

THE DEVELOPMENT OF LEARNING MATERIAL BASED ON CHARACTERED EDUCATION TO INCREASE THE STUDENTS' LEARNING OUTCOMES AT CLASS IV SDN 104203 BANDAR KHALIPAH, MEDAN, INDONESIA

Siti Rahmadhani Siregar¹, Abdurrahman Adisyahputra² and Evi Eviyanti²

¹Master Student at State University of Medan (Unimed), Medan, Indonesia

²Lecturer at State University of Medan (Unimed), Medan, Indonesia

Abstract: *Reading is a process for obtaining information contained in the reading text to gain an understanding of the passage. Reading consists of understanding the written language. It is a development research on teaching materials based on charactered education by using 4-D development modes from Tangerine, Semmel and Sammel that produced valid and effective teaching material to improve the students' learning outcomes of grade IV of SD (Primary School) Negeri 104203 Bandar Khalipah. The validation results by the validator of the experts of material, language, and instructional design stated that the developed material is worthy of use with an average of 90.32 and the category is very valid. Although the developed material has met the criteria of validity. For the percentage of learning result of classical learning, it was obtained by the control class students on pretest and posttest is 33,33% and 76,66% and gain score is 0,34. Meanwhile the learning outcomes for classical completeness experimental class increased from pretest and posttest students is 61.29% to 90.32%.*

KEYWORDS: Learning Material; Charactered Education; Learning Outcomes; Reading Ability

INTRODUCTION

Reading as a basic skill must be mastered by each student to equip their knowledge at the next level. For that reason, reading ability plays an important role. Without reading ability, the students cannot learn various subjects. Reading can be said to be a process for obtaining information contained in the reading text to gain an understanding of the passage. Reading consists of understanding the written language. Reading and writing are not universal factors because many languages do not know the form of writing. Because of the reading is tangible, these two factors depend on each other. The nature of reading is visual, organized and systematic and most importantly is related to a language and society.

Those activities are very supportive to the development of some character values in students, such as reading, curiosity, meticulous, creative, confident, responsible, friendly/communicative, and others. The development of reading material is one of the learning instruments that support the implementation of character education integration in the learning process. Based on that reasons, it is simply that the general purpose of reading can be said to be achieved optimally, if the students' cognitive abilities increases then their ability to read show good results. In achieving good students' reading skills, the appropriate teaching materials based on character education are required so that it may achieve the general goal of learning to read cognitively and affectively and the students' learning outcomes would increase.

Before conducting the research, an observation was made in grade IV of SD (Primary School) Negeri 104203 Bandar Khalipah that from 9 out of 40 students met the minimum passing standards, and 31 out of 40 other students did not meet the minimum passing standards. It shows that students' understanding in the learning process is still low that cause their learning outcomes tend to be low. Based on the observation, it can be concluded that the students are classified not understand that causes their learning outcomes tend to be low and does not meet the minimum predefined minimum score that has been determined. The low learning outcomes of the students become an indication that the lessons learned so far have not been effective. Furthermore, learning to read is only limited to the acceptance of information alone, without any emphasis on the development of student character values. In the students' book of fourth grade SD, the theme 6 about *Indahnya Negeriku* (My Beautiful Country) page 90-91, the text used is not an adventure story text but only the information, and has not entered the element value of the character. The teaching materials used are not in accordance with the basic competencies set. For example, the students' book of fourth grade SD on the theme 6 about *Indahnya Negeriku* (My Beautiful Country) at KD 3.5 discusses about the information from the text of a book review on the value of historical heritage and the development of Hindu-Buddhism in Indonesia with the help of the teachers and friends in spoken and written Indonesian by selecting and sorting out the standard vocabulary. While in the students' book there is no text of book reviews about the historical relics except the text information quoted from the internet.

LITERATURE REVIEW

Learning and Reading Ability

Learning is a mental activity that takes place in a person's mind so that the behavior changes occur. Skinner (in Gredler, 2011: 118) specifically defines "learning as a change of behavior". According to Gagne (in Dahar, 2011: 2) "learning is defined as a process by which an organization changes its behavior as a result of experience." This means learning is a process that the results in behavioral change based on the experience he/she gains. In contrast, Burton (in Hosnan, 2014: 3) defines that "learning is a change of behavior in the individual because of the interaction between the individuals and the environment so that they can interact with their environment". According to Winkel (2014: 59) "learning is a mental/psychic activity, which takes place in active interactive interaction with the environment, resulting in a number of changes in knowledge-comprehension, skill and attitude-values". According to Hosnan (2014: 7) "learning is essentially a process of interaction of all situations that exist around the individual". Learning also can be interpreted as an interaction that leads to changes in behavior in individual students. Learning can be viewed as a process directed to the goal and process of doing through various experiences. Learning is also a process of seeing, observing, and understanding things. Learning does not only remember, but also experience. Learning is also a mental activity that takes place in a person's mind so that the behavior changes occur. Mental activity is very dependent on the acquisition of one's experience. According to Anthony Robbins (in Trianto, 2009: 15) "learning is defined as the process of creating the relationship between something (knowledge) that is understood and something (knowledge) new". In line with what Jerome Bruner suggests (in Trianto, 2009: 15) "that learning is an active process in which students build (construct) new knowledge based on the experience/knowledge they already have."

According to Fudyartanto (2002: 23) "learning outcomes are the mastery of a number of knowledge and a number of new skills and new attitudes, or strengthening something that has been mastered before, including understanding and mastery of values". According to Abdurrahman (in Jihad and Haris, 2013: 14), "learning outcomes are the abilities that a child acquires through learning activities". Learning itself is a process of one who seeks to obtain a form of relative sedentary behavior change. In instructional activities or instructional activities, teachers typically set learning goals. Students who succeed in learning are successful in achieving instructional goals or instructional objectives. Learning outcomes are indicators for measuring the students' success in the learning process. Learning outcomes are the abilities that the students get after learning activities. From the student side, learning outcomes are the peak of the learning process which is a proof of the effort that has been conducted. Hamalik (2010: 23) affirms "that learning outcomes appear as an occurrence of behavioral changes in students, which can be observed and measured in the students' changes in knowledge, attitudes, and skills". Changes can mean better upgrades and development than ever before, for example from being ignorant, being polite and being polite and so on. The same thing is expressed by Supardi (2015: 2) that "learning outcomes are actual achievement stages which are displayed in the form of behavior that includes cognitive, affective, and psychomotor aspects and can be seen in the form of habits, attitudes, and rewards."

