



Developing Process Approach-Based Reading Textbook for Grade IV Students

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Abstract

The objective of this research and development study is generating approach-based reading textbook which will be appropriate and feasible for implementation in order to improve the reading skills of Grade IV students. This research and development study referred to the steps of research and development proposed by Borg & Gall. The subjects in this study were the Grade IV students from the State Elementary Schools under the Regional Unit of Technical Implementation in Kutasari District, the Regency of Purbalingga which consist of SD Negeri 1 Cendana, of SD Negeri 1 Karangjengkol, SD Negeri 1 Sumingkir, and SD Negeri 2 Munjul. In gathering the data, the researcher made use of interview, document analysis, rating scale, test, and questionnaire. The results of this research and development study are a process approach-based reading textbook for Theme 9 “My Food is Healthy and Nutritious” which has been designed in five reading activities namely: (1) setting up; (2) reading; (3) responding; (4) understanding; and (5) expanding the understanding. This textbook has been considered feasible for implementation according to the material expert and the media expert with “Good” category and according to the book design expert with “Very Good” category. There are differences in the final results between the experimental group and the control group after the approach based-reading textbook has been applied with the significance < 0.05 . These differences show the significant reading skills improvement with sig. value (2-tailed) = 0.024.

Keywords: reading textbook, process approach, reading ability

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Introduction

Learning process is the main activity within an education. In each learning process, at least there should be the following components: educator (teacher), student, objective, learning material, method, media, and learning evaluation. Learning material is one of the important components within the learning process. Learning material also becomes one of the factors that have caused the low learning quality.

Teacher is an educator and, therefore, he or she should develop learning materials that they have designed on their own or that they have imported from other references in order to complete the gap in these learning materials. In the same time, textbooks can also be considered as one of the learning materials that a teacher may have designed.

According to Tarigan & Tarigan (2009, pp. 13–14) textbook is a learning book for the subject in certain fields that has been designed by an expert in the related fields for certain intentions and instructional objectives; this textbook has been equipped with appropriate and comprehensible learning facilities from elementary schools to universities. As a result, this textbook may support a teaching program. On the other hand, according to Widyahening, Sitoresmi, & Al Hakim (2015, p. 89) a textbook represents the information source which is compiled with structures and sequential based on a certain science area.

In line with this statement, Sitepu (2012, p. 15) also asserted that in terms of designation in educational fields learning books are also part of textbook.

2013 Curriculum for elementary schools make use of integrative thematic learning

process which does not use the term subject anymore; instead, this new curriculum makes use of the term theme and sub-theme and the learning process is presented in one learning material using textbook, namely the teacher's book and the student's book. Both the teacher's book and the student's book are available for each theme. Specifically, the content of Bahasa Indonesia which consists of four skills of language proficiency, namely listening, speaking, reading, and writing, is not taught separately anymore; instead, these skills should be taught through integration with other subjects according to the theme and the sub-theme of the learning process. Language learning, especially the reading skill, has been very important from the past to the present for elementary schools recalling the objective elementary school education is equipping the students with the life skills (read-write-count).

Gillet, Temple, Temple, & Crawford (2012, p. 3) stated that reading is first of all a language ability. As the first part of language ability, reading skills in the learning process of Bahasa Indonesia does not only serve to improve the students' language ability but also serve to improve their ability in the other subjects. It might be stated that reading is the students' main key to study the science in every learning process as having been stated by Podhajski, Mather, Nathan, & Sammons (2009, p. 403) as follows: "Reading serves as the major conduit for all learning. In the same time, Council, Cartledge, Green, Barber, & Gardner (2016, p. 241) asserted that reading is the most essential skill for school success.

Reading is an important skill for the students' individual and academic development. Jones & Brown (2011, p. 5) suggested that reading skill for children are critical for future academic and personal growth. In line with the statement, Akubuilu, Okorie, Onwuka, & Uloh-Bethels (2015, p. 38) stated that reading is one of the important skills of language. Reading skills will impact the attainment of new knowledge, language, and insight. In addition, reading skills are also able to improve intelligence so that students will be more prepared to welcome their future.

