

Literacy-based tex books to improve the character and language competence of elementary students

Dwi Agus Setiawan*, Farida Nur Kumala, Tamella

Universitas PGRI Kanjuruhan, Jl. S. Supriadi No.48, Malang, East Java, 65148, Indonesia
setiawan@unikama.ac.id*

Abstract: *The purpose of this study was to produce and determine the feasibility, practicality, and legibility of reading literacy-based textbooks using the type of research and development of the 4D model. The research instruments were arranged based on the level of research needs, namely material expert validation, product validation, and linguist validation. The results of the product feasibility assessment by validation experts obtained 95.8% media validation, 95% material validation, and 91.96% language validation. The product readability rating obtained 89.83%, supported by 90.75% language literacy story questions and 89% character-based language story test results. The findings of this study indicate that reading literacy-based textbooks can attract students' attention and are interactive, the presentation of the content supported by pictures and various color compositions can attract reading interest and stimulate critical thinking skills. So as to help students have the literacy skills needed at this time.*

Key Words: *Textbooks; Reading Literacy; Language competence*

Introduction

Language learning is basic learning that is needed by children to develop language skills according to their functions which consist of four aspects of language skills, namely reading, writing, listening, and speaking skills (Halijah, 2017: 326). One of the language skills that plays an important role is reading (Resnani & Agustina, 2014) because most of the acquisition of knowledge is done through reading activities (Nurgiyantoro, 2004). Therefore, reading skills need to be mastered by students from an early age.

Based on the results of observations made at SDN Mergosono 1 Malang City, on average all fifth grade students have the ability to read fluently and well. However, not all students are able to understand the contents of a reading material they read. Reading activities carried out by students have not been linked to reading literacy activities in core learning in class, although in general the School Literacy Movement (GLS) program has been activated in the school environment. Reading literacy is one of the basic literacy that supports the development of other basic literacy skills such as numeracy literacy which requires students to use their mathematical abilities to solve contextual problems which are often presented in the form of word problems. If students' reading ability is not maximized, it will have an impact on students' ability to solve math word problems which require students' understanding skills in translating story problem readings into mathematical sentence forms. In addition, the use of teaching materials which are limited to teacher books and student books makes learning in class feel monotonous and makes children tend to be passive so that students have difficulty developing their language skills.

One solution that can be used to overcome this problem is to use textbooks that are able to make students obtain reading material that is lighter in presentation. (Novianto &

Mustadi, 2015: 7) defines a textbook as a learning resource that can help the learning process take place independently, a source of activity and a source of reference for students. In line with Muslich (2010: 50) which states that textbooks are student handbooks at a certain level as learning (instructional) media related to certain fields of study. From the expert opinion, it can be concluded that textbooks are learning resources that can be used as a guide by teachers and students which contain learning sequences in accordance with certain fields of study to help the learning process take place independently.

The state of SDN Mergosono 1 Malang City which has activated the School Literacy Movement (GLS) program can support the development of more creative and innovative textbooks to foster students' interest in reading and literacy skills. One of the literacy activities that has been activated in the school environment is the 15-minute reading activity which is supported by a reading corner in each class. However, so far the literacy activities that have been implemented have not been fully activated in core learning in the classroom due to the limited use of literacy-based supporting teaching materials in them. Based on the background above, the researcher proposed a study entitled Development of Reading Literacy-Based Textbooks in Language Competence.

The purpose of this development research is to produce reading literacy-based textbook products that are appropriate, practical, and legible so that they can support the use of teaching materials in an interactive, innovative, creative, fun learning process, motivating students to be active in developing their language skills and literacy abilities. Textbooks are said to be appropriate if they have received appropriate criteria from experts. Textbooks are said to be practical if they have received practical criteria from the teacher. Textbooks are said to be read if they have received readability criteria from students.

The product produced in this development is a reading literacy-based textbook on Indonesian material for class V semester 2. The material contained in this textbook is taken from all Indonesian Basic Competences (KD) in the semester 2 theme book which has four main themes in it namely: theme 6 (Heat and Its Movement), theme 7 (Events in Life), theme 8 (Our Friend's Environment), and theme 9 (Things Around Us). This textbook is equipped with customized readings with supporting pictures, rubrics that support language skills, information literacy, numeracy information, did you know, and inspirational stories as special characteristics of reading literacy-based textbooks.