Charactered Education

Charactered education is a term that increasingly gets recognition from the people of Indonesia. According to Rutland in Hidayatullah (2010: 12) the character comes from the Latin root meaning "sculpted", therefore character is the quality and strength of mental or morals or character of the individual who is a special personality that becomes the driver and enforcer, differentiate with other individuals. According to Megawangi (in Kesuma 2011: 5) "character education is an attempt to educate children to make wise decisions and practice them in everyday life, so that they can contribute positively to their environment". According to Khan (in Asmani 2012: 30) character education teaches habitual ways of thinking and behavior that help individuals to live and work together as family, community, and nation.

According to Koesoema (2007: 124) character education related to how to instill certain values in students at school. Thus the function of the school is as a place of nursery and the land that allows the seeds to flourish and bring out their best possible respective (Raka, Gede et al 2002: 51). These values can have a moral weight or not, such as personal individual values (personal responsibility, generosity, self-esteem, honesty, self-control, compassion, self-discipline, endurance, self-giving, self-confidence, integrity, love, timely, soul-forgiving, and gratitude). Furthermore Narwanti (2011: 14) suggests "Character education is a system of inculcating the values of character to the people at school that includes components of knowledge, awareness or willingness, and actions to implement those values. Character education should bring the students to cognitive value recognition, affective value appraisal and ultimately a real value experience and teachers have a role to help learners build and develop character.

Teaching Materials

Materials or subject matter is everything that the curriculum content should be mastered by students in accordance with the basic competencies in order to achieve the standard competence of each subject in a particular education unit (Sanjaya, 2010: 141). Teaching materials or learning materials largely the knowledge, skills, and attitudes that must be learned by students in order to achieve a predetermined standard of competence.

Teaching materials are a necessary part in the course of the learning process. Teaching materials are a set of materials that are arranged systematically to be used in the learning process. According to Hamdani (2011: 120) teaching materials are all forms of materials that are arranged systematically to help teachers or instructors in implementing the learning process so as to create an environment or atmosphere that allows students to learn. Next Majid (2009: 174) states teaching materials are all forms of materials used to assist teachers/instructors in carrying out teaching and learning activities in the classroom.

According Prastowo (2012: 17) teaching materials are all materials (both information, tools and text) systematically arranged, which displays the complete figure of the competence that will be mastered learners and used in the learning process with the purpose of planning and review of learning implementation. Furthermore, Raka (2002: 64) states a teacher searches and finds lesson material that can be a stepping stone to highlight aspects of character related to the subjects taught. Based on the understanding that the teaching materials are all forms of material used by teachers systematically arranged that displays the whole figure of the competencies that must be mastered students in the learning process.

III.METHODOLOGY

Place and Time of Research

This development research was conducted at SD Negeri 104203 Bandar Khalipah in the final semester academic year of 2016-2017. The researcher's reason chose this school because: (1) in SD Negeri 104203 Bandar Khalipah there has not been implemented any research on the development of teaching materials based on Character Education, (2) the unavailability of teaching materials based on Character Education, and (3) by the teacher has not led to character education.

Subjects and Objects of Research

The subjects in this research are the students of SD Negeri 104203 Bandar Khalipah Grade IV. The object in this research is the Character Education-Based Learning Material.

Data Collection Techniques

Arikunto (2006: 222) mentions that "data collection is an important work in a research". Therefore, in this research the data collection techniques will be described to be selected in the implementation of the research because the conclusions of the research results are expected to be properly accounted for. The correct conclusions will only be obtained from the correct data collection. The following data collection techniques will be used in this research:

1) Test method

Pre-test is a test given to the research subject before learning activities. Post-test is a test given to the research subject after learning activities.

2) Questionnaire method

This questionnaire is used to obtain the subject response of the developed product. This type of questionnaire is a closed questionnaire type that has the choice of "happy" or "not happy", "new or" not new ", "interested "or" not interested "and" yes "or" no ".

3) Observation method

Table.1: Observation Method

Aspect of Assessment	Research Variables	Indicator
Content Feasibility	Quality of Learning Materials	1. Clarity of learning objectives according to KI-KD.
		2. Accuracy of material coverage.
	Learning System Presentation	3. Truth of concept.
		4. Conformity with the curriculum
		5. Conformity with character education
		6. The accuracy of the learning materials sequence .
		7. Depth of learning materials.
Presentation	Learning Strategy Quality	8. Quality of introduction
		9. Student engagement and role in learning activities
		10. Encourage students to answer in their own way
		11. Ffeedback quality
		12. Time of presentation
		13. Quality of exercise questions
Language	Quality of Learning Material	14. Logical material digestibility and exposure
		15. Ease of language understanding.
		10. Clarity of command word / instructions.
		11. Language used in accordance with PUEBI (General Use of Indonesian Spelling).
Image Selection	Quality of teaching material display	16. Display
		17. Illustration

The purpose of observations made in this study in order to obtain information related to data required in product development. Observations made are unstructured.

4) Interview method

Interview is an activity conducted through a dialogue conducted by the interviewer to obtain information from the interviewer. This interview was conducted to fourth grade students at SD Negeri 104203.

5) Documentation method

In this research, documentation method is used to collect facts, book data used as previous learning source as a study material for product development.

Data Collection Instruments

The data collection instruments used in this development research are as follows: The teaching material validation sheet is a research instrument that is used to measure the validity of the teaching materials that will be filled by the experts commonly called the validator. The assessment criteria are score 1 (*not good*), 2 (*less good*), 3 (*good*), and 4 (*very good*).