Kamalova & Koletvinova (2016, p. 480) stated that reading is the basic component of education. This is line with the statement of Roe, Smith, & Burns (2012, p. 3) who stated that the ability to read is vital to functioning effectively in a literate society. Unfortunately, not

many Indonesian people are aware of the important meaning that reading learning process has. Learning to read should become a continuous effort and only people who understand the importance of reading activities will learn more actively as having been seen in the advanced countries. However, the truth that should be accepted is that the students' reading ability in Indonesia is still concerning.

The importance of reading for students has not been fully understood by teachers; as a consequence, the Indonesian students' reading skills are still low. Concerning results can be seen in the study by Progress in International Reading Literacy Study (PIRLS) 2011, an international study toward the reading skills of the students throughout the world (Mullis, Martin, Foy, & Drucker, 2012, p. 38). In the results of this study, the rank on the reading skills of elementary school students in Indonesia is still very low namely 42 out of 45 countries under study with the average score 428.00. Indeed, the score has increased from the one in 2006 namely 405.00; however, the results of this study certainly becomes a matter of consideration for evaluating the educational programs in Indonesia. This statement is further strengthened by Suryaman (2015, p. 170) who disseminated the results of his study that the achievement of the average reading skills among the Indonesian students is still below the international median.

Based on that discussion, it is appropriate that teachers and educational persons always strive to improve the quality of reading learning process in schools. Budiarti & Haryanto (2016, p. 235) explained that teaching reading skills in elementary schools is intended to develop the fundamentals of reading skills. In line with this opinion, Efendi & Suhardi (2015, p. 98) also stated that reading learning process in elementary schools has an important role in helping the students to be skillful in reading activities.

Multiple efforts can be performed in order to improve the students' reading skills, such as providing teaching materials in the form of textbooks that will be appropriate for the students' needs. Textbook has important function and position in the learning activities within the school. In addition, appropriate learning approach and method should also be used. The appropriate teaching materials that are taught using the appropriate approach and

method may lead to well-qualified learning process.

Learning innovation can be performed through the implementation of process approach in order to improve the reading learning process. The intended process is the approach within the process of learning and teaching reading that emphasizes the skills of attaining knowledge and communicating the knowledge that has been attained through certain sequential steps. These steps are setting up to read, reading, responding, exploring texts, and expanding interpretation (Syamsi, Swatika Sari, & Pujiono, 2013, p. 84; Tompkins, 2002, pp. 200–206, 2013, pp. 42–50).

Process approach is deemed necessary to implement in the reading activities because this approach is important in supporting the students' reading ability. The teaching materials that support the process approach in the learning of reading in the form of elementary school textbooks are not available and have not been developed according to the approach process. This statement is proven by a document review toward the textbooks that have been implemented in the learning process of Grade IV students.

From the problems in the teaching materials and the importance of the learning of reading, it is very interesting for the researcher to conduct a test of teaching materials development. The intended teaching materials development takes the form of textbooks for the learning of reading in elementary schools. In order that the benefits of this study can be perceived widely, the researcher has decided that the scope of this study will be district-wide. From an analysis toward several regencies, the researcher will select the location that might enable the conduct of this study and the location is the Regional Technical Unit of Implementation for State Elementary Schools in Kutasari District, Regency of Purbalingga.

After conducting the pre-survey activities that involve observation and interview and based on the teacher's and the student's needs and also the unavailability of process approach-based textbooks, the researcher has found that there should be a development of process approach-based textbooks development. The development of such textbooks is expected to improve the learning process of reading. The learning textbook that will be developed is complimentary to both the teacher's book and the student's book and is enriching the learning

materials in 2013 Curriculum. Therefore, it is sufficient to state that the research and development on the process approach-based reading textbook among the Grade IV students of Regional Unit of Technical Implementation for Elementary Schools in Kutasari District should be undergone.

The development of this process approach-based reading textbook is based on the process approach. The reading materials are presented into the five stages of the process approach. However, in order that the language will be easily accepted by the students these five stages are converted as follows: (a) setting up; (b) reading; (c) responding; (d) understanding; and (e) expanding understanding. The textbook will be designed by meeting the three elements of feasibility namely the design feasibility, the cover feasibility, and the content feasibility. The cover and the content feasibility belong to the anatomy feasibility.

