentage from mathematics teacher in SMP Negeri 5 Yogyakarta that use the book, and 68,15% score percentage from the average of students class VIID SMP Negeri 5 Yogyakarta that in total 31 students. From the three assessors, researcher and mathematics teacher give a sufficient criteria, while the students give a good criteria in the language aspect of the mathematics textbook.

The research resut of analysis of junior high school mathematics textbook grade VII curriculum 2013 revised edition in 2016

reviewed of language aspect is consisted of four assessment indicators of assessment sheet that be done by researcher, four assessment indicators of assessment sheet that be done by mathematics teacher, and two assessment indicators of assessment sheet that be done by students. In this graph aspect is obtained 56,25% score percentage from researcher, 75% score percentage from mathematics teacher in SMP Negeri 5 Yogyakarta that use the book, and 65,32% score percentage from the average of students class VIID SMP Negeri 5 Yogyakarta that in total 31 students. From the three assessors, researcher give a sufficient criteria, while mathematics teacher and students give a good criteria in the graph aspect of the mathematics textbook.

CONCLUSION AND SUGGESTION
Conclusion

The research of this analysis of mathematics textbook obtain the conclusion that junior high school mathematics textbook second semester of grade VII curriculum 2013 revised edition in 2016 got a good criteria of material and presentation aspects. While in language and graph aspects, this mathematics textbook got a sufficient criteria.

Suggestion

junior high school mathematics textbook second semester of grade VII curriculum 2013 revised edition in 2016 can be used as a learning source in SMP Negeri 5 Yogyakarta but should be revised again by Kemendikbud because not yet get a good criteria in language and graph aspects. Moreover, further research is needed to analyze the other mathematics textbook. It is intended to know the quality of mathematics textbook that be used in schools.

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