Development of Teaching Materials Based on People's Stories Assisted In the Graphics of 5th Grade Students Primary School Muhammadiyah 01 Kota Binjai

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Abstract

This research aims to: (1) Analyze how effective the use of teaching materials is based on folktales assisted with serial images. (2) Analyze how the feasibility of teaching materials based on folklore based on serial images developed to improve learning outcomes. This research uses Borg & Gel development research. Based on the results of the validity of material experts 85.42%, 85.7% design experts, and 94.44% linguists. From the results of the validation of teaching materials developed, the teaching materials based on folklore with serial images are included in the very good criteria and are declared to be effective and appropriate for use. Based on the completeness data of student learning outcomes before using the average value obtained reached 62, while after using individual completeness and classical average reached 85 with a gain score of 0.70 into the high category. And the questionnaire responses of students about the effectiveness of teaching materials reached 88% of 25 students. Based on this data teaching material based on rocky folktales is said to be effectively used in learning with the assumption that Indonesian students score higher when using material.

I. Introduction

The importance of teaching materials in learning activities can be analogous to the importance of a hoe or plow tool for farmers. If there are no tools used, then there will not be much that can be done by these farmers. Conversely, if the farmer brings his equipment, there are many things he can do. With this analogy we can understand that the tools or materials in this case have an important position on a process. Likewise, teaching materials in the learning process. Teaching material is a component that must be present in the learning process.

Teaching material is one of the important parts in the learning process. Teaching materials should be designed and written according to the rules of learning, i.e. adapted to learning materials, arranged based on learning needs, there are evaluation materials, and the instructional materials are interesting for students to learn. Dick and Carey in Widiaastuti (2019) add that instructional material contains the content either written, mediated, or facilitated by an instructor that a student as use to achieve the objective also includes information about the learners will use to guide the progress. Based on the expressions of Dick, Carey, and Carey it can be seen that teaching materials contain content that needs to be learned by students either in the form of print or which are facilitated by teachers to achieve certain goals.

Hernawan (2012: 4) says that teaching material is a set of material or substance of lessons arranged in a coherent and systematic way and displays a complete figure of the competencies that students will master in learning activities. Therefore teaching material is an important part in the implementation of education. With teaching materials teachers will be easier to implement learning and students will be easier to learn. Teaching materials can be made in various forms according to the needs and characteristics of the teaching material to be presented. The book is prepared in the hope that it will benefit all parties concerned with the development of teaching materials, such as school principals, teachers, school supervisors and other educational supervisors. For principals this book can be used as guidance for teachers who have difficulty in developing teaching materials.

According to Lestari (2013) Teaching materials are teaching materials written with the aim that students can learn independently without or with the guidance of the teacher, therefore teaching materials must contain learning instructions, competencies to be achieved, content of subject matter, supporting information, practice exercises, work instructions, evaluations and feedback on evaluations. By providing teaching materials, students can study independently without having to be assisted by the teacher. Students who have a low learning speed can repeatedly learn each activity without being limited by time, while students who have high learning speeds will learn more quickly one basic competency. In essence, teaching materials facilitate the learning speed of students that are different. Whereas in modern times, folklore has shifted even extinction which has been replaced by stories and serials from abroad which are more enjoyed by children through the presentation of cartoons, comics, novels and so on. At present folklore is less demanded as a result folklore is almost unknown to students anymore.

Folklore has a function in public education by embracing the values contained in it. The values contained in folklore as well as the people love each other love, help each other help and be willing to sacrifice, reflected also the attitude of courtesy to parents or an older person. Can provide a positive picture to stimulate to form a good student character.

According to Fauzi (2011) Folklore is one type of literary work as a cultural treasure. Folklore is one part of folklore. In general, folklore is only in the form of oral stories which are passed down and down. In its development, folklore which was originally in the form of oral tradition turned into written tradition. Archipelago folklore can be found in every corner of the country and is part of the tradition of our nation which is also a cultural heritage and wealth of the Indonesian people. Folklore is often used as a reference, parameter and contains noble values regarding goodness, character and others. Therefore preservation of folklore is important for the community.