Then, the problem formulations in this study are as follows: (1) how the process approach-based reading textbook feasibility for the Grade IV students in the Regional Unit of Technical Implementation for Elementary Schools in Kutasari District is; and (2) how the process approach-based reading textbook effectiveness for the Grade IV students in the Regional Unit of Technical Implementation for Elementary Schools in Kutasari District is. In relation to these problem formulations, the objectives of the study are as follows: (1) generating feasible process approach-based reading textbook for the Grade IV students in the Regional Unit of Technical Implementation for Elementary Schools in Kutasari District; and (2) generating effective process approach-based reading textbook for the Grade IV students in the Regional Unit of Technical Implementation for Elementary Schools in Kutasari District.

Method

This study was a research and development using the model proposed by Borg & Gall (1983). The product that would be developed was a process approach-based reading textbook for the Grade IV students. This research and development study on the process approach-based reading textbook was conducted on the second semester of 2015/2016 Academic Year. The site of this study was the Grade IV in the scope of the Regional Unit of Technical Implementation for Elementary Schools in Kutasari District, the Regency of Purbalingga.

Then, the subjects of this study were the Grade IV students under the same scope. There were four elementary schools that had been randomly selected namely SDN 1 Cendana with 24 students, SDN 1 Karangjengkol with 20 students, SDN 1 Sumingkir with 25 students, and SDN 2 Munjul with 25 students.

The procedures in conducting this research and development study were in accordance to the steps in the research and development model that had been proposed by Borg & Gall (1983, pp. 775–776). These procedures were as follows: (1) researching and collecting information; (2) planning; (3) developing preliminary form of product; (4) conducting preliminary field testing; (5) conducting the main product revision; (6) conducting the main field testing; (7) conducting the operational product revision; (8) conducting the operational field testing; (9) conducting the final product revision; and (10) disseminating and implementing the final product.

The data gathering techniques that the researcher employed in this study were interview, document analysis, rating scale, test, and questionnaire distribution. Then, the data gathering instruments that the researcher used were as follows: (1) interview guideline; (2) documentation analysis guideline; (3) product rating scale; (4) reading ability test; and (5) perception and response questionnaire.

Moreover, the researcher analyzed the data before the conduct of the study, the data on the process of product development, and the data after the process of product development. The data before the conduct of the study were in the form of pre-survey interview and the results of this pre-survey interview were analyzed using the descriptive technique. Then, the data on the process of product development were manipulated in the needs analysis and the product feasibility test and the analysis was as follows: the data analysis on the perception questionnaire made use of percentages of agreement test; the data analysis on the document made use of the descriptive technique; and the data analysis on the product assessment made use of the Likert scale and the conversion from the quantitative data to the qualitative data. Last but not the least, the data after the process of product development were manipulated in order to measure the effectiveness of the product that had been developed and to identify the teachers' and the students' response; the analysis toward the data after the process of

product development made use of the quasi-experimental data analysis, while the analysis toward the data from the teachers' and the students' response made use of the percentages of agreement test.

The conversion score referred to a formula that had been adapted from Azwar (2010, p. 163) as follows.

Table 1. Conversion from the Quantitative Data to the Qualitative Data

Score Interval	Value	Category
$X > X_i + 1,5 SB_i$	A	Very Good
$X_i + SB_i < X \leq X_i + 1,5 SB_i$	B	Good
$X_i - 0,5 SB_i < X \leq X_i + SB_i$	C	Moderately Good
$X_i - 1,5 SB_i < X \leq X_i - 0,5 SB_i$	D	Poor
$X \leq X_i - 1,5 SB_i$	E	Very Poor

Note:

X: empirical score (actual score)

X_i : ideal mean = $\frac{1}{2}(\text{max. score} + \text{min. score})$

SB_i : ideal standard deviation = $\frac{1}{6}(\text{max. score} - \text{min. score})$

Results and Discussions

In general, the results of this research and development study will be the results of preliminary product research and development, of product testing, and of final product review. The explanation of each part will be provided in the following sections.

The Results of Preliminary Product Research and Development

The process of preliminary product research and development is divided into three stages namely collecting and studying data, planning, and developing the draft of the product. Through each stage the research attains the research data that will be the part of research and development on the product assembly.

This stage aims at gathering information on the needs analysis. The intended information is the relevant information regarding the importance of developing the process approach-based reading textbook.

