



DEVELOPMENT OF PPKN LEARNING MEDIA BASED ON PICTURE STORIES TO IMPROVE CRITICAL THINKING SKILLS CLASS V STUDENTS OF SDIT PERMATA FIRDAUS

Lenni Hartati Manurung¹

State University of Medan, Indonesia

Email : lenni@gmail.com

Reh Bungana Beru Perangin-angin²

State University of Medan, Indonesia

Evi Eviyanti³

State University of Medan, Indonesia

Abstract

The study aims to describe the feasibility and effectiveness of civics learning media based on pictorial stories to improve students' critical thinking skills in Theme 8 Sub-theme 3 about the socio-cultural diversity of the society. This type of research is research and development. While the research design used is the research of Borg & Gall. The research subjects were made 1 teacher of class V and 25 students of class V, as well as 2 material experts and two media experts. Data was collected through questionnaires, tests, and interviews. Based on the results of material expert validation, an average score of 89.7% was obtained, while media experts obtained an average score of 87.9%, which was categorized as very feasible. Meanwhile, based on the results of the student response questionnaire, the average score obtained was 87.9%, which means the category is very good. In assessing students' abilities, the researchers conducted pre-test and post-test. From the results of the pre-test and post-test, it can be seen that there is an increase in students' critical thinking skills, namely the average score of 55% during the pre-test to 72.6% during the post-test. Based on the n-gain score assessment criteria, the effectiveness of picture story-based learning media obtained a value of 0.39, which means that it is in the range of $0.3 < g < 0.7$ classified in the medium category.

Keywords: *learning media, picture stories, critical thinking skills*

A. Introduction

Buston (Suardi, 2018: 9) says that "learning is a change in behavior in individuals and individuals with their environment." Meanwhile, Surya (in the UPI Educational Science Development Team, 2007:328) suggests that learning is "a business process carried out by individuals to obtain new changes in behavior as a whole as an individual's experience in interacting with his environment."

In 2020, there has been a drastic change in education in Indonesia and the world. This change is due to the coronavirus outbreak (covid-19/coronavirus disease-19), which requires humans to limit their activities. Activities that used to be done outside the home are now being carried out at home. Learning online more or less causes problems for both students and teachers. Students have difficulty understanding the learning material due to the lack of explanation from the teacher and the lack of learning resources and media. Learning media is one of the factors that influence the success of learning. Learning media is a tool in achieving learning objectives. Rusyan (Supriyono, 2018: 45) argues that "in principle, the media is used in the learning process to make more effective and efficient ways of communicating." Therefore, learning media are designed creatively, effectively, efficiently, and easily understood by students.

Elementary school students like picture stories because they contain interesting pictures and various colors according to the plot and background of the story. Picture stories can also encourage imagination so that students can imagine as if they were included in the story. It will

[680]

usually sharpen your memory and make it easier to remember even after reading it. According to Sudjana and Rivai (Adipta, 2016:990), "communicate facts and ideas clearly and strongly through a combination of expressing words and pictures." In the teaching and learning process, it is very important to pay attention to students' thinking. In Civics subjects, thinking is very important, considering that actual events with the existing material often trap and change.

In the strong current of globalization, students need to be given a good understanding of Indonesia's wealth through the socio-cultural diversity that makes Indonesia unique compared to other countries. This will foster a sense of love for the homeland from an early age. The lack of reading and students' knowledge about socio-cultural diversity is why researchers raise the material. In addition, during a pandemic, students cannot learn optimally from school, so picture storybooks can be used as learning media for students to increase their understanding and knowledge. Therefore, it is necessary to research "Development of PPKn Learning Media Based on Picture Stories to Improve Critical Thinking Skills for Fifth Grade Students of SDIT Permata Firdaus".

B. Method

Types of Research

This research type is R&D (research and development) research or development research. Seals and Richey (Hanafi, 2017:134) define research development (R&D) as a systematic study of the design, development, and evaluation of programs, processes, and learning products that must meet the validity criteria, practicality, and effectiveness. Meanwhile, according to Salim and Haidir (2019:58)

The design of this study used the stages of development research by Borg & Gall. Borg & Gall (Yuberti, 2014:5)