The design learning validation sheet is a research instrument used to measure the feasibility of the developed teaching materials. The validator is required to write the corresponding score by ticking the list (√) on the corresponding row and column. The assessment criteria are score 1 (*not good*), 2 (*less good*), 3 (*good*), and 4 (*very good*).

Table 2: Instrument Validation Grids of Learning Design Expert

Assessment Aspect	Assessment Indicator	Assessment Item
Feasibility of Presentation	Technique of Presentation	1. Consistency of systematic presentation in learning activities
		2. Accuracy of concept
	Supporting Presentation	3. Examples of problems in learning activities
		4. Exercises at the end of learning
		5. The accuracy of image selection
		6. The accuracy of color selection in the picture
		7. The accuracy of story selection
		8. Introduction
Presentation	Learning Presentation	9. Student involvement in reading activities
		10. Encourage students to read critically with the correct stages.
Language	Coherence and Thinking Problem Order	11. The linkage between reading and character education activities
		12. Time of Presentation
		13. Ease of language understanding
Image Selection	Quality of Learnign Material Display	14. Display
		15. Illustration
		Total

Questionnaire sheet of students' response is used to obtain the data about the statement and opinions of students on teaching materials developed. The students' response questionnaire will be distributed to each student after all learning is completed. The students are required to check the list (√) on the row and column corresponding to *happy* or *not happy*, *new* or *not new*, *interested* or *not interested* and *yes* or *no* answers ". The students' response questionnaire grids can be seen in Table 3 below:

Table 3: Instrument Grids of Students' Response Questionnaire

No	Aspect	Happy	Not Happy
1	Are you happy or not with the following learning component? a. Subject matter b. Reading materials c. Learning atmosphere in the class d. How teachers teach		
		New	Not New
2	Is the following learning component for you new or not? a. Subject matter b. Reading materials c. Learning atmosphere in class d. How teachers teach		
		Interested	Not Interested
3	Are you interested or not in following the next learning activity just like you just followed?		
		Yes	No
4	a. Can you understand clearly or not the language used in reading materials?		
		Yes	No
5	a. Are you interested or not with the appearance (writing, illustrations/drawings and image location), contained in the reading material?		

The students' response data on teaching materials and learning activities use the teaching materials development results analyzed by calculating the percentage of each statement. The observation sheet of reading skills process is a sheet which is designed to see the students' reading comprehension skills throughout the learning process.

Table 4: Assessment Sheet Grids of Reading Skill Process

Score	Indicator and Description
LKP of Pre-reading Stage: Predicted Reading	
1	Only fill out less than 3 predictions
2	Fill out 3-5 predictions
3	Fill out the five predictions
LKP of Reading Stage: The Meaning of Difficult Word	
1	Only able to write 2 difficult words and their meaning
2	Able to write 3-4 difficult words and their meanings
3	Able to write 5 difficult words and their meaning
LKP of Reading Stage: Prediction Test	
1	Only fill out less than 2 prediction test results
2	Fill out 3-5 predictions
3	Fill out the five predictions
LKP of Post-Reading Stage: Travel Map of A Figure	
1	Able to write less than 3 events and correlate them correctly
2	Able to write 3-4 events and correlate them correctly
3	Be able to write the entire events and connect them correctly
LKP of Post-Reading Stage: Retelling	
1	Telling some of the events in their own languages in the wrong order
2	Telling the whole event with their own languages in the wrong order
3	Telling the whole event with their own languages in the correct order

Table 5: Observation Sheet Grids of Character Assessment

No.	Value	Description	Score			
			BT	MT	MB	SM
			1	2	3	4
1.	Religious	Obedient attitudes and behaviors in implementing religious teachings, tolerance to the practice of religious worship, and harmonious living with other religions.				
2.	Curiosity	Attitudes and actions that always strive to know more and more broadly from what they have learnt, seen, and heard.				
3.	Tolerance	Attitudes and actions that respect the differences in religion, ethnicity, ethnicity, opinion, attitude, and actions of others which are different from them.				

4.	Love of the Land	The way thinking, acting, and insight that places the interests of the nation and state on the interests of themselves and their groups.				
5.	Friendship/Communicative	Attitudes and actions that encourage themselves to produce something useful for society, and recognize, and respect the success of others.				
6.	Care for the Environment	Attitudes and actions that always strive to prevent damage to the surrounding natural environment, and develop efforts to correct the natural damage that already occurred.				
7.	Social Care	Attitudes and actions that always want to provide assistance to other people and communities in need.4				
8.	Responsibility	Responsibility and behavior of a person to carry out his duties and responsibilities, which he should have done, to himself, the community, the environment (nature, social and culture), the state and the Supreme God.				

Validity test is used to measure the accuracy of a test in measuring the data in accordance with its competence. According to Sudijono (2012: 185) validity test can use the formula biserial point correlation coefficient as follows:

$$r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}} \quad (\text{Sudijono, 2012 :185})$$

Note:

r_{pbi} : Test validity

M_p : The students' average score who answered the item correctly

M_t : The average score of the total score

SD_t : The deviation standard of the total score

p : The proportion of students answered correctly

q : The proportion of students answered incorrectly

r_{table} (significance level 5% and $dk = n$), with the criterion:

If $r_{count} > r_{table}$ then the item of the question is Valid.

If $r_{\text{count}} < r_{\text{table}}$ then the item of the question is invalid.

Reliability test aims to measure trustworthiness, and consistency of tests in measuring data. According to Sudijono (2012: 254) reliability test can use Kuder-richardson formula as follows:

$$r_{ii} = \left(\frac{n}{n-1} \right) \left(\frac{SD_t^2 - \sum pq}{SD_t^2} \right) \quad (\text{Sudijono, 2012: 254})$$

r_{ii} : Reliability test

n : Number of test items

SD_t^2 : Total Variance

p : The proportion of students who get a score of 1

q : Proportion of students who get a score 0

With the criterion:

If $0,00 \leq r_{ii} \leq 0,69$ then the test is not reliable and the question should be replaced.