The activity in this stage starts with an interview to the teachers and the principals. In order to support the interview results, the researcher analyzes the document that takes the form of a review toward the textbook and the lesson plan that the teachers of Grade IV students have developed using the learning of reading approach; in the same time, the researcher also review the Bahasa Indonesia

textbook for the Grade IV students in order to identify the approach that has been implemented in presenting the teaching materials for reading activities. In addition to supporting the results of the interview and the document analysis, the researcher distributes questionnaire about the perception of reading activities to the principal, the classroom teachers, and the Grade IV students of SD Negeri 1 Cendana.

From the interview results, the researcher may conclude that the development of process approach-based reading textbook that can improve the students' reading ability is necessary. This textbook is expected to assist the learning activities of reading in the classroom. This conclusion is supported by the results of document analysis in the form of review toward the textbook and the lesson plan. Based on the review results, the researcher may conclude as well that in presenting the learning process of reading the textbook author has not implemented any specific approach that is in accordance to the steps in the reading process and the lesson plan that the teachers develop has not implemented the process approach in the reading activities. In the same time, from the questionnaire results on the teacher's and the student's perception the researcher may conclude that both the teacher's and the student's perception toward the reading activities have not been good.

From the results of data gathering and data collecting through the needs analysis using interview, document analysis, and questionnaire on the teacher's and the student's perception, the researcher may conclude that both the teachers and the students demand a reading textbook in order to develop the Grade IV students' reading ability. The intended reading textbook is the process approach-based textbook. The process approach-based reading textbook for the Grade IV students indeed has not been found after the analysis toward the subject textbooks for the Grade IV students have been completed.

In the planning stage, the researcher formulates the development plan based on the results of the needs analysis. The plan in this stage is developing the process approach-based textbook for the Grade IV students. In order to support this plan, the researcher conducts a library study by reviewing the concepts or the theories related to the process approach in the reading activities and the textbook arrangement. The activities in the library study are also supported by another review toward the syllabus

and the learning materials of reading activities for the Grade IV students in the 2013 Curriculum. The textbook development is conducted on the Theme 9 "My Food is Healthy and Nutritious."

After the planning stage has been finished, the researcher designs the preliminary product. The Basic Competencies that will be selected is those that are in accordance to the Theme 9 "My Food is Healthy and Nutritious." Then, the basic competencies that have been selected are the ones in the learning materials of Bahasa Indonesia on the aspect of reading skills namely Basic Competencies 3.1, 3.3, and 3.4. Then, the learning materials are selected according to the theme, the basic competencies, and the learning indicators. These materials are taken from multiple sources namely the student's book, the Internet (with revisions), and the developmental results. Eleven materials that have been designed then will be arranged based on the process approach in reading. The process approach in reading undergoes five stages namely setting up, reading, responding, understanding, and expanding understanding.

Before the process approach-based reading textbook is tested, this product should be assessed and be validated by the material expert, the media expert, and the book design expert. The assessment of each aspect has different aspects. This assessment is performed in order to identify the feasibility of the textbook that has been developed. The textbook can only be tested if it is considered feasible by the material expert, the media expert, and the book design expert. The complete results of the judgment can be seen in the following table.

Table 2. Results of Textbook Feasibility Assessment by the Material Expert

Aspects	Score	Value	Category
Content Feasibility	68.00	B	Good
Presentation	52.00	B	Good
Total	120.00	B	Good

From the results that have been displayed in Table 2, the total score of the reading textbook assessment by the material expert is 120.00. If this score is converted, then it will be B with "Good" category; as a result, the product that has been developed can be considered feasible. Then, the score of each aspect is as follows: 68.00 for the content feasibility with "Good" category and 52.00 for the presentation with "Good" category.

Table 3. Results of Textbook Feasibility Assessment by the Media Expert

Aspect	Score	Value	Category
Language	28.00	A	Very Good
Graphic	44.00	A	Very Good
Total	72.00	A	Very Good

From the results that have been displayed in Table 3, the total score of the reading textbook assessment by the media expert is 72.00. If this score is converted, then it will be B with “Good” category; as a result, the product that has been developed can be considered feasible. Then, the score of each aspect is as follows: 28.00 for the language with “Good” category and 44.00 for the graphics with “Good” category.