This textbook is presented in printed form (hardcopy) containing integrated material, images and rubrics of supporting questions, then designed as attractive as possible using the Microsoft Word 2010 and CorelDraw X4 application programs which are presented in full color according to standard textbook sizes commonly used. that is A4.

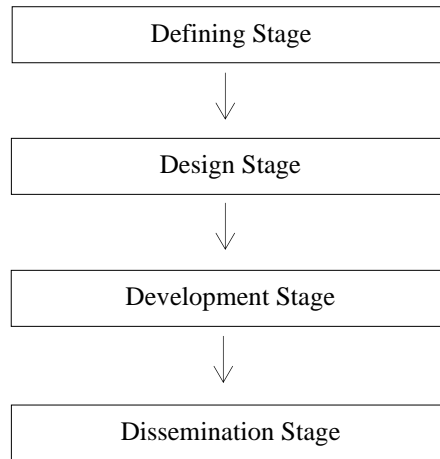
This research is expected to be useful for the world of education as a whole. In addition, it can also be useful for teachers, principals, and other researchers. The assumption of developing literacy-based textbooks is that textbooks are easy to understand and their presentation is designed in printed form to make it more practical to use without the need to use electronic devices. While the limitations of developing reading literacy-based textbooks are: (1) the material used is only Indonesian language material for grade V which is taken from all Indonesian Basic Competences (KD) in semester 2 theme books which are then developed

into several main indicators within the scope of the material and combined with the presentation of numeracy story questions to support the presentation of literacy skills in textbooks, (2) the stages of the 4D research and development model used only up to three stages, namely the definition stage, the design stage, and the development stage, and (3) This reading literacy-based text book was only tested on fifth grade students at SDN Mergosono 1 Malang City. Relevant previous research is research whose variables intersect with research conducted by current researchers. Relevant research studies are intended to prove that there is empirical evidence of similar research that has been conducted before. As for the outline of this research, it will raise development variables, namely textbook-type teaching materials. Relevant previous research is characterized by literacy in it. Following are the results of previous research conducted by Octavia, et al (2016), Aisyah, et al (2017), Sari, Dyah (2015), Maulidina & Hartatik (2018), Rusmiyati & Rosidah (2018), Mahmud & Pratiwi (2019), Van Kraayenoord (2001), Chittooran (2015), Thomas Heather (2013). In line with this, the novelty of the product being developed is a literacy-based textbook for elementary school students in thematic learning content, in this product there are literacy story questions that require students to think creatively critically based on hots skills, so that they are able to form a student mindset by thinking scientifically, innovation from This product contains pictures that support the material, the themes developed by researchers are developed based on the teacher's book by following Malang cultures

Method

The development model used in this study is the 4D Research & Development model proposed by Thiagarajan & Semmel. The reason for choosing this model is because the steps in the 4D development stage are in accordance with the steps required by researchers in developing textbook products. This development model contains a sequence of steps that are systematically arranged and each development step has a clearly arranged sequence of development steps. The research and development procedure in the 4D model consists of four stages, namely (1) the define stage, (2) the design stage, (3) the develop stage, and (4) the disseminate stage. To find out more clearly these steps are described in Figure 1.

The first stage is the defining stage, which is carried out to determine and define the development requirements through five steps: curriculum analysis, analysis of student characteristics, task analysis, concept analysis, and analysis of learning objectives. The second stage is the design stage, which involves designing a reading literacy-based textbook with four steps: test preparation, selection of media, selection of formats, and initial design. The third stage is the development stage, which includes validation by experts and limited trials. The fourth stage is the dissemination stage, aimed at distributing the textbook product widely. The research subjects include media experts, material experts, language experts, teachers, and students. This research will also be tested with teachers and students to assess the feasibility, practicality, and readability of the textbooks.

Figure 1. 4D Model Development Procedure

The types of data in this research and development are quantitative data obtained from filling out questionnaires and qualitative data obtained from suggestions and comments from research subjects. The data collection instruments used were observation, questionnaires, and tests. Observation is used to find out the initial conditions in the learning process, questionnaires are used to assess the validity of eligibility, practicality, and readability of textbooks, tests in the form of giving numeration word problems are used as a support to find out the extent to which students' comprehension abilities in understanding the contents of a reading and their literacy skills.