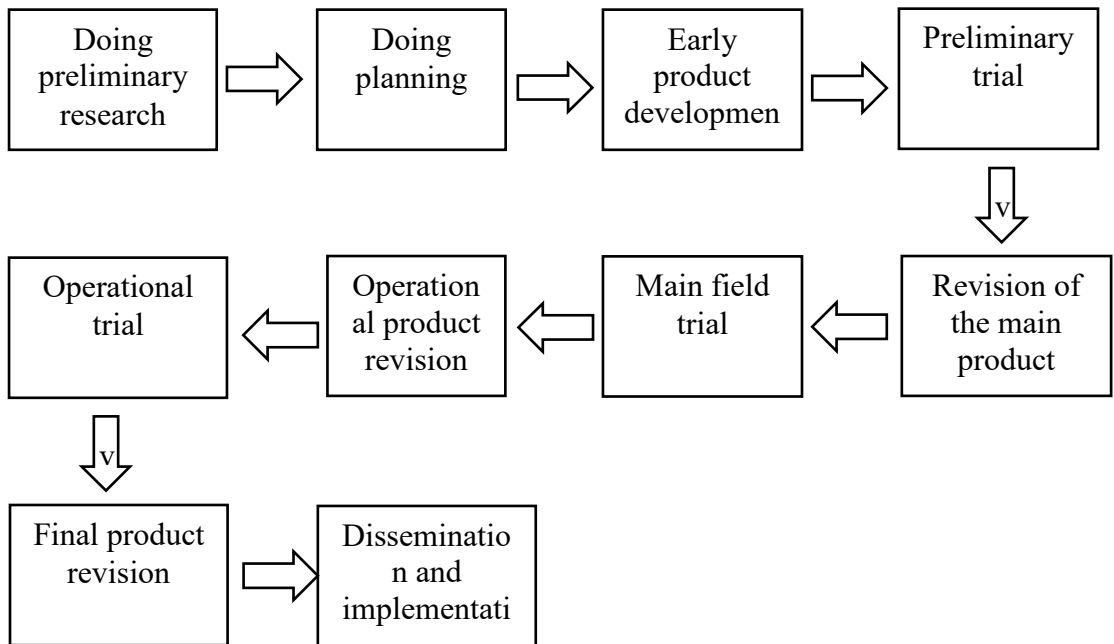


Figure 1. Schematic of Borg & Gall Research Stages

Place and Time of Research

This research was conducted at SDIT Permata Firdaus, Firdaus Village, Sei Rampah Subdistrict, Serdang Bedagai Regency, in-class V for the 2020/2021 academic year. The time of the research was carried out in April 2021.

Research Subjects

The research subjects in this study were 1 class teacher (homeroom teacher) and 25 students of class V SDIT Permata Firdaus. The

research validators consisted of 2 material expert validators to validate the suitability of the material content based on competency standards and two media expert validators to validate product quality (picture stories) technically.

Procedure and Research Design

The research design is described in the chart of the steps used by researchers in the following research.

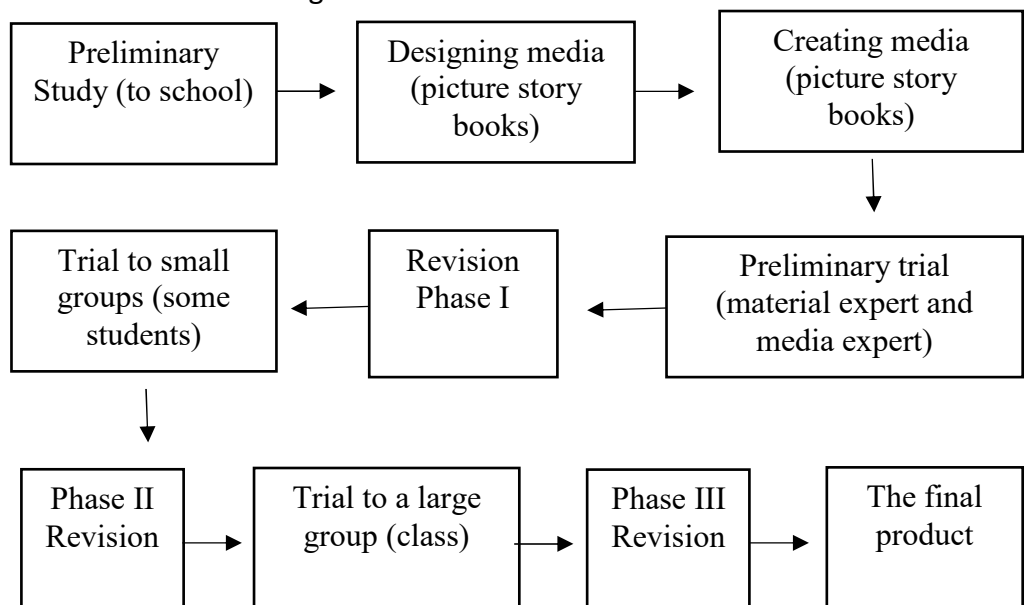


Figure 2. Steps in the Research Design

Instruments and Data Collection Techniques

Sugiyono (Widoyoko, 2017: 51) Data collection techniques are used by researchers to collect research data. The instruments used by researchers are