Table 4. Results of Textbook Feasibility Assessment by the Book Design Expert

Aspect	Score	Value	Category
Book Design	41.00	A	Very Good
Book Content	32.00	B	Good
Book Cover	65.00	A	Very Good
Total	138.00	A	Very Good

From the results that have been displayed in Table 4, the total score of the reading textbook assessment by the media expert is 138.00. If this score is converted, then it will be A with “Very Good” category; as a result, the product that has been developed can be considered feasible. Then, the score of each aspect is as follows: 41.00 for the book design with “Very Good” category, 32.00 for the book content with “Good” category, and 65.00 for the book cover with “Very Good” category.

Results of Product Testing

Results of Preliminary Product Testing

The preliminary product testing is performed in Grade IV of Sekolah Dasar Negeri 1 Cendana for two weeks and the subjects of this preliminary product testing are 6 students. The preliminary product testing is conducted in order to attain empirical evidence of the process approach-based reading textbook feasibility in learning process using the reading ability test.

The information that has been attained from the preliminary product or field testing is the data from the students’ reading ability test that has been conducted at the end of the learning process, or also known as the posttest. The data analysis from the students’ reading ability test is taken in order to identify the

improvement of the students’ reading ability in mastering the competencies after they attend the learning process using the process approach-based reading textbook.

The score that have been gathered in the preliminary field testing is the reading ability test score that has been conducted at the end of the learning process or also known as the posttest. This posttest is administered because in the preliminary field testing the researcher has made use of the one-shot case study design.

The results of this product testing show that the students’ highest score is found on the subject with initial DS, namely 80.00, while the students’ lowest score is found on the subject with the initial AAT and SNS, namely 68.00. The subjects are considered to surpass the cut score because the cut score that has been determined is 65.00. The mean of the learning results in this preliminary field testing is 72.50. Based on these results, the process approach-based reading textbook is considered feasible and may process to the main field testing.

Results of Main Field Testing

The main field testing is conducted in the Grade IV of Sekolah Dasar Negeri 1 Cendana for 2 weeks and the subjects in this testing are 24 students. The objective of conducting the main field testing is implementing the product that has been revised in the preliminary field testing and identifying the effectiveness of the process approach-based reading textbook using the reading ability test.

The data that have been attained from this field testing are the reading ability pretest score and the reading ability posttest score. The analysis toward the data from the reading ability test in this field testing is performed in order to identify the effectiveness of the process approach-based textbook that has been developed. In this field testing as well, the researcher gathers the pretest and the posttest score from the 24 students because the field testing makes use of one-group pretest-posttest design.

From the results of the pretest that has been attended by 24 students in the main field testing, the highest score is 80.00, the lowest score is 22.00, and the mean score is 57.80. 15 of 24 students do not achieve the cut score. Then, the posttest is administered after the students conduct their learning process using the process approach-based reading textbook. The data from the posttest results show that there 4

students who do not achieve the cut score. From the posttest results, the researcher found that the highest score is 95.00, the lowest score is 58.00, and the mean score is 77.83.

Looking at the mean score that has been achieved in the pretest and the posttest results, the researcher found the gain score that has been equal to 0.47 with "Moderate" category. Based on the gain score that has been attained, the process approach-based reading textbook that has been developed is considered effective in improving the students' reading ability and the textbook may be implemented in the next stage namely the operational field testing.

Results of Operational Field Testing

The operational field testing is conducted in Sekolah Dasar Negeri 1 Karangjengkol, Sekolah Dasar Negeri 1 Sumingkir, and Sekolah Dasar Negeri 2 Munjul. Sekolah Dasar Negeri 1 Karangjengkol with 20 students and Sekolah Dasar Negeri 1 Sumingkin with 25 students serve as the experimental group. On the other hand, Sekolah Dasar Negeri 2 Munjul with 25 participants serves as the control group. The objective of this operational field testing is implementing the product that has been revised in previous testing and identifying the effectiveness of process approach-based reading textbook in improving the students' reading ability.

The number of test participants for the experimental group is 45 people in total, while the number of test participants for the control group is 25 students. The learning process in the experimental group makes use of the process approach-based reading textbook, while the learning process in the control group makes use of the conventional textbooks. In the following sections the researcher will provide explanation regarding learning results of the students in the experimental group and the students in the control group within the operational field testing.