If $0,70 \leq r_{ii} \leq 1,00$ then the test is reliable.

The difficulty test aims to capture the subjects who answer the test items correctly. Robert L. Thorndike (in Sudijono, 2012: 372) suggests the difficulty test with the formula and the criteria as follows:

$$P_n = \frac{B_n}{J_s} \quad (\text{Sudijono, 2012: 372})$$

P_n : The difficulty degree of the nth item

B_n : Number of the students who answer correctly the nth item

J_s : Total number of the students

With the criterion:

$0.00 < P < 0.30$: Difficult

$0.30 < P < 0.70$: Medium

$0.70 < P < 1.00$: Easy

The different power test separates clever students and students who are less clever to know the level of goodness of each item question. Sudijono (2012: 389) proposed the different test power formula and criteria as follows:

$$P_n = \frac{B_n}{J_s} \quad (\text{Sudijono, 2012: 372})$$

Note:

D : Power difference

B_A : The number of upper group students who answer the test correctly

B_B : The number of lower students who answer the test correctly

J_A : Number of upper group students

J_B : Number of lower group students

With the criteria:

0.00 < D < 0.20: Bad

0.21 < D < 0.40: Enough

0.41 < D < 0.70: Good

0.71 < D < 1.00: Very Good

Data Analysis Technique

The analysis technique used is the analysis data of descriptive qualitative that describes the level of validity of teaching materials, the practicality of teaching materials, the students' competence that shows the effectiveness of teaching materials.

The technique is used to analyze the results of teaching materials validation is descriptive qualitative, that is by looking at the feasibility assessment of teaching materials from the research results. The quality of the development feasibility of developed teaching materials is viewed from the assessment of the validators of expert team on the developed teaching materials. The material expert's validator, linguists, media experts, and learning design experts will answer the question by checking the list (√) on a scale of 1-4. The criteria of teaching materials validation answers can be seen in Table 3.6 below:

Table 6: Criteria of Validation Instrument Item Answer

No	Answer	Score
1	Very Good	4
2	Good	3
3	Less Good	2
4	Not Good	1

Then the data were analyzed by calculating the score percentage of developed teaching materials. The formula used to calculate the percentage of validation sheet of teaching materials are as follows:

$$P = \frac{f}{N} \times 100\% \quad (\text{Sugiyono, 2011: 141})$$

P = Percentage of score

f = Number of score obtained

N = Number of maximal score

According to Sudjana (2007: 91) the determination of validation criteria is determined in the following ways:

a. Determining ideal percentage score (maximum score), that is:

$$\left(\frac{4}{4}\right) \times 100\% = 100\%$$

b. Determining the percentage of ideal score (minimum score), namely:

$$\left(\frac{1}{4}\right) \times 100\% = 25\%$$

c. Determining the range, i.e $100\% - 25\% = 75\%$

d. Specifying the interval class, ie 4 (very valid, valid, less valid, and invalid).

e. Determining the length of the interval, ie $75 : 4 = 18.75\%$

Based on the above calculation, the percentage range and qualitative criteria of feasibility test are presented in Table 7 below:

Table 7: Percentage Range and Qualification Criteria LKS Feasibility Test

Achievement Level	Qualification
$81,26\% < P \leq 100\%$	Very Valid
$62,26\% < P \leq 81,25\%$	Valid
$43,76\% < P \leq 62,25\%$	Less Valid
$25\% < P \leq 43,75\%$	Invalid

Source: Sudjana (2007: 91)

Analysis of the effectiveness of teaching materials aims to take a decision whether to do a further testing in the development stage of teaching materials. The effectiveness of teaching materials used in learning is determined based on the achievement of indicators in the form of: (1) the success of learning or completeness of the students' learning; (2) character assessment (3) students' response; and (4) reading ability. The effectiveness of the use of teaching materials based on character education is achieved when it fulfills at least three (3) of the four (4) indicators, provided that the success of learning or completeness of student learning complete.

a. Analysis of the Students Learning Completeness

Student's individual learning mastery can be calculated by the formula:

$$KB = \frac{T}{T_t} \times 100\% \quad \text{Trianto, (2009:241)}$$

KB = Learning mastery

T = Number of scores obtained by the students

T_t = Total score

0% = KB <65% of students who have not finished the study

65% = KB = 100% of students who have completed the study

Each student is said to be completed the learning (individual completeness) if the proportion of the students correct answers = 65%.

To know the students learning completeness by classical used the formula:

$$PKK = \frac{\text{Number of KB student} \geq 65\%}{\text{Number of researchsubject}} \times 100\% \text{ (Depdikbud in Trianto, 2009)}$$

PKK = percentage of classical completeness

According to Depdikbud (in Trianto, 2009) a class is said to be thoroughly studied if in the class has 85% who have achieved = 65% KB. After the students' individual and classical learning completeness are analyzed, the results of pre-test and post-test are calculated with gain score. To assess the improvement and the effectiveness of the Student Worksheet (LKS) on the theme of *My Beautiful Country* between before and after using the Students Worksheet (LKS) in the learning process is calculated by a normalized gain score formula:

$$\frac{(\text{Post-assessment} - \text{Pre-assessment})}{\text{-----}}$$

$$(100\% - \text{Pre-assessment})$$

Gain score is a good indicator to show the effectiveness level of the treatment from the acquisition of post-test score (Hake, 1999). The gain score categories are grouped as follows:

$$0,70 < gs \leq 1,00 \quad = \text{High}$$

$$0,30 < gs \leq 0,70 \quad = \text{Medium}$$

$$0,00 < gs < 0,30 \quad = \text{Low}$$

b. Data Analysis of Character Assessment

The steps taken in the analysis of student character assessment data are as follows:

- 1) Giving value to each character aspect according to the indicators developed, with the following assessment:

Table 8: Character Assessment

Assessment Description	Score
<i>Always</i> , when making a statement	4
<i>Often</i> , when often do the statements and sometimes do not	3
<i>Occasionally</i> , when sometimes do and often do not	2
<i>Never</i> , when not doing	1

- 2) Summing up the scores of each of the assessed aspects

- 3) Determining the values through the formula:

$$N = \frac{\text{Score obtained (SD)}}{\text{Ideal Score(SI)}} \times 100 \%$$

(Abidin, 2012: 278)

The category of the students' character assessment can be found based on the following table:

Table 9: Student Character Assessment Category

No	Achievement Level (%)	Category	Description
1.	76-100	SM	Accustomed
2.	51-75	MB	Developing
3.	26-50	MT	Seen
4.	0-25	BT	Not yet seen

c) Data Analysis of Reading Skills Assessment

The data of the students' reading skill assessment is collected based on process and results assessment. Data analysis for the assessment of the reading skills process can be done with the following steps:

- 1) Giving the score based on the developed reading skills assessment indicators.
- 2) Summing up the scores of each of the assessed aspects.

$$N = \frac{\text{Score obtained (SD)}}{\text{Ideal Score(SI)}} \times 100 \%$$

(Abidin, 2012: 278)

The students' reading process rating categories can be determined based on the following table:

Table 10: Category of Student Reading Skills Rating

No	Achievement Level (%)	Category
1.	81-100	Very Good
2.	61-80	Good
3.	41-60	Enough
4.	≤ 40	Less

Meanwhile for the data assessment of reading skill results was obtained from the evaluation results used. The data analysis is conducted by using the students' percentage who meet the minimum mastery criteria (KKM). For the development of reading material it is said to be effective, if it is more than 70% of students obtain the score =70. (the KKM of Indonesian learning at school will perform the testing).

d) Analysis of student response data

The data obtained from the questionnaire of students' responses was analyzed by determining the percentage of students who gave a positive response answer for each category questioned in the questionnaire. The formula for calculating the percentage of student responses is as follows:

$$PRS = \frac{\sum A}{\sum B} \times 100\% \quad (\text{Borich dalam Herman, 2012: 5})$$

PRS : The percentage of the students number who respond positively to each of the categories asked

$\sum A$: The proportion of students who choose

$\sum B$: Number of the students (respondents)

To determine the achievement of learning objectives in terms of the student responses, if the number of the students who responded positively greater or equal to 80% of the subjects number studied for each trial (Sinaga, 2007).

DISCUSSION

Validation is an important part in developing the teaching materials to correct the errors and weaknesses of draft I. The validator team involved in validating this learning instrument consists of 5 experts, 3 material experts, 1 design expert, 1 linguist. The validators are chosen in this research is as follows:

Table 11

List of Expert Validator Names

No	Name of Validator	Description
1	Dr. Syahnan Daulay, M.Pd	Graduate Lecturer of Bahasa Indonesia, Unimed
2	Dr. Ajat Sudrajat, M.Si	Graduate Lecturer of Physics, Unimed
3	Dr. Hidayat, M.Si	Graduate Lecturer of Social Studies, Unimed
4	Prof. Dr. Khairil Ansari, M.Pd	Graduate Lecturer of Bahasa Indonesia, Unimed
5	Dr. Samsidar Tanjung, M.Pd	Graduate Lecturer of Technology, Unimed

The Validation data in detail on the teaching materials can be seen as follows:

Table 12: Result of Material Expert Validation

Assessment Aspect	Research Variable	Indicator	Assessment Score			Average	Category
			V1	V2	V3		
Feasibility of Presentation	Quality of Learning Materials	1. Clarity of learning objectives according to KI-KD.	4	4	4	4	Very Good
		2. Accuracy of material coverage.	4	4	3	3,6	Good
	Learning Presentation System	3. Truth of concept.	3	3	3	3	Good
		4. Conformity with the curriculum	4	3	4	3,6	Good
		5. Conformity with character education	3	3	3	3	Good
		6. The accuracy of the learning materials sequence .	3	4	4	3,6	Good
		7. Depth of learning materials.	4	4	4	4	Very Good
Presentation	Learning Strategy Quality	8. Quality of introduction	3	4	3	3,3	Good
		9. Student engagement and role in learning activities	4	4	4	4	Very Good
		10. Encourage students to answer in their own way	3	3	4	3,3	Good
		11. Ffeedback quality	3	3	4	3,3	Good
		12. Time of presentation	4	4	4	4	Very Good
		13. Quality of exercise questions	4	3	4	3,6	Baik
Language	Quality of Learning Material	14. Logical material digestibility and exposure	4	4	3	3,6	Good
		15. Ease of language understanding.	4	4	4	4	Very Good
Image Selection	Quality of teaching material display	16. Display	4	4	4	4	
		17. Illustration	3	3	3	3	Good
Total			89,7	89,7	91,2	90,2	Very Valid

Table 13: Result of Language Expert Validation

Assessment Aspect	Research Variable	Indicator				Category
		1	2	3	4	
Aspects of Language Usage	1. Accuracy of sentence structure			✓		Good
	2. The effectiveness of the sentence			✓		Good
	3. Clarity of language in material				✓	Very Good
	4. Clarity of sentence				✓	Very Good
	5. The interesting language style			✓		Good
	6. Using good and correct Bahasa Indonesia rules			✓		Good
Aspects of Language Accuracy	7. clarity of letters				✓	Very Good
	8. Symbols used			✓		Good
	9. Clarity of command word / instructions			✓		Good
	10. The language used is simple, straightforward and easy to understand				✓	Very Good
	11. Using spelling in accordance with PUEBI (General Use of Indonesian Spelling)			✓		Good
Aspects of Student Development Conformity	12. Language is adapted to the stage of student development				✓	Very Good
	13. Language can stimulate students' imagination			✓		Good
	14. Language is easily understood				✓	Very Good
Total		85,7				Very Valid

