DEVELOPING THE BIG QUESTIONS AND BOOKMARK ORGANIZERS (BQBO) STRATEGY–BASED LITERACY READING LEARNING MATERIALS IN THE 4TH GRADE OF ELEMENTARY SCHOOL

Taufina*, Chandra*

* Lecturers of Primary School Teacher Education, the Faculty of Education, State University of Padang

Corresponding e-mail: taufina_taufik@yahoo.co.id

Abstract

This research is intended to produce BQBO strategy – based literacy reading learning materials for the 4th grade students of Elementary School which are valid, practical, and effective. To produce the prototype of the materials, Plomp Model was applied. The prototype was revised by using Self Evaluation and Experts Review Evaluation. It then was tested by using One to One Evaluation method to the students at SD Negeri 46 Kuranji. Meanwhile to see the practicality of the product, the prototype was tried out by using Small Group Method and Field Test Evaluation Method in the 4th grade of SD Negeri 06 Padang. Based on the results of the research, it is concluded that the BQBO strategy – based literacy reading learning materials developed for the 4th grade students of Elementary School are valid, practical, and effective.

Keywords: the development of learning materials, literacy reading, bqbo strategy, elementary school.

1 INTRODUCTION

Literacy reading that focuses on reading comprehension in the 4th grade of Elementary School covers four major studies, namely: (1) reading skills; (2) applying, practicing, and determining reading texts; (3) reading process; and (4) texts used in reading ([1]; [2]; [3]; [4]; and [5]). Literacy reading viewed from reading comprehension skills is closely related to reading comprehension techniques used. Proper reading techniques that should be implemented are: reading in silence, reading without moving the lips or muttering, reading without moving the head following the reading line, reading without pointing the reading line with a finger, a pencil, or other tools, and not reading word by word, or sentence by sentence [6]. Paying close attention to reading comprehension techniques will help the learners to gain a better reading quality.

The implementation of literacy reading could not be separated from the role of teachers as the 'spearhead' of the learning process in every educational unit applying Standard of National Education. Referring to the Government Regulation No. 19 Year 2005 about the Standard of National Education, it is affirmed that one of the standards to be developed by the teachers is the process standard. It includes planning the learning process, conducting the learning process, assessing the learning outcomes, and supervising the learning process. As a result, the teachers’ skill in creating learning readiness determines the success of the learning process conducted. To create an effective learning process, the teachers are demanded to develop lesson plans in the form of literacy reading materials in accordance with appropriate learning strategies.

Literacy reading learning materials refer to the availability of the reading texts. Learning materials which are developed by using appropriate strategies will foster the students’ creative effort to discover the content of the reading. The discovery process could be done not only by recognizing the type of texts to be read, but also by predicting and summarizing the content of the reading correctly. This is in line with the idea proposed [7] emphasizing that there are six activities that could be done to achieve success in comprehending the content of the reading, namely: (1) recognizing the text types, (2) recognizing some kinds of text structure, (3) predicting and summarizing the content of a text, (4) making references for information implied in the text, (5) determining the meaning of unknown words based on the context of the reading, and (6) analyzing the morphology of the unknown words.
Based on the results of needs analysis done through observation and interview with the 4th grade teachers in several Elementary Schools in Padang, similar problems were revealed. Firstly, reading class is rarely preceded by the process of predicting the content of the reading through asking and answering questions activity. This is resulted from the insufficient learning materials available [8]. Secondly, reading comprehension materials used in the 4th grade of Elementary School could not help the students to imagine what is being read because reading comprehension techniques are not inserted in. Reading comprehension techniques are still rarely applied by the students leading them to have poor comprehension in reading. This is in line with the research conducted by PISA (Program for International Student Assessment) in 2006 revealing that reading skills of Indonesian students is still low [9]. Thirdly, the learning materials used rarely direct the learners to discuss the contents of the text. It is also found that the questions addressed to the students rarely contain the element of questions that could represent the content of the reading, such as the use of question words: what, who, where, when, why, and how. The shortage of the data found is corroborated by the results of the researcher's analysis on some learning materials in which the highest score of the Basic Competence achieved is only 51.85% of the total, that is in the BSE book written by SL. Fourthly, the learning materials used are not fully in accordance with the rules of literacy reading. The text used is less appropriate to the students’ real life, so they are unlikely to communicate what they already read with their teachers and friends. Furthermore, there are still many students who are less fond of reading due to the less interesting reading materials [10].