In developing instructional materials the writer must be selective in choosing folktales and also the media images used in the learning method, because this will certainly have an impact on students who accept this method. Implementing image-assisted strategies will help shape the positive imagination given from a collection of folklore that has moral reflection, which are expected to be able to form good character towards students and be able to increase interest in reading.

II. Review of Literature

3.1 The Nature of Folklore

According to the large Indonesian dictionary Alwi et al, (2003: 210) say that folklore is a literary story from ancient times that lived among the people and passed on orally. In the

journal Sumayana (2017) Folklore is an old prose of oral tradition. In addition, folklore can be interpreted as an oral story that includes legends, music, oral history, proverbs, jokes, superstitions, fairy tales, and customs into traditions in a culture, subculture, or group. The characteristics of folklore are as follows, the creator is unknown (anonymous), not bound by the span of time or time, contains symbolic aspects, does not heed the chronological time, simple form and honest and open disclosure, usually contains fantasy. As for the characteristics specifically folklore lies in its traditional, oral and basically always changing from time to time. Folklore has identifying and distinguishing features that distinguish it from written literature. The folklore that will be developed is the folklore of Sumatra.

3.2 The Nature of Images

Journal of Abbas Hasnindah (2011) serial media media is a series of images consisting of 2 to 6 pictures that tell a unity of stories that can be used as a plot of students' thinking in writing, each picture can be made into paragraphs. Meanwhile, according to Daryanto (2002: 41) media image series is a unit of information that is poured into several stages or made serially on one sheet so that in one unit of information requires several images. It can be concluded that the series drawings here are pictures that students can understand, how to convey them easily and do not require expensive costs. where each picture has a relation between one another. Each picture in the media contains a series of images meaning the plot in a story in a picture that must be arranged properly. So, the compilation of images must be in accordance with the story line that should be so that it contains certain meanings, and the pictures can be made in the form of interesting stories or essays.

Series images function as creators of suggestive atmosphere, stimuli and at the same time a bridge for students to imagine or create images and events or events based on the theme of the series of images shown. These images are related to each other so that it is a series of stories / events. Each picture is numbered in accordance with the order of the story (Soeparno 1988: 18).

3.3 Model of teaching materials on human and environmental themes based on folklore

One of the general policy priorities in education development in Indonesia is improving the quality of education. In improving the quality of education there are many factors or strategies that can be used to implement. One of the factors that influence the improvement of the quality of education is an increase in the quality of learning. Improving the quality of learning can be done from several aspects of learning variables. Learning variables that are directly related to the quality of learning are the availability of books quality text.

Some teaching materials, teaching materials have certain characteristics, which distinguishes from other teaching materials. According to Russell (1974) Characteristics of teaching materials include Self Contain, Relying on individual differences, The existence of associations, Use of various media, Active student participation, Direct reinforcement, and Supervision of evaluation strategies. Likewise teaching material has certain components as one of the characteristics of individual learning. The components of the teaching materials consist of Rational, Objectives, and Input tests, Learning Activities, Self Tests and Final Tests (Post Tests)

According to Walter Dick and Lou Cary (1985) teaching material is interpreted as a printed learning unit. Integrated teaching that has an integrated theme, presents students with the information needed to master and assess the specified knowledge and skills, which function as a component of overall curriculum. So teaching material is reviewed from the physical form in the form of printed learning materials, its function as a medium of independent learning, and its contents are a unit of learning material. According to Jerrold E,

Kemp (1978) teaching material is interpreted as a self-learning package containing one topic or unit of subject matter that requires several distant learning times for one week. From this definition teaching material is viewed from the function as an independent learning media, this is teaching material in the form of a topic or unit of subject matter and the time required to study teaching material.