Experimental Group

The data from the learning results of the experimental group are gathered from 45 Grade IV students in Sekolah Dasar Negeri 1 Karangjengkol and Sekolah Dasar Negeri 1 Sumingkir. These results show that the highest score is 80.00 while the lowest score is 28.00. From the pretest results, the researcher found that 31 of 45 students do not achieve the cut score or the minimum passing grade that has

been stipulated namely 65.00. The mean score of the students in this group is 57.30 with standard deviation 12.26.

Then, from the posttest results the researcher also found that the highest score is 95.00 and the lowest score is 43.00. There are 6 students who do not achieve the cut score namely 65.00. However, classically 86.60% students have achieved the cut score. The mean score in this posttest is 73.90 with standard deviation 10.49.

Control Group

The data from the learning results of the experimental group are gathered from 25 Grade IV students in Sekolah Dasar Negeri 1 Munjul. These results show that the highest score is 78.00 while the lowest score is 50.00. From the pretest results, the researcher found that there are 9 students do not achieve the cut score or the minimum passing grade that has been stipulated namely 65.00. The mean score of the students in this group is 65.72 with standard deviation 8.26.

Then, from the posttest results the researcher found that the highest score is 80.00 and the lowest score is 38.00. There are 6 students who do not achieve the cut score namely 65.00. However, classically 76.00% students have achieved the cut score. The mean score in this posttest is 67.76 with standard deviation 11.01.

Normality Test

The data calculation for the normality test is performed using the assistance of SPSS (Statistical Product and Service Solution) 16.0. The normality test is based on the following hypothesis.

H_0 : The sample comes from the normally distributed population.

H_1 : The sample does not come from the normally distributed population.

H_0 will be rejected if the significance value is smaller than $\alpha = 0.05$. On the contrary, if the significance value is greater then the normality and the homogeneity will be accepted. The followings are the results of normality test toward the students' pretest and posttest scores.

Based on the data that have been displayed in Table 5, the researcher found that the results of normality test with the related significance value are greater than the probability value 0.05. Thereby, H_0 is accepted or the data is normally distributed.

Table 5. Summary on the Normality Test Results

Test	N	Kolmogorov-Smirnov Score	Score of Significance
Pretest (EG)	45	1.064	0.208
Posttest (EG)	45	1.235	0.094
Pretest (CG)	25	0.778	0.580
Posttest (CG)	25	0.983	0.289

Homogeneity Test

In addition to normality test, and also serving as part of prerequisite test, the researcher performs data homogeneity test. The homogeneity test aims at identifying whether the sample that has been involved in the study is homogenous or not. In order to identify the whether the population variance is homogenous or heterogeneous, the homogeneity test is based on the following hypothesis:

H0: The population variance of the learning results test between the respondents in the control group and the respondents in the experimental classroom is similar (homogenous).

H1: The population variance of the learning results test between the respondents in the control group and the respondents in the experimental classroom is different (heterogeneous).

Table 6. Summary on the Results of Homogeneity Test

Test	N	Levene Statistic	Score of Significance
Pretest & Posttest (EG)	90	0.451	0.504
Pretest & Posttest (CG)	50	0.658	0.421

Based on the results that have been displayed in Table 6, the researcher found that the significance value results of the homogeneity test are bigger than the probability value 0.05. Thereby, H0 is accepted or the data are homogenous.

The Difference on the Learning Results Improvement between the Experimental Group and the Control Group

From the results of data normality test and of data homogeneity test, the researcher may conclude that the data are normally distributed and are homogenous; therefore, in order to identify the difference on the learning results improvement between the experimental group and the control group the researcher employs the

independent sample t-test. The independent sample t-test is performed using SPSS 16.0. The product in the form of textbook that has been developed will be considered effective if the posttest results of the experimental group are better than those of the control group. The followings are the hypothesis that will be tested:

H0: There has not been significant difference on the posttest results between the experimental group and the control group.

H1: There has been significant difference on the posttest results between the experimental group and the control group.

The criteria of decision then will be as follows: If $\text{sig} < \alpha$, then the difference will be significant. If $\text{sig} > \alpha$, then the difference will not be significant.

The criteria of H0 acceptance or rejection on the rate of significance 5% are as follows: if the significance > 0.05 then H0 will be accepted and if the significance < 0.05 then H0 will be rejected. The followings are the results of independent sample t-test calculation from the posttest results between the experimental group and the control group using SPSS 16.0 for Windows.