In order to cope with the problems previously mentioned, the teachers are demanded to be able to develop literacy reading learning materials effectively and creatively. The materials should be developed by making use of appropriate strategies. One of the strategies that could be used is The Big Question and Bookmark Organizer (BQBO). The BQBO strategy is a combination of The Big Question strategy with the Bookmark Organizer strategy. The Big Question Strategy is a strategy focusing on one of the application solutions in literacy reading, especially the pre-reading stage. Meanwhile the Bookmark Organizer strategy is a strategy used after the students apply reading techniques during reading. [11]

2 RESEARCH METHOD

This research is categorized into Research and Development study sought to develop a product and conducted by applying Plomp model. Plomp model consists of three phases, namely preliminary research phase, prototyping phase and assessment phases [12].

In preliminary research phase, analysis on curriculum, students, learning materials, and needs was undertaken. In prototyping phase, the BQBO strategy-based literacy reading learning materials were designed and the first draft was produced. The first draft was evaluated by using self-evaluation method. The result of the evaluation was reviewed by the experts to determine the validity of the learning materials. The materials which had been validated then were tried out by using one to one method and small group method. The result of the small group evaluation is used for field try out to determine the practicality of the learning materials. Having the materials practical, the effectiveness test by using field test stage II was conducted. Finally, the research produces valid, practical, and effective learning materials.
Plomp model used in this research produces an initial draft of the prototype design. The initial draft of the prototype was evaluated by using self evaluation method to one of the teachers (the fourth grade teacher of SD Negeri 01 Sawahan). The result of the evaluation on the prototype is reviewed by 3 experts, then it was tried out by using one to one evaluation method to two students at SD 46 Kuranji Kecamatan Kuranji Kota Padang. In order to see the practicality of the prototype, it was tried out by using small group method to the students in class IV-A, and by using field test evaluation to the students in class IV-B at SD Negeri 06 Padang Besi Kecamatan Lubuk Kilangan Kota Padang. Meanwhile to see the effectiveness of the prototype, it was tried out to the students at SD Negeri 01 Sawahan Kecamatan Padang Timur Kota Padang. The effectiveness of the product was seen from the results of the test given to the students and the results of observation on the learning process. The procedure of the research can be seen in the table of Evaluation Matchboard. The data analyzed in this research are those gotten from the results of validity test, practicality test, and effectiveness test. They were analyzed by using descriptive statistical analysis and descriptive technique. The first is used to analyze the results of critical thinking test, observation sheet and questionnaire, while the descriptive technique is intended to analyze the result of interview.

### 2.1 The Result of Data Analysis in Preliminary Research Phase

Descriptive technique is used to describe the data obtained from the result of preliminary analysis. The data collected were the results of analysis on curriculum, concept, students’ characteristics, learning materials used in the field, and interview result. To analyze the data in preliminary research phase, four stages were committed, including collecting the data, reducing the data, presenting the data, and drawing conclusions. Reducing the data is a process of selecting, focusing, and transforming raw data obtained through interviews and observations.

### 2.2 Validity Analysis

Validity analysis is done to see the validity of the learning materials developed. The results of the validity analysis are presented in the form of table by using Likert scale in the range of 1 to 4. Afterward, the mean score is defined [13].

### 2.3 Practicality Analysis

Practicality analysis is used to analyze the data obtained from observation and questionnaires distributed to the teachers and students. The responses given by the teachers, students, and experts through the questionnaires were arranged in the form of Likert Scale. It is arranged in positive statements. The statements are scored as follows [14].

1) Strongly Agree : 4
2) Agree : 3
3) Less Agree: 2
4) Disagree: 1

The questionnaire of practicality is described by using frequency analysis technique. Learning materials are regarded practical when their practicality score is > 75%.

2.4 Effectiveness Analysis

The data of the effectiveness was obtained from the result of analysis on several factors, including: (1) the percentage of the students’ learning activities in each meeting. (2) The attitudes occur during the learning process (3) the students’ critical thinking skill which is revealed through an essay test, and (4) the students’ reading skills assessed by using scoring rubric. The rubric is adopted from [16]. The percentage of the students' activity was calculated by using the formula proposed by [15]:

\[ P \times 100\%

3 FINDINGS AND DISCUSSION

The findings of the research are classified into three parts, which are: Preliminary Research Phase, Prototyping Phase, and Assessment Phase.