Teaching material as a textbook that is very important to help students understand the learning material certainly has several characteristics or characteristics. According to Prastowo (2014) the characteristics of textbooks can be referred to as teaching materials, namely: first, teaching materials are designed for independent learning systems. Second, teaching materials are whole and systematic learning programs. Third, teaching materials contain objectives, materials or activities and evaluation. Fourth, teaching materials are presented communicatively, two ways. Fifth, teaching materials are strived to replace a few percent of the instructor. Sixth, teaching material has a focused and measured scope of discussion. Seventh, teaching materials are concerned with user learning activities ".

III. Research Method

This type of research is Research and Development with the learning design development model by the Borg and Gall learning system design model. The steps for developing teaching materials. conducted in this study through ten stages, including: a) Research and gathering initial information; b) Planning; c) Development of initial product formats; d) Initial trials; e) Product Revision; f) Field trials; g) Product revision; h) Field trials; i) Revision of the final product; and j) Dissemination and implementation. This research was conducted at 5th grade student of Muhammadiyah 01 Binjai. The time of the research was carried out in the even semester of the 2019/2020 academic year. The subjects in this study were fifth grade students of SD Muhammadiyah 01 Binjai. In this study, testing using the average difference test method for two paired samples (paired sample t-test). This different test model is used to analyze the pre-post or before and after research models. Different tests are used to evaluate certain treatments for the same sample at two different observation periods.

IV. Results and Discussions

4.1 Research Results
a. Expert Validation of Learning Materials

Expert validation of learning materials towards the development of teaching materials based on folklore with serial pictures in V grade of elementary school was done by Dr. Hidayat, M.Sc. who is a lecturer in the Postgraduate Program at Medan State University. The assessment is carried out to obtain information that will be used to improve and improve the quality of teaching materials based on series of folk stories in serial pictures in SD Muhamadiyah 01 City Binjai.

From the results of expert assessments it can be concluded that the overall learning material states that the level of achievement score about the feasibility of the content and the feasibility of the presentation is 85.42 where the range is at the level of achieving the score 85-100 categorized as "Very Good". The results of the assessment of the story text material that connects the culture and environment of the students' developed homes received several comments including: (a) each inclusion of material must include cultural values, (b) correct the sentences of each story, and the suggestions are improved according to the story there is.

Conclusions from the assessment, comments and suggestions by learning material experts that based on rocky folklore based pictures should be tested on the field with revisions.

b. Validation of Learning Design Expert

The validation of the instructional design expert on teaching materials based on folklore rocky serial pictures on the text material of the story in grade V elementary school conducted by Mr. Dr. Mursid, ST, M.Pd. lecturer at the Medan State University Postgraduate Program. The conclusions from the results of the assessment by the learning design expert covering the aspects of the attractiveness of physical appearance, the accuracy of the use of the design, the suitability of the format, the presentation of the characteristics of the target, the clarity of media instructions, the clarity of the material exposure, and the suitability of the evaluation with the overall material. % where the range is at the level of achieving a score of 85–100 categorized as "Very Good". The results of the assessment of the design of learning in the development of teaching materials based on rocky folklore based images get a number of comments including: (a) pictures of folklore replaced with only the app sketch; (b) English in teaching material is omitted. The conclusion of the assessment, comments and suggestions by the learning design experts that teaching materials based on folklore rocky pictures should be trialed in the field with revisions.

c. Validation of Learning Media Design Experts

Validation of linguists on the development of teaching materials based on folk stories with serial pictures in grade V elementary school was done by Dr. Evi Eviyanti, M.Pd. is a lecturer in Postgraduate at Medan State University. Based on the results of language validation it can be concluded that the language design that includes aspects of word use or language use in making teaching materials as a whole can be concluded that the level of achievement of the score of linguists is 94.44 where the range is at the level of achieving 85-100 score categorized as "Very Good".