Table 14: Result of Learning Design Expert Validation

Assessment Aspect	Research variable	marks	Score				category
			1	2	3	4	
Feasibility of Presentation	Technique of Presentation	1. Consistency of systematic presentation in learning activities				✓	Very Good
		2. Accuracy of concept				✓	Very Good
	Supporting Presentation	3. Examples of problems in learning activities			✓		Good

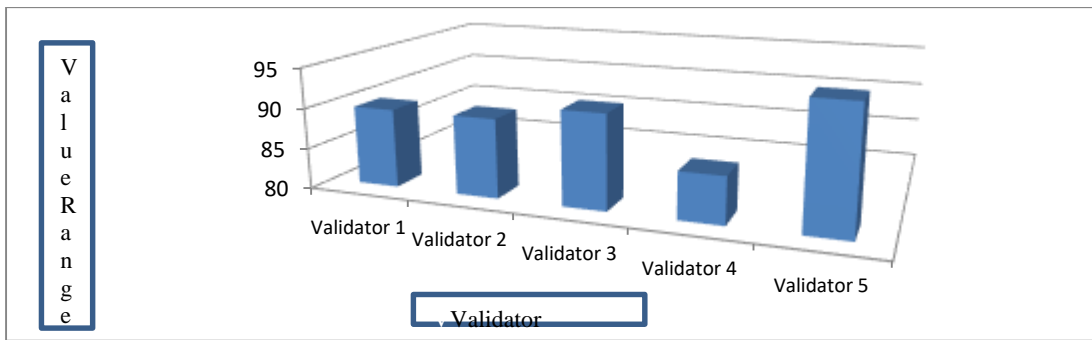
		4. Exercises at the end of learning				✓	Very Good
		5. The accuracy of image selection				✓	Very Good
		6. The accuracy of color selection in the picture				✓	Very Good
		7. The accuracy of story selection			✓		Good
		8. Introduction				✓	Very Good
Presentation	Learning Presentation	9. Student involvement in reading activities				✓	Very Good
		10. Encourage students to read critically with the correct stages.				✓	Very Good
Language	Coherence and Thinking Problem Order	11. The linkage between reading and character education activities				✓	Very Good
		12. Time of Presentation				✓	Very Good
		13. Ease of language understanding				✓	Very Good
Image Selection	Quality of Learnign Material Display	14. Display				✓	Very Good
		15. Illustration			✓		Good
Total			95				Very Valid

Table 14: Result of Teaching Materials Validation

No	Validator	Value	Total Average
1.	Validator 1	89,7	
2.	Validator 2	89,7	
3.	Validator 3	91,5	90,32
4.	Validator 4	85,7	
5.	Validator 5	95	

To see the value of teaching materials validation in detail can be seen in the following chart:

Chart 1.: Teaching Materials Validation



Before the learning outcome test in multiple choices is given to the students as the instrument, the item grid should be validated. The item grid is validated through the students in Grade five on 18 August 2017. Based on the calculation of item grid validation with the formula of moment product correlation using Ms. Excel, then it is obtained the validity of each grid of learning outcome pre-test as shown in Table 15.

Table 15: Validity of Test Item Grid of Learning Outcomes

	Test Item									
	1	2	3	4	5	6	7	8	9	10
R_{count}	0.929	0.87	0.76	0.95	0.21	0.93	0.87	0.76	0.95	0.33
R_{table}	0.361									
Description	Valid	Valid	Valid	Valid	Invalid	Valid	Valid	Valid	Valid	Invalid
R_{count}	0.95	0.95	0.95	0.95	0.01	0.3	0.93	0.87	0.76	0.95
R_{table}	0.361									
Description	Valid	Valid	Valid	Valid	Invalid	Invalid	Valid	Valid	Valid	Valid
R_{count}	0.93	0.87	0.76	0.95	0.95	0.95	0.95	0.1	0.948	0.95
R_{table}	0.361									
Description	Valid	Valid	Valid	Valid	Valid	Valid	Valid	Invalid	Valid	Valid
R_{count}	0.93	0.95	0.95	0.95	0.93	0.87	0.76	0.95	0.95	0.1
R_{table}	0.361									
Description	Valid	Valid	Valid	Valid	Valid	Valid	Valid	Valid	Valid	Invalid
R_{count}	0.209	0.93								
R_{table}	0.361									
Description	Invalid	Valid								

Based on the results of the calculation with Ms. Excel, it was obtained the reliability coefficient for pretest is 0.99. This means that the reliability of the developed learning pretest instrument is included in the *high* category. Thus, this instrument can be said as reliable to measure the students' learning outcomes. The assessment of reading skill is conducted with rubric assessment. In summary, the results of the students' reading skill assessment can be seen from the following table:

Table 16: Results of Reading Skills Assessment

Student's Code	Assessed Aspect					Number of Score	Value (%)	Category	Description
	1	2	3	4	5				
R1	3	3	2	3	3	14	93.3	Very Good	Completed
R2	3	2	3	3	3	14	93.3	Very Good	Completed
R3	3	3	2	3	3	14	93.3	Very Good	Completed
R4	3	3	3	3	2	14	93.3	Very Good	Completed
R5	3	2	3	3	3	14	93.3	Very Good	Completed
R6	3	2	3	3	3	14	93.3	Very Good	Completed
R7	3	3	3	2	3	14	93.3	Very Good	Completed
R8	3	3	3	3	2	14	93.3	Very Good	Completed
R9	3	2	3	3	3	14	93.3	Very Good	Completed
R10	2	3	3	3	2	13	86.7	Very Good	Completed
R11	2	2	3	3	3	13	86.7	Very Good	Completed
R12	2	3	3	2	3	13	86.7	Very Good	Completed
R13	3	3	3	2	2	13	86.7	Very Good	Completed
R14	2	2	3	3	2	12	80	Good	Completed
R15	2	2	2	3	3	12	80	Good	Completed
R16	2	3	3	2	2	12	80	Good	Completed
R17	2	2	3	3	2	12	80	Good	Completed
R18	2	2	2	3	3	12	80	Good	Completed
R19	2	2	3	2	3	12	80	Good	Completed
R20	2	2	3	2	3	12	80	Good	Completed
R21	3	2	3	2	2	12	80	Good	Completed
R22	3	3	2	2	2	12	80	Good	Completed
R23	3	3	2	2	2	12	80	Good	Completed
R24	2	2	3	2	2	11	73.3	Good	Completed
R25	2	2	2	2	3	11	73.3	Good	Completed
R26	2	3	2	2	2	11	73.3	Good	Completed
R27	2	2	2	3	2	11	73.3	Good	Completed
R28	2	2	2	3	2	11	73.3	Good	Completed
R29	2	2	2	2	1	9	60	Enough	Not Completed
R30	2	2	2	1	2	9	60	Enough	Not Completed
Total	73	72	78	75	73	371		82	
%	81.11	80	86.67	83.33	81.11	412.22		82	Very Good