3.1 Preliminary Research Phase

In this phase, analysis on curriculum (Local-Based Curriculum), learning materials used in the field, and students’ characteristics was done.

3.2 Curriculum Analysis

Literacy reading presented to the students is adjusted to the demand of reading skill curriculum on the basis of Standard Competence and Basic Competence. In order to formulate the indicators and learning materials, analysis on Standard of Competence and Basic Competence was conducted. Based on the result of Indonesian curriculum analysis, especially on reading skills for the 4th grade students of Elementary School, it was figured out that the learning materials did not match to the competences to be achieved by the students. Consequently, the curriculum needs to be modified. The modification was done to the Basic Competence point 3.2 and 3.3. The materials contained in the two points did not meet the demands of the literacy reading. The Basic Competence point 3.2 was revised into “doing something based on the children’s stories” and point 3.3 becomes “identifying the meaning of unknown words through reading comprehension and figuring out appropriate information in dictionary or encyclopedia through scanning.

3.3 Analysis on Students’ Characteristics

The characteristics of the 4th grade students can be identified from several types of development, namely: physical-motoric development, intellectual development, language development, emotional development, and social development. The data of the students’ characteristics were obtained from observation on the learning process, and interview conducted with the students. The results of the interview reveal that the students like to play bike, football, and other games. Furthermore, the students enjoy folklore, fairy tales, and children's stories. They like stories with pictures of children and animals. The pictures they like are colored as their original ones.

3.4 Needs Analysis

The purpose of needs analysis is to deeply examine various aspects needed to achieve an effective learning process. An effective learning could not be separated from the use of learning materials in the learning process. Therefore, needs analysis is focused on the analysis of the problems contained in learning materials used by the teachers and the students during the learning process. To develop effective learning materials, certainly, requires effective Lesson Plans.

In general, the results of the preliminary research analysis on literacy reading learning materials for the 4th grade students show that the needs fulfilled are only 46.80%. In other words, the achievement of the learning objectives is still not as it is expected.

Based on the results of the analysis, the learning materials developed should minimize the above lack by seeing comprehensively the needs of the learning materials in accordance with the level of the students’ development. The learning materials developed should be easy to understand, not too long, more contextual, provide an explanation of correct reading techniques, include reading stages (pre-reading, whilst-reading, and post-reading activities) which are arranged systematically, direct the students to have good attitudes, challenge the students’ critical thinking skill, accustoming the students to communicate what they read, and display more attractive colors, and attract the students’ attention.
3.5 Prototyping Phase

After needs analysis, interview, and observation were conducted in the preliminary research phase, the prototype of BQBO strategy–based literacy reading learning materials then was designed and developed. The prototype designed especially for reading competences is prepared for one semester. The design is classified into four parts, namely initial draft, prototype 1, prototype 2, and prototype 3.

3.5.1 Initial Draft

The characteristics of the learning materials designed contain the presentation of reading texts that focus on establishing positive attitudes and challenging the students’ critical thinking. The texts could be derived from folklores, fables, parables, and other children’s stories. The learning materials developed have to refer to the results of analysis on Standard of Competence, Basic Competence, and indicators formulated. The process of developing the materials refers to the technical guidance suggested by the Ministry of National Education of General Directorate of Primary and High Education Management 2010. In this draft, the establishing attitudes are written in boldface.

a) The Results of the Prototype Initial Draft

The images/pictures used in the learning materials were obtained from the internet. Meanwhile the character values were adopted from the Student Book 2013. In order to make the texts presented more interesting, Baar Metanoia font was applied. The size of the letters for writing stories and describing the materials is 12, for sub-titles is 24, and for the cover of the book is 48. The materials are presented by using attractive colors that could attract the students’ attention. Each assignment is accompanied with several icons that indicate the focal point of the learning in accordance with the BQBO strategy stages applied.

b) The Results of the Prototype Evaluation by Using Self Evaluation Method

The BQBO strategy-based literacy reading learning materials developed were revised by a teacher before they were sent to the experts. This is intended to minimize the mistakes and improve the quality of the initial draft. The result of the evaluation was compared to the results of the self evaluation. The result of the self evaluation on the initial draft indicates that the score of the learning materials designed is 98.70%. In other words, the content of the learning materials matches to the self evaluation instruments designed.