The results of the assessment and conclusions from the assessment, comments and suggestions by linguists that teaching materials based on rocky folklore pictures should be trialled on the field with revisions, and the results of the linguist assessment on the development of teaching materials based on folklore rocky pictures get some comments including: (a) several times revisions which are less precise; (b) all English vocabulary is typed in italics; (c) the term "younger siblings" is changed into children. Conclusions from the assessment, comments and suggestions by linguists that teaching materials based on folklore based on serial images should be tested on the field with revisions.

d. Trial I

Individual trials conducted in Va. SD Muhamadiyah 01 Binjai City class consisting of 25 students. The purpose of this trial I is to identify product deficiencies. Assessment and responses from trial I to provide input in the form of criticism and suggestions on the presentation of teaching material development products that include aspects of the appearance of the media and the media content of teaching materials based on folklore rocky picture series. The results of trial I in the form of assessment scores can be seen in the following table.

Table 1. Students' Responses to Trial I against Teaching Materials Based on Rocky Pictures

Rating Indicator	Respondents			Average	Percentage (%)	Criteria
	1	2	3			
The material in teaching materials is easy to understand	3	4	3	3,33	83,33	Very good
Activities in teaching materials are clear and easy to understand	4	4	4	4,00	100,00	Very good
Activities in teaching materials enhance students' critical thinking skills	3	4	3	3,33	83,33	Very good
The study instructions contained in the teaching material are easy to understand	4	3	4	3,67	91,67	Very good
The sentences used in teaching material are clear to understand	4	2	3	3,00	75,00	Good
Display attractive teaching materials	4	3	2	3,00	75,00	Good
Images of teaching materials are clear and facilitate understanding of the material	3	4	3	3,33	83,33	Very good
Teaching materials help students learn concepts in everyday life	3	4	4	3,67	91,67	Very good
Questions in teaching material are clear and easy to understand	3	3	3	3,00	75,00	Good
this teaching material can help students in learning	4	4	4	4,00	100,00	Very good
Average				**81,67**		**Very good**

From table 4.11 it can be concluded that the results of the evaluation and responses of the first trial to teaching materials based on folklore with serial images as a whole are 81.67%. Based on the evaluation criteria of interactive learning media stated with the category "Very Good".

1). Analysis of Mastery Learning Students Trial I

- Calculating Mastery Learning

  Based on data from the completeness of learning outcomes of the first trial obtained based on the ability of students, it can be seen that from 25 children there are 10 students who are "Not Completed" and there are 15 students who have already "Completed".

- Calculating Mastery Learning Trial I

  Mastery learning Students' I trials can be calculated with the following formula:

$$PKK = \frac{\text{Many research subjects}}{\text{Many students complete}} \times 100\%$$