1. Questionnaire (questionnaire)
2. Critical Thinking Ability Test

3. Interview

Data Analysis Techniques

Data analysis comes from data collection. If the data that has been collected is not analyzed, the data will only become meaningless goods, meaningless, dead data, and data that does not sound. Therefore, data analysis serves to give meaning, meaning, and value contained in the data. Kasiran (Mamik, 2015:133).

The data analysis used in this research is the quantitative descriptive analysis technique. Quantitative descriptive analysis was used to analyze the score given by the expert to the learning media developed through the validation sheet. There are two quantitative analyzes used, namely:

- a. Expert Validation Questionnaire Data Analysis
- b. Student Response Questionnaire Data Analysis

C. Finding and Discussion

1. Result

Picture Story-Based Learning Media Planning

At this stage, the researcher plans the learning media that will be used. The researcher arranges the steps for making media, as follows: (1) choosing KI and KD in Civics subjects in the Thematic Book of Class V; (2) formulating indicators and learning objectives; (3) conclude the material to be loaded on the learning media; (4) sketching the initial design of the product display. This planning must be done carefully and systematically as a basic step for product design (pictorial story learning media). The material taken is about the socio-cultural diversity of the community in Theme 8, "The Environment of Our Friends" Sub Theme 3.

Development of Picture Story-Based Learning Media

After completing the planning of the picture storybook learning media, then the media development was carried out. The material developed in this illustrated story learning media is the community's socio-cultural diversity, which is the content of Civics learning in Theme 8, "Our Friends Environment" Sub Theme 3. The material is arranged based on indicators and learning objectives by taking examples of everyday events. The topics discussed were about respecting other people's efforts and being tolerant of differences. In the story, problems and messages are also inserted to take lessons. At the end of the book is equipped with an evaluation or question as a reflection of the material that has been presented. Meanwhile, in designing and drawing story characters, the author uses the Infinite Design application.

Trial Phase I

1. Description of Material Expert Validation Data

At this stage, material expert validation was carried out to 2 validators, namely Dr. Surya Dharma, S.Pd., M.Pd., and Mr. Dr. James Ndonga, SS, M. Hum. who is a lecturer in the Department of Civics, State University of Medan.

The assessment of the Sub-theme 3 material regarding the socio-cultural diversity of the community gets suggestions and inputs that are improved through revisions. Revisions were carried out twice until the media was said to be feasible to be tested. After going through the revision stage, the illustrated story-based learning media by material experts was declared "Very Eligible" to be tested in the field.

Furthermore, the results of the material expert validation assessment can be seen in the image below:

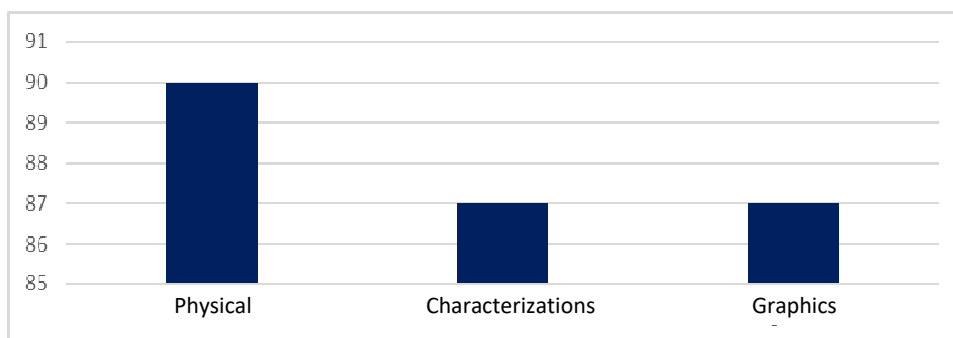


Figure 3. Results of Material Expert Assessment on Picture Story-Based Learning Media

2. Description Media Expert Validation Data

Media expert validation was carried out to 2 validators, namely Prof. Dina Ampera, M.Si. and Mr. Dr. Mursid, ST, M.Pd. who is a postgraduate lecturer at Medan State University

The media expert's assessment of the Sub-theme 3 material regarding the socio-cultural diversity of the community received suggestions and inputs that were improved through revision. Revisions were carried out twice until the media was said to be feasible to be tested. After going through the revision stage, media experts' illustrated story-based learning media was declared "Very Eligible" to be tested in the field.