3.5.2 Prototype 1

The focal point of the prototype 1 is the result of the prototype evaluation by using expert review method which was done by validating the BQBO strategy-based literacy reading learning materials and Lesson Plan. The validation was committed by 3 experts.

a) The Validation of Literacy Reading Materials Based on BQBO Strategy

The validation was done on several aspects, namely the feasibility of the content, language, presentation, and layout. In general, the validity score of the learning materials in the term of conformity to the Standard of Competence, Basic Competence and Indicators was 4 (very valid). The average score of each indicator on presentation aspect was in the range of 3.67 to 4 (very valid). Overall, the validity score of the materials on the presentation aspect was 3.89 (very valid).

The next aspect validated was the principles of the BQBO strategy. The validation on this aspect was done through asking questions, making connection, visualizing reading, discussion, self-monitoring, and clarifying. The results of the validation on the principles of the BQBO aspect show that the average score of each indicator was in the range of 3 to 4. The validity score of the learning materials viewed from the principle aspect was 3.60 (very valid), the presentation aspect was 3.80 (very valid), and the layout was 3.57 (very valid). Based on the results of the validation, there were several fundamental changes done to the learning materials including the use of more attractive color gradations, the emphasizing on the characteristics of the Primary School students who are identical to red and white, and the use of formal font for the cover of the book.

Based on the results of the validation on various aspects above, generally, the validity score of the learning materials was 3.82 (very valid). The details could be seen in Appendix 16.

3.5.3 Prototype 2

Prototype 2 was tested through a practicality test that aims to determine the level of the convenience or practicality and efficiency of the
prototype. The first step of the practicality test was conducted through one to one evaluation method and small group method. The next step was carried out through field test, and the result was regarded as prototype 3.

a) The Results of the Prototype Evaluation by Using One to One Method
One-to-one evaluation is done to prototype 1. The results of the evaluation were revised in accordance with the findings. The results were strengthened by the responses given by the students. One-to-one evaluation is done by distributing the learning materials (prototype 1) to two students. The two were chosen as the materials require the students to work in pairs of at least two students. Based on the results of the one-to-one evaluation method, it is found that the practicability score of the materials developed is in the range of 85% to 100% (very practical), and the average score is 96.47% (very practical).

b) The Results of the Prototype Evaluation by Using Small Group Method
Small group method was done to the students in class IV-A of SD Negeri 06 Padang Besi Kecamatan Lubuk Kilangan, Kota Padang. The samples chosen were those whose ability was between 8 and 15. Based on the results of Small Group Method evaluation, it is revealed that the practicality score of the learning materials is in the range of 85% to 100%. On average, the practicality score of the materials is 96.47% (very practical).

3.5.4 Prototype 3

The result of the revision on prototype 2 is called prototype 3 which is used in practicality test. The test was carried out by using Field Test 1 method. The Field 1 test was conducted on September 26th, 2016 in class IV-B of SD Negeri 06 Padang Besi Kecamatan Lubuk Kilangan, Kota Padang.

a) The Results of the Observation on the Implementation of the Lesson Plan
Based on the results of the observations on the implementation of the Lesson Plan in class IV (4th grade) of SD Negeri 06 Padang Besi, it is revealed that the practicality score of the learning materials developed is 91.67% (very practical).

b) The Result of the Observation on the Learning Process
The practicality data was obtained from the results of observation on the use of BQBO strategy-based literacy reading learning materials. During the learning process, the teachers could make use of the materials maximally through which they were able to direct the students to predict the content of the story. The students were also asked to write simple sentences.

c) The Result of the Practicality Questionnaire
The questionnaires were distributed to either the teachers or the students. The results of data analysis on the questionnaires given to the students indicate that the students perceive that the literacy reading materials which were developed based on the BQBO strategy are very practical to be used in the 4th grade. Meanwhile the teachers consider the learning materials as practical to be used for teaching Indonesian subject in the 4th grade.

d) The Results of the Interview on the Implementation of the BQBO-Based Literacy Reading Learning Materials in the Learning Process
The results of the interview were divided into two parts; interview done with the teachers and that done with the students. Through the interview, the students were asked to give their opinion about the learning materials used from which it is figured out that the students are interested in the appearance of the materials developed. The results of the interview done with the teachers reveals that the teachers do not get any difficulties in teaching appropriate reading techniques to the students and facilitating the students to deliver their ideas or express their opinions.