PKK = 15/25 x 100%

PKK = 60%

Based on the data above there are 60% of students who have reached KB ≥ 70%. After the students' completeness in the learning process individually and classically is analyzed, the results of the pre-test and post-test are calculated with a gain score. For more details about the pre-test and post-test results, it can be seen in the picture below:
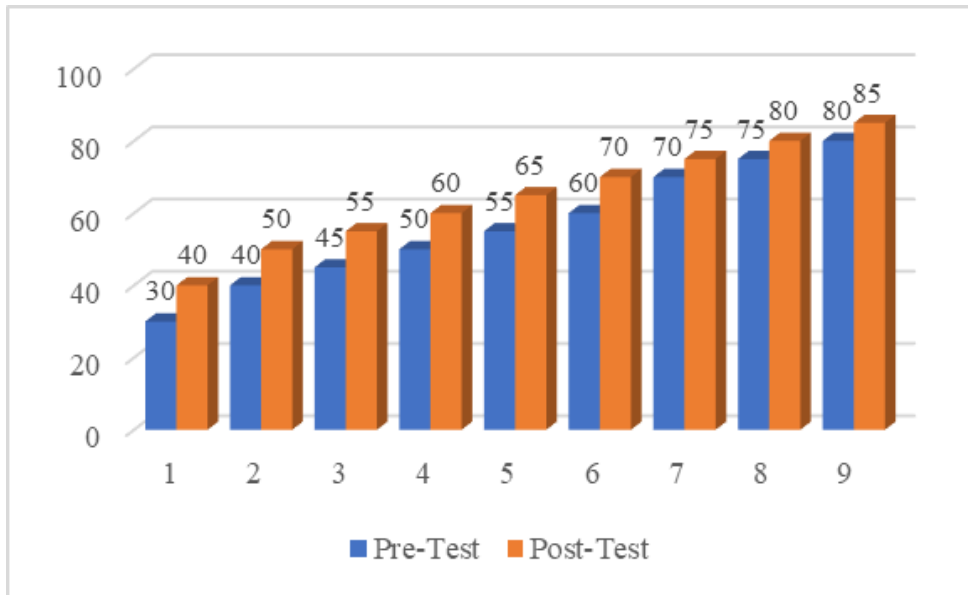
Figure 1 Pre-Test and Post-Test Results Diagram for Trial Students I

The following calculation of student learning completeness in the first trial using the gain score formula:

$$g = \frac{S_{Post} - S_{Pretest}}{Maximum \quad S_{Pretest}}$$

$$g = \frac{65 - 52}{100 - 52}$$

$$g = 0,27$$

Criteria: $0,70 < gs \leq 1,00$ *High*
$0,30 < gs \leq 0,70$ *Middle*
$0,00 < gs \leq 0,30$ *Low*

Based on the gain score, the result is 0.27, so the gain score on trial 1, which is 25 people, is considered low.

e. Trial II

Previously, the analysis of student learning outcomes had been done in trial I. But it needed improvement so that the results were maximum, then the trial II was conducted. To find out the level of effectiveness of the developed teaching material was carried out again in trial II. As for measuring the value of A-gain required pretest values that have been obtained before teaching treatment begins. Assessment and response to teaching materials based on folklore with serial images in the first trial conducted by 25 students in different classes, shows that the developed product is feasible to use and there is a suggestion for improvement of teaching materials seen by students in trial 1 of the product the development of teaching materials based on folklore based on serial images, so that the development activities continued in the second trial with revisions.

1). Analysis of Mastery Learning Students Trial II

The test results obtained by the researchers were analyzed to see the completeness of students in learning trials II.
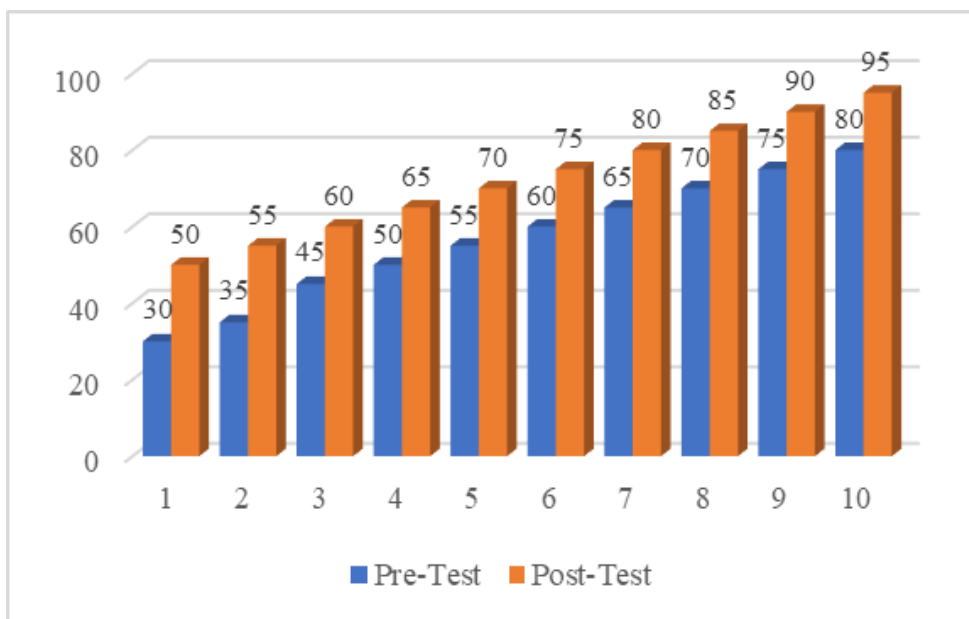
- Calculating Mastery Learning Trial II
  The mastery learning of student II trials can be calculated with the following formula:
  PKK = (Many students are Completed) / (Many research subjects) x 100%