CONCLUSION

This research is a development research on teaching materials based on character education by using 4-D development modes from Tangerine, Semmel and Sammel that produced *valid* and *effective* teaching material to improve the students' learning outcomes of grade IV of SD (Primary School) Negeri 104203 Bandar Khalipah: The validation results by the validator of the experts of material, language, and instructional design stated that the developed material is

worthy of use with an average of 90.32 and the category is *very valid*. Although the developed material has met the criteria of validity, there are several things that need to be fixed in accordance with the records provided by the validator including the content, language and constructs. For the percentage of learning result of classical learning, it was obtained by the control class students on pretest and posttest is 33,33% and 76,66% and gain score is 0,34. Meanwhile the learning outcomes for classical completeness experimental class increased from pretest and posttest students is 61.29% to 90.32%. The value of pretest and posttest based on the criteria of learning completeness classically is *completed* where the average pretest result is 65.24 and students who thoroughly learn as many as 19 students from 30 students and posttest is 82.48 and the students who thoroughly learn as many as 28 students from 30 students. For the character development, the average score is 67.5% overall character with category started to develop and effective. Meanwhile the overall reading skill reading result is 82% with *very good* category. The average percentage of total student positive responses on product trials is 88.50%. Based on the data, it can be concluded that teaching materials based on character education have been *effective*.

REFERENCES

- Abbas, Saleh. 2006. *Pembelajaran Bahasa Indonesia yang Efektif di Sekolah Dasar*. Jakarta: Departemen Pendidikan Nasional.
- Abidin, Yunus. 2012. *Pembelajaran Bahasa Berbasis Pendidikan Karakter*. Bandung: Refika Aditama
- _____, 2015. *Pembelajaran Multiliterasi*. Bandung: Refika Aditama
- Amsah, Siti. 2014. "Pengembangan Lembar Kerja Siswa (LKS) Berbasis Pendekatan Matematika Realistik Untuk Meningkatkan Hasil Belajar Siswa Kelas III SD Negeri 101670 Aek Haruaya Desa Lantosan Kec. Portibi Kab. PALUTA". *Tesis*. Medan: PPs UNIMED.
- Anderson dan Krathwohl, 2001. *A Taxonomi for Learning. Teaching & Assessing: A Revisison of Bloom's Taxonomi of Educational Objectives*. New York: Addison Wesley Longman, Inc
- Arifin, Zainal. 2009. *Evaluasi Pembelajaran*. Bandung: PT. Remaja Rosdakarya.
- Arfiliana. 2014. "Pengembangan Bahan Ajar Bentuk Komik Dan Lembar Kerja Siswa Dengan Pendekatan Matematika Realistik Untuk Meningkatkan Hasil Belajar Siswa Kelas III SD Negeri 060843 Kecamatan Medan Barat. *Tesis*. Medan: PPs UNIMED.
- Asmani, Jamal Ma'mur. 2012. *Buku Panduan Internalisasi Pendidikan Karakter di Sekolah*. Yogyakarta: DIVA Press.
- Arifin, Zainal. 2009. *Evaluasi Pembelajaran*. Bandung: PT. Remaja Rosdakarya.
- Arikuntoro, Suharimi. 2012. *Dasar-dasar Evaluasi Pendidikan*. Jakarta: Bumi Aksara
- Aunillah, NI. 2011. *Pendidikan Karakter di Sekolah*. Yogyakarta: Laksana.
- Dahar, Ratna Wilis. 2011. *Teori-Teori Belajar*. Jakarta: Erlangga.
- Depdiknas 2004. *Naskah Akademik Bahasa Indonesia*. Jakarta: Puskur
- _____. (2008). *Panduan pengembangan bahan ajar*. Jakarta: Direktorat Pembinaan Sekolah Menengah Atas Dirjen manajemen Pendidikan dasar dan menengah Depdiknas.
- Firman, Hary. 2000. *Penilaian Hasil Belajar dalam Pengajaran*. Bandung: FMIPA UPI.
- Fudyartanto, R.B.S. 2002. *Psikologi Pendidikan dengan Pendekatan Baru*. Yogyakarta: Global Pustaka Utama.