3.6 Assessment Stage

Assessment stage is intended to see the effectiveness of the learning materials used on various objects, situation, and conditions. The materials then were used in the 4th grade of SD Negeri 01 Sawahan. The effectiveness of the materials was seen from the students’ activities during the learning process, their reading comprehension skill, and their critical thinking ability after the BQBO strategy-based learning materials used.
3.6.1 Students’ Activities

The students’ activities during the learning process of using BQBO strategy-based learning materials were observed by two observers. The result of the observation shows that the score of the students’ learning activities is 88.39% (very good). The students were enthusiastic to get involved in the learning process by using the BQBO-based learning materials.

3.6.2 Attitudes (Characters) Assessment

The attitudes assessed were those occurred during the learning process. The literacy reading materials developed direct the students to have positive attitudes in everyday life. The students are expected to be able to show some of 18 positive attitudes required. In this research, the effectiveness of the learning process is not merely seen from the students’ activities and learning achievement, but also from their attitudes.

The results of the attitude assessment reveal that the 4th grade students are now accustomed to have positive attitudes, such as being discipline, creative, friendly, and communicative. Classically, the most prominent attitude arises in the classroom is the attitude of discipline. The students tend to do and submit the task on the time it is due. It can be said that the students are able to complete the tasks related to the BQBO-based literacy reading materials with good attitudes.

3.6.3 Critical Thinking Assessment

Critical thinking skill is the ability to think reflectively and productively by taking the evaluation of evidences into account. The purpose of assessing the students’ critical thinking skills is to reveal the way the students analyze ideas or notions about an object of study by using certain criteria. The results of the assessment on the critical thinking skills show that the students are able to think critically in the terms of asking questions, analyzing arguments, and drawing conclusions based on the texts read. Classically, the students are more likely to master critical thinking skills in the the aspect of asking questions. In general, the score of the students’ critical thinking skill is 76.98% (good).

3.6.4 Reading Skills Assessment

Reading skills assessment is viewed from two aspects, namely process assessment and outcome assessment. Process assessment is conducted during the teaching and learning process. The students were asked to fill out the worksheets provided and their work then was scored by using scoring rubric of reading skills. Outcome assessment is an assessment of the students’ understanding on the reading texts given. The students were assigned to answer several questions related to the texts read. The result then was processed by using scoring rubric.

3.6.5 Assessment on Reading Skill Process

The results of the assessment on reading skill process show that the average score of the reading skill process is 85.71% (very good). In other words, the students’ activities during the learning process highly support their efforts to understand and use the learning materials developed. There are three main stages of reading included in this research, namely pre-reading, whilst-reading, and post-reading.

3.6.6 Assessment on Reading Skills Outcomes

Assessment on the reading skill outcomes is an assessment on the students’ understanding about the content of the reading texts. It could be measured through evaluation items related to the content of the text. The evaluation consists of 10 multiple choice items, 5 gap filling items, and 5 essay items. The items cover the components of the Lesson Plan and the learning materials developed.

The learning mastery of each student was seen from the result of formative test compared to the Minimum Standard Score achieved by each class. The use of BQBO strategy-based literacy reading learning materials could help the students in understanding the reading content completely. Of the 28, 23 students got score above the Minimum Standard Score, and 5 students got below.

3.7 Limitations of Research

This development research produces BQBO strategy-based learning materials with six literacy reading lessons. The materials tried out to the students was only lesson 1. The limitation implies that further research is needed in order to test and compare the current research finding. By conducting further research, it is expected that the finding of the upcoming research are synchronous to the current one. Having the materials for Lesson 1 are practical and effective, it is predicted that those for Lesson 2 – 6 are also practical and effective.
4 CONCLUSIONS, IMPLICATIONS, AND SUGGESTIONS

Based on the development and try out done to the BQBO strategy-based literacy reading learning materials, it is concluded that: (1) the learning materials developed are very valid, (2) the learning materials developed are very practical, and (3) the learning materials developed are very effective.

BQBO-based literacy reading learning materials are effective to be used in the learning process of reading in the 4th grade of Elementary School. The development of the learning materials could be done by every teacher in every school by considering the validity, practicality, and effectiveness of the materials developed. This is done to assure the quality of the learning materials to match the expected results and the students’ needs according to the goals of education.

Based on the research findings, it is recommended to: (1) the teachers to use BQBO strategy-based literacy reading learning materials and make use of the stories contained in as the stories that precede the learning process in literacy class. (2) other researchers to conduct further research on BQBO-based literacy reading materials in a wider scope with different situations and conditions to achieve more complete results.

5 REFERENCES