  PKK = 21 / (25) x 100%

  PKK = 84%

Based on the completeness of classical learning completeness data above there are 84% of students who have reached KB KB 70%. After completeness of students in learning in the first test and second test were analyzed, the results of the pre test and post test were calculated with a gain score. For more details about the pre-test and post-test results in trial II, it can be seen in the figure below:

Figure 2 Diagram of Pre-Test and Post-Test Results for Trial Students II

The following is the calculation of students' mastery learning in trial II using the gain score formula:

$$g = \frac{S_{Post} - S_{Pretest}}{Skor\ Maksimum - S_{Pretest}}$$

$$g = \frac{85 - 60}{100 - 60}$$

$$g = 0{,}70$$

Based on the gain score the results obtained are 0.70, the gain score on the Try II is high.

- Student Questionnaire Analysis Questionnaire
  Questionnaire given during the learning process with teaching materials has been completed. The results of filling out the questionnaire with the number of student responses of 25 students after the use of teaching materials based on folklore series of pictures that were developed in the classroom are calculated using the formula:
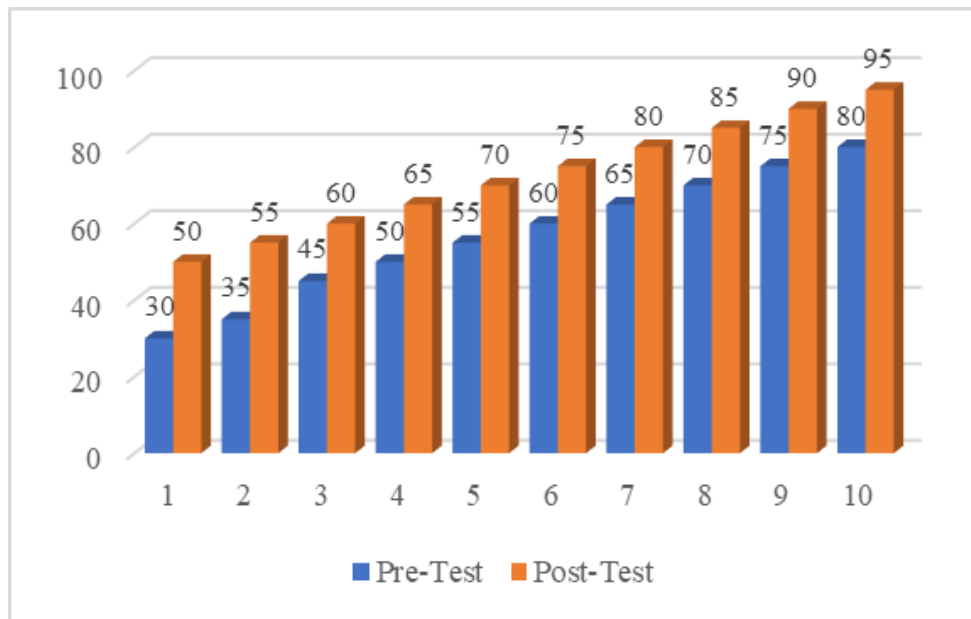
PRS = ΣA / ΣB