Table 7. The Difference on the Posttest Results between the Experimental Group and the Control Group

Group	N	Mean	Std. Deviation	Std. Error Mean
Experimental	45	73.9333	10.49329	1.56425
Control	25	67.7600	11.01998	2.20400

Based on the results that have been displayed in Table 7, it is apparent that the mean of the posttest results from the experimental group which respondents are 45 students has been 73.93 with standard deviation 10.49 while the mean of posttest results from the control group which respondents are 25 students has been 67.76 with standard deviation 11.01. From the mean score that has been attained by the students, there has been difference on the mean score and the mean score of the experimental group is higher than that of the control group.

From the results of homogeneity test, the researcher may conclude that the variance has been homogenous; therefore, the analysis toward the t-test should make use of the equal variance assumed. From the SPSS output, the researcher found that the t value on the equal variance assumed is 2.317, df 68, and rate of significance 0.05 (two-tailed). If the results of

significance < 0.05 , then H_0 is rejected and H_1 is accepted or the posttest results of the experimental group is better than those of the control group in the rate of significance 0.05. Then, the results of two-tailed significance is $0.024 < 0.050$ and the mean score from the posttest results of the experimental group is bigger than that from the posttest results of the control group. Based on these findings, the researcher may conclude that there has been significant difference on the posttest results between the experimental group and the control group.

In the experimental group, the overall learning process of reading makes use of process approach-based reading textbook. The students are involved actively in the learning activities. The textbook is equipped with exercise test items that strengthen the students' understanding toward the reading materials. Through these test items, the students might train themselves in solving the test items based on the reading materials; as a result, the mean score of the students in the experimental group is higher than that of the students in the control group.

On the other hand, the learning process of reading in the control group still centers on the teachers. The reading materials are taken from the conventional textbook which has not been developed using the process approach. Then, the media that the teacher makes use in this group are the pictures that have been available in the textbook. This situation has caused the student to not take active participation in the learning process of reading.

Thereby, the researcher may conclude that the reading score of the students in the experimental group is better than that of the students in the control group. The researcher may also conclude that the learning process of reading in the experimental group that employs the process approach-based reading textbook is more effective in improving the students' reading ability in comparison to that in the control group that employs the conventional textbook.

Results of Teacher's Response Questionnaire and Student's Response Questionnaire

A response questionnaire is distributed in order to measure the teacher's response and the student's response toward the process approach-based textbook that has been developed. Based on the results in this questionnaire, the researcher may conclude that the teacher's

response and the student's response toward the process approach-based textbook are very good. The results that have been attained in the teacher's response questionnaire show that the total score is 149, the predicate is A, and the textbook falls into the "Very Good" category. Then, the results that have been attained in the student's response questionnaire show that the total score is 636, the predicate is A, and the textbook falls into the "Very Good" category. Therefore, the process approach-based reading textbook is effective.

Final Review of the Product

The final product in the form of process approach-based reading textbook has been resulted from the revision, the preliminary draft, the after field testing-revision, and the after main field testing-revision. This final product is a textbook for the reading activities with the following title: "Skillful Reading: Process Approach-Based Complimentary Learning Materials for Theme 9 My Food is Healthy and Nutritious." This textbook is a complimentary material for the reading activities in Curriculum 2013 under the above theme. The meaning of complimentary is that the textbook that has been developed will complete the learning process of reading that has not been supported by the textbook that has been published by the Ministry of Education and Culture the Republic of Indonesia, namely the learning process that does not make use of the process approach. The 2013 Curriculum textbooks that have been issued by the related Ministry are the Theme 9 My Food is Healthy and Nutritious Subtheme 3 Learning Process 6. The textbook that has been developed also entails a reading ability test as the final part.

The reading textbook that has been developed displays several strengths and one of the strengths is that this textbook is able to ease the teachers and the students within the learning process of reading; the evidence can be seen in the results of the teacher's response questionnaire and the student's response questionnaire. In addition, this textbook can also improve the students' reading ability; the evidence can be found in the student's reading ability test results. These results are in accordance to the opinion by Purnanto & Mustadi (2016, p. 111) who stated that students will be heavily assisted in developing their knowledge through the presence of learning textbook. The students will also be assisted in understanding the learning materials and in recognizing multiple types of

healthy and nutritious food that they often find in their daily life. Such statement has also been provided by Syatriana, Husain, Haryanto, & Jabu (2010, p. 16): "The material should meet the students' need."