- Gredler, Margaret E. 2011. *Learning And Instruction*. Jakarta: Kencana.
- Harjanto. 2010. *Perencanaan Pengajaran*. Jakarta: Rineka Cipta
- Hadi, Rizali 2015 The Integration of Character Values in the Teaching of Economics: A Case of Selected High Schools in Banjarmasin. Vol.8, No.7, Juni2015(Online,www.ccsenet.org/journal/index.php/ies/article/view/49836/26875, diakses 30 Oktober 2016)
- Hake, R. 1999. Analyzing change/ gain scores. *AERA-D-American. Educational Research Association's Division D, Measurement and Research Methodology*. (Online, <http://lists.asu.edu/cgi-bin.html>, diakses 27 November 2015).
- Hamalik, Oemar. 2010. *Proses Belajar Mengajar*. Bandung: Bumi Aksara.
- Hamdani. 2011. *Strategi Belajar Mengajar*. Bandung : Pustaka Setia.
- Hamid, Abdul. 2009. *Teori Belajar dan Pembelajaran*. Jakarta: Raja Grafindo Prasada.
- Harylesmana, David.2007. Jenis-jenis Membaca dan Karakteristiknya. <http://guruit07.blogspot.com>. (diunduh 30/1/2009)
- Herman. 2012. "Pengembangan Perangkat Pembelajaran Model Pengajaran Langsung Untuk Mengajarkan Materi Kesetimbangan Benda Tegar". *Jurnal Sains dan Pendidikan Fisika*, 8 (1): 1-11.
- Hidayatullah, Furqon. 2010. *Pendidikan Karakter: Membangun Peradaban Bangsa*. Surakarta: Yuma Pustaka.
- Hosnan. 2014. *Pendekatan Saintifik dan Kontekstual dalam Pembelajaran Abad 21 Kunci Sukses Implementasi Kurikulum 2013*. Bogor: Ghalia Indonesia.
- Iskandarwassid & Sunendar, Dadang. 2011. *Strategi Pembelajaran Bahasa*. Bandung: Remaja Rosdakarya.
- Jauhari. 2013. *Terampil Mengarang*. Bandung: Nuansa Cendakia.
- Jihad, Asep dan Abdul Haris. 2013. *Evaluasi Pembelajaran*. Yogyakarta: Multi Pressindo
- Kemendiknas, 2010. *Pengembangan Pendidikan Budaya dan Karakter Bangsa*. Jakarta: Pusat Kurikulum
- Kesuma, Dharma, dkk. *Pendidikan Karakter: Kajian Teori dan Praktik di Sekolah*. Bandung: PT Remaja Rosdakarya.
- Koesoema, Dhoni. 2007. *Pendidikan Karakter: Strategi Mendidik Anak di Zaman Global*. Jakarta: Grasindo.
- Kunandar. 2008. *Langkah Mudah Penelitian Tindakan Kelas*. Jakarta: Rajawali Press.
- Lickona, Thomas, *Educating for Character*. Terjemahan oleh Juma Abdu Wamaungo. 2012. Jakarta: Bumi Aksara
- Majid, Abdul. 2009. *Perencanaan Pembelajaran*. Bandung: PT Remaja Rosdakarya.
- Narwanti, Sri. 2011. *Pendidikan Karakter*. Yogyakarta: Familia (Grup Relasi Inti Media).
- Nurjaya, Gede Pengembangan Bahan Ajar Metode Pembelajaran Bahasa dan Sastra Indonesia Berbasis Pembelajaran Kooperatif Jigsaw Untuk Meningkatkan Pemahaman dan Kemampuan Aplikatif Mahasiswa. Vol.1, No.2 Oktober 2015 (Online, ejournal.undiksha.ac.id/index.php/jpl/article/3463, diakses 30 Oktober 2016)
- Peraturan Menteri Pendidikan Nasional Republik Indonesia Nomor 20 Tahun 2007 Tentang Standar Penilaian Pendidikan. Jakarta: Direktorat Jenderal Manajemen Pendidikan Dasar dan Menengah.
- Plomp, Tj. (1997). *Educational Design: Introduction*. From Tjeerd Plomp (eds). *Educational & Training System Design: Introduction*. Design of Education and Training (in Dutch). Utrecht (the Netherlands) : Lemma. Netherland Faculty of Educational Science and Technology, University of Twente.
- Prastowo, Andi. 2012. *Panduan Kreatif Membuat Bahan Ajar Inovatif: Menciptakan Metode Pembelajaran yang Menarik dan Menyenangkan*. Yogyakarta: DIVA Press.

- Priyatni, Endah. 2014. Pengembangan Bahan Ajar Membaca Kritis Berbasis Intervensi Responsif. Vol.13.No.1 .2014
- Rahim, Farida. 2007. *Pengajaran Membaca di Sekolah Dasar*. Jakarta: Bumi Aksara.
- Raka, Gede, dkk. 2011. *Pendidikan Karakter di Sekolah*. Jakarta: Elex Media Komputindo.
- Reigeluth, C. M. 1983. *Instructional Design Theoris & Model*. London: Lowrence Erlbaum Assosiates Publisher.
- Rusman. 2012. *Model-Model Pembelajaran*. Jakarta: Rajawali Pers.
- Sudijono, Anas. 2012. *Pengantar Evaluasi Pendidikan*. Jakarta: Rajawali Pers.
- Sanjaya, Wina. 2009. *Perencanaan dan Desain Sistem Pembelajaran*. Jakarta:Prenada media Group.
- Santoso, Puji 2007. *Materi dan Pembelajaran Bahasa Indonesia SD*. Jakarta: Universitas Terbuka.
- Sugiyono. 2011. *Metode Penelitian Kuantitatif, Kualitatif, dan R & D*. Bandung: Alfabeta.
- Sujarweni, V. Wiratna. 2014. *Metodologi Penelitian*. Yogyakarta: Pustaka Baru Press.
- Tarigan, Henry Guntur. 2008. *Membaca Sebagai Suatu Keterampilan Berbahasa*. Bandung: Angkasa Bandung
- Thiagarajan, S. Semmel, D.S. Semmel, M. (1974). *Instructional Development for Training Teachers of Expectional Children*. A Sourse Book. Blomington: Indiana.
- Trianto. 2009. *Mendesain Model pembelajaran Inovatif Progresif*. Jakarta: Kencana Prenada Group.
- _____. 2012. *Mendesain Model Pembelajaran Inovatif Progresif*:. Jakarta: Kencana
- Winkel. 2014. *Psikologi Pengajaran*. Yogyakarta: Sketsa.
- Wheeler, L Kip. 2009. Critical Reading o An Essay's Argument.kip@hwaet.org
- Zulela. 2012. *Pembelajaran Bahasa Indonesia*. Bahasa Indonesia: PT Remaja Rosdakarya.