Results and Discussion

The product of reading literacy-based textbook development was validated by media experts, material experts, and linguists. The validation results from media experts reached 95.8% with the criteria of being feasible and usable. Suggestions and comments for improving the media in textbooks, namely adding the Curriculum 2013 logo and agency logo on the front cover, changing the position of the placement of the agency name on the back cover, increasing the font size in the activity rubric, adjusting the character illustrations according to the theme on the cover of each theme, and fixed the placement of the profile posts and names of each character on the profile (introductory text). The validation results from material experts reached 95% with the criteria of being feasible and usable. Suggestions and comments for improving the material in the textbooks, namely further reviewing the description of material analysis in accordance with the Core Competencies (KI) and Basic Competencies (KD) presented. The validation results from linguists reached 91.96% with the criteria of being feasible and usable. Suggestions and comments for improving language in textbooks are paying attention to the writing systematics, the use of color composition, and the use of aspects of the language skills presented. The results of presenting the feasibility level data from media experts, material experts, and linguists will be recapitulated based on the percentages, suggestions and comments given as improvements to reading literacy-based textbook products. The results of the product feasibility data are presented in table 1.

Table 1 Recapitulation of Textbook Feasibility

No	Validators	Percentage	Assessment criteria
1.	Media expert	95,8%	Decent, slight improvement
2.	Material expert	95%	Decent, slight improvement
3.	Linguist	91,96%	Decent, slight improvement

Apart from being validated by experts, this reading literacy-based text book was also tested on teachers and students. The results of the trial were carried out to determine the practicality and legibility of reading literacy-based textbooks supported by the provision of numeracy word problems to find out more about students' comprehension abilities related to reading content contained in textbooks and find out students' reading literacy and numeracy abilities. The results of product practicality trials carried out by the teacher obtained a percentage of 88.75% which was supported by the achievement of numeration word problems obtaining a percentage of 92.5%. The results of the product readability test were carried out by 20 students obtaining a percentage of 89.83% which was supported by the achievement of Students literacy story problems language word problems obtaining a percentage of 90.75%. The results of practicality and product readability data are presented in Tables 2 and 3 below.

Table 2 Recapitulation of Textbook Practicality

No	Respondents	Percentage	Assessment criteria
1.	Teacher (textbook)	88,75%	Decent, slight improvement
2.	Teacher (language story problems)	92,5%	Decent, slight improvement

Tabel 3 Textbook Readability Recapitulation

No	Responden	Percentage	Kriteria Penilaian
1.	Student (textbook)	89,83%	Decent, slight improvement
2.	Students (literacy story problems)	90,75%	Decent, slight improvement

The results of the numeracy story problem test were carried out to support the readability of reading literacy textbooks. The test results obtained from 20 students after using the textbook obtained an 89% percentage which was already above the KKM. Based on table 1, the feasibility value of this textbook from the assessment of expert responses is

categorized in the "proper" criteria. Based on table 2, the practicality value of this textbook from the assessment of teacher responses is categorized in the "very good" criteria. Based on table 3, the readability value of this textbook from the assessment of student responses is categorized in the "very good" criteria. It can be concluded based on the analysis of the data obtained that reading literacy-based textbooks are feasible, practical, and legible so that they can be used in learning. This literacy-based textbook development product has feasibility, practicality, and readability that is appropriate for use in classroom learning activities. With the existence of reading literacy-based textbooks as supporting teaching materials in learning, students are more interested in using learning media because the textbooks presented are different from the books used by students in learning. Creating interesting and interactive learning media can help the teaching and learning process to be effective and fun for students (Yuniati, et al., 2011: 25) so students don't get bored in learning activities.

The presentation of reading literacy-based textbook media features supporting images for each reading material and also the packaging of the contents of the reading material supported by a colored background to increase the carrying capacity of students' reading interest. Interest in good reading will also support good language competence in students. Language competence is the mastery of language skills which includes the ability to obtain information in texts and communicate the results of obtaining this information through other language activities (Resmini, 2003:6). A person is said to have language competence if he has good language skills or abilities with four aspects of skills including reading, writing, listening, and speaking skills (Sunarti & Nursalim, 2018: 13). These language skills are presented in reading literacy-based textbooks by presenting readings in the Let's Read rubric which is then supported by giving supporting assignments in the rubric Let's write, let's listen, let's convey, let's do it, let's let's find out, let's discuss, and let's reason, all of which are combined to support students' language competence.