The process approach-based textbook that has been developed in this study has good quality in terms of materials, media, and book design. Such a good quality has been attained from the systematic design that is in accordance to the standards of textbook composition: meeting the elements of material feasibility, media feasibility, and book design feasibility (Muslich, 2010, p. 291; Sitepu, 2012, p. 127). The specifications of this product are as follows: (1) the textbook is a printed version with length 29.70 cm and width 21.00 cm; (2) the paper that has been used is HVS 80 gr with A4 size (29.70 cm x 21.00 cm); and (3) the type of font that has been used is Baar Metanoia 12 pt that has been in accordance to the standard font in the teacher's book and the student's book that have been issued by the Ministry of Education and Culture the Republic of Indonesia.

In general, the contents of this product are designed as follows: (1) the textbook cover is designed in an interesting way by putting the appropriate colors and by using the supporting illustrations; (2) the introductory part of this textbook contains foreword that explains the intention and the objective of the textbook development; (3) this textbook is equipped with an explanation about the book content in order to ease the users in studying the textbook; (4) this textbook is also equipped by the Core Competencies and the Basic Competencies for Bahasa Indonesia in the aspect of reading skills Theme 9 My Food is Healthy and Nutritious; (5) there are students' illustrations and conversations that begin every learning subtheme; (6) in order to draw the students' attention this textbook is equipped with pictures and illustrations for each reading materials; and (7) the closing part of the textbook is equipped with the reading ability test and the words that motivate the students to read.

The reading materials for the reading skill of Bahasa Indonesia in Theme 9 My Food is Healthy and Nutritious from subtheme 1, 2, and 3 are presented according to the steps in the process approach that has been proposed by (Tompkins, 2002, pp. 200–206) and Tompkins (2013, pp. 42–50) and these steps are as follows: setting up, reading, responding, understanding, and expanding understanding. In the Setting up

step, the learning activities are inviting the students to prepare themselves before reading the learning materials. Then, in the Reading step there are learning materials that will be studied and be used for improving the students' reading ability; the learning activities in this step are designed using the reading model that has been decided. Next, in the Responding step the learning activities are inviting the students to provide their responses after reading the learning materials and they may also have discussions about their responses with their peers and teachers. Subsequently, in the Understanding step the learning activities are inviting the students to have deeper understanding toward the reading materials through the repeated reading activities, the study toward new vocabularies, and the response to the questions around the reading materials. Last but not the least, in the Expanding Understanding step the learning activities are inviting the students to expand their understanding toward the reading materials; in expanding their understanding, the students may re-write the reading materials or re-tell the reading materials using their own language and they may even also perform role play according to the materials.

Conclusions

Based on the results of this research and development study, the researcher would like to draw the following conclusions. First, the process approach-based reading textbook that has been resulted is feasible for implementation among Grade IV students in terms of learning material. According to the material expert, the score of this process approach-based reading textbook is 120.00 with the "B" predicate and the textbook itself falls into the "Very Good" category. Then, the process approach-based reading textbook that has been resulted is also feasible for implementation among Grade IV students in terms of learning media. According to the media expert, the score of this process approach-based reading textbook is 72.00 with the "B" predicate and the textbook itself falls into the "Good" category. Next, the process approach-based reading textbook that has been resulted is feasible for implementing among Grade IV students in terms of book design. According to the book design expert, the score of this process approach-based reading textbook is 138.00 with the "A" predicate and the textbook itself falls into the "Very Good" category.

Second, the process approach-based reading textbook that has been resulted is considered effective to improve the reading ability of Grade IV students on the learning process of Theme 9 My Food is Healthy and Nutritious. From the perspective of the students' learning results, their mean score has improved based on their pretest and posttest score. The results of differential test between the experimental group and the control group show that there has been significant difference on the learning results between the experimental group and the control group. Third, the process approach-based reading textbook that has been resulted gathers very good response from the users, namely the teachers and the students. Therefore, this textbook is considered precisely useful.

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