PRS = 850/1000 x 100%

PRS = 85%

Based on the completeness of classical learning completeness data above there are 84% of students who have reached KB KB 70%. After completeness of students in learning in the first test and second test were analyzed, the results of the pre test and post test were calculated with a gain score. For more details about the pre-test and post-test results in trial II, it can be seen in the figure below:

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  Questionnaire given during the learning process with teaching materials has been completed. The results of filling out the questionnaire with the number of student responses of 25 students after the use of teaching materials based on folklore series of pictures that were developed in the classroom are calculated using the formula:

  PRS = ΣA / ΣB

PRS = 850/1000 x 100%

PRS = 85%

On average, all aspects of the assessment questionnaire items were 85%, which were in good qualitative criteria. So, it can be concluded that: 1) Teaching materials are developed in accordance with what is needed by students and that is expected by researchers, 2) Teaching materials based on folklore rocky picture series which in this case are declared effective in the learning process especially in Indonesian language lessons story.

4.2 Discussion

The validity that is carried out at the validity test stage is theoretical validity, that is, validity with experts and competent in their fields based on theoretical and logical considerations. There are 3 parts of teaching materials that will be validated namely material, design, and language. Teaching materials developed need to be validated to obtain eligibility so that they are suitable for use in learning. In the validation stage the researchers conducted a study with a discussion technique by showing the initial design of teaching materials based on folklore with a series of pictures to draw the text of the story, to the design expert, material expert and linguist. In addition, researchers also provide validation sheets to the validation in order to get the theoretical validation results. The experts give an assessment in accordance with the validation sheet provided by researchers.

Based on valid results from material experts, it is known that the validation assessment is 85.42% with valid criteria but there is still an improvement from material experts. Material experts suggest fixing simple words so they are understood by students. After revised the percentage to 92,11% valid with very valid criteria. The validator also suggested using appropriate material to raise the story of the surrounding environment. After discussing with the material experts, teaching materials based on folklore with series of pictures were revised based on validation input and suggestions.

Based on the validation of learning design experts based on aspects of content, presentation, linguistic appearance and content got an assessment of 78.57% in both categories. The validation suggests that the English word in the teaching material used be deleted, and the writing of the teaching material be made with the application schema. After being revised, it is suitable for students to use.

Furthermore, the feasibility test of teaching materials tested in trial I obtained a percentage of 60 %% and in trial II as many as 25 people obtained the percentage of 84 %% in the excellent category and was very suitable for use. Based on the assessment given by the validation and also the assessment given by students on teaching materials based on the rocky folklore pictures developed as well as suggestions and input provided by experts, the learning materials based on the folklore rocky pictures that were developed were said to be valid and feasible to be used in learning

The effectiveness of teaching materials is measured by using the results of the pre-test and post-test at the beginning of the learning and the end of the learning activities that have been implemented. Based on the results of the pre-test which amounted to 20 multiple choice questions consisting of 25 items the students' pre-test data items can be seen in table 4.16 it can be seen that student learning outcomes are still low with an average of 65 with a standard deviation of 11.7 this is seen based on the minimum completeness criteria of completeness the minimum school for Indonesian subjects is 70.

V. Conclusion

The conclusion of this research is based on the findings from the research data, the systematic presentation is carried out with due regard to the research objectives that have been formulated. The conclusions include: (1) From the results of the validation of the teaching materials developed, the teaching materials based on folklore using series of pictures are included in the criteria very well and are declared to be effective and feasible to use; (2) Teaching materials based on folklore based on practical series of images because teaching materials from the responses of students from trials I and trial II have increased; (3) Teaching materials based on folklore with serial images are effectively used in learning with the assumption that Indonesian students score higher when using teaching materials; and (4) The ability of children's learning outcomes increases as seen from student learning outcomes increase from those before using and after using teaching materials.

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