Good interest in reading will also make students independent throughout life, creative, and able to solve problems by using their language skills (Nurdiyanti & Suryanto, 2010: 117) so that they have the ability to understand the contents of a reading. This ability can help students improve critical thinking skills because in reading students will experience a thought process to understand ideas broadly (Pujiono, 2012: 778). Critical thinking skills are needed in analyzing systematically and specifically the problems faced carefully and thoroughly to identify the information needed to plan problem solving strategies (Azizah, et al., 2018: 62). Learning that requires more problem-solving strategies is learning mathematics, especially those related to solving problems in word problems. Story problems contain a lot of vocabulary and texts that require analysis, reasoning, and students' understanding to solve mathematical problems (Rusmiyati & Rosidah, 2018:99). The provision of math word problems is presented in reading literacy-based textbooks through the presentation of material in the numeration info rubric which is supported by math word problems in the let's reason rubric. The addition of math and numeration rubrics is intended to train students to have the ability to change the reading sentences of word problems into mathematical sentences using appropriate mathematical symbols based on the understanding they gain after reading the math story problems.

The presentation of the entire content of the material in reading literacy-based textbooks is adapted to the characteristics of elementary school students, namely liking interesting pictures and liking colorful things. Sentence structures that are packaged simply are used to represent the contents of the message or information to be conveyed. The use of terms, iconic symbols, and sentence structures is designed in a concise, concise, consistent, and communicative manner so that students are able to receive messages in the material properly and the messages conveyed in the material are more communicative. Likewise with the use of language that refers to grammar rules and enhanced spelling guidelines (EYD) so that students can be easily accepted to study textbooks thoroughly. In line with the opinion of Novianto & Mustadi (2015: 103) that the use of language in textbooks must be able to motivate and arouse students' pleasure in reading them. Furthermore, the language used must stimulate students to question things further and seek answers independently in textbooks and other sources of information to increase students' reasoning and creativity (Depdiknas, 2006:39).

The link between the presentation of language and mathematics material in reading literacy-based textbooks is highlighted through the provision of other supporting rubrics such as the existence of elementary school children's character characters to attract students' interest in reading, the motivation and messages presented in the did you know rubric and inspirational stories to encourage curiosity. know students more in reading activities, as well as important information presented in the information literacy rubric in the form of a brief description of the basic literacy that students must master and the info numeration rubric in the form of presenting mathematical material which is used as a support for students trying to solve problems in math word problems that require numeracy literacy skills in them.

The order of presentation of each rubric in a reading literacy-based textbook is packaged and designed to be interrelated to help students have good literacy abilities or skills as well. This literacy ability is reading literacy which is one of the six basic literacy skills which is the beginning of the development of other basic literacy skills (Kemendikbud, 2017) such as numeracy literacy. In reading literacy-based textbooks, each reading material presented to support students' reading literacy is linked and arranged into material and story questions presented to support students' numeracy literacy. Therefore, researchers link reading literacy and numeracy literacy in reading literacy-based textbooks so that they become one of the innovative, creative, and effective learning media to meet students' literacy skills needed today in 21st century learning which is learning by integrating abilities literacy, knowledge skills, skills and attitudes, as well as mastery of the technology in it (Cahyuningsih, 2019:2)

This text book is packaged in a structured manner based on the order in which the theme is presented and the Basic Competency (KD) of Indonesian and is supported by the appearance of the textbook which is made in color with lots of supporting pictures to make it easier for students to read the readings in each material presented. read the passages in each material presented. In the textbook, characters are also given to support the presentation of the textbook to attract students' interest in reading. The substance of this textbook has three main components, including: (1) the initial part consists of the front cover (cover) of the textbook, preface, Core Competence (KI) and Basic Competence (KD) in Indonesian,

instructions for using the book, rubrics in the book , profile (preface), and table of contents, (2) the contents section consists of the cover for each theme, Basic Competency (KD) and theme indicators, illustrations of character conversations, let's read, let's write, let's do it, let's convey, let's listen, let's find out, let's discuss, let's reason, supporting material, did you know, literacy info, numeracy info, material summary, scoring rubric, and inspirational stories, and (3) the final part consists on the bibliography, glossary, author bio, as well as the back cover of the textbook.

Conclusion

Based on media expert validation, material expert validation, linguist validation, and test results on teachers and students, it was found that reading literacy-based textbooks for class V semester 2 were declared feasible, practical, and readable so that they could be implemented in learning. The use of literacy-based textbooks increases the carrying capacity of students' interest in reading with attractive pictures and color composition in each presentation of the content and rubrics so as to encourage language skills and students' critical thinking abilities. The presentation of the entire material is related to reading literacy and numeracy literacy skills to support students' literacy skills needed in today's 21st century learning.

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