Furthermore, the results of the media expert validation assessment can be seen in the image below:

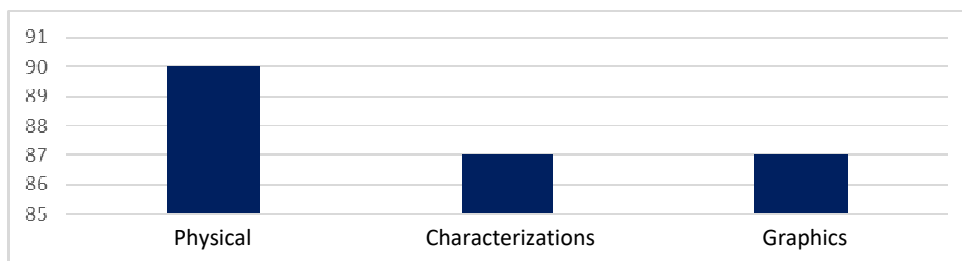


Figure 4. Media Expert Assessment Results on Picture Story-Based Learning Media

Revision Phase I

1. Small-Group Trial

At this stage, the researcher conducted a small group trial of 6 fifth grade students at SDIT Permata Firdaus, randomly taking into account the advice of the homeroom teacher. Six students were taken based on their abilities, namely students with high, medium, and low abilities. In this trial, students were given a questionnaire that assessed the aspects of the media display, the presentation of the material, and the resulting benefits. This trial is expected to provide an initial picture of how students accept the media used in learning. From the trials that have been carried out on the six students, the results of the student response assessment are described in the following table:

Table 1. Data on the Overall Result of Student Response Assessment

No.	Assessment Aspect	Average Score	%	Category
1.	Media Display	4.5	90%	Very good
2.	Material Presentation	4.25	85%	Very good
3.	Benefits	4.3	86%	Very good
Overall average score		4.35	87%	Very good

The trials that have been carried out illustrate that, in general, picture story learning media is feasible to use. This trial is a reference for researchers to continue research to the next stage. The average results of the assessment of student responses to illustrated story-based learning media can be seen in the following figure:

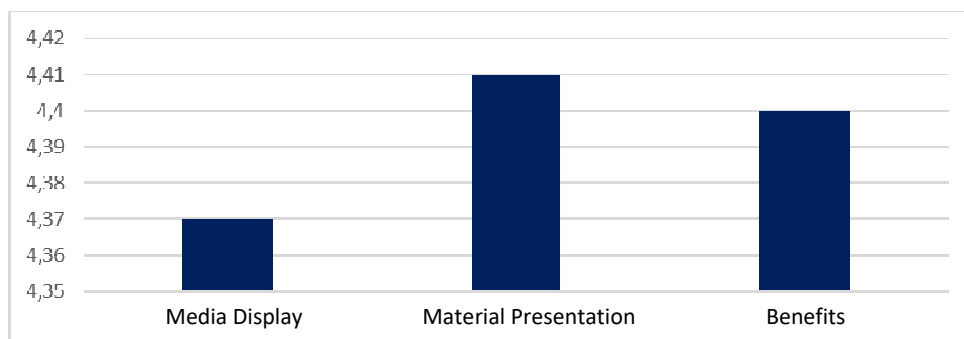


Figure 5. Result of Student Response Assessment on Picture Story-Based Learning Media

Phase II Revision

At this stage, the revision was carried out based on a small group trial tested on six fifth-grade students of SDIT Permata Firdaus. The results obtained based on student responses that illustrated story-based learning media can be used for fifth-grade students of SDIT Permata Firdaus. Based on the results of the questionnaire that has been carried out, the responses stated that the picture story learning media is easy to understand, interesting, and increases motivation in learning because it contains messages that they can apply in everyday life.

Trial to Large Group (Class)

1. Data Analysis of Critical Thinking Ability Test Results

In the previous trial, students were assessed in the form of a questionnaire. Students are also given test questions to reflect the illustrated story learning media that has been given. The test questions are carried out in 2 stages, namely pre-test and post-test. The pre-test was conducted to measure students' initial abilities before being given picture story-based learning media. In comparison, the post-test was carried out to measure students' final ability after learning using illustrated story-based learning media.

After applying illustrated story-based learning media in learning, there was an increase in student's abilities, especially in critical thinking skills. Students can answer questions by providing creative ideas and answering problems with solutions. The improvement of students critical thinking skills can be seen in the following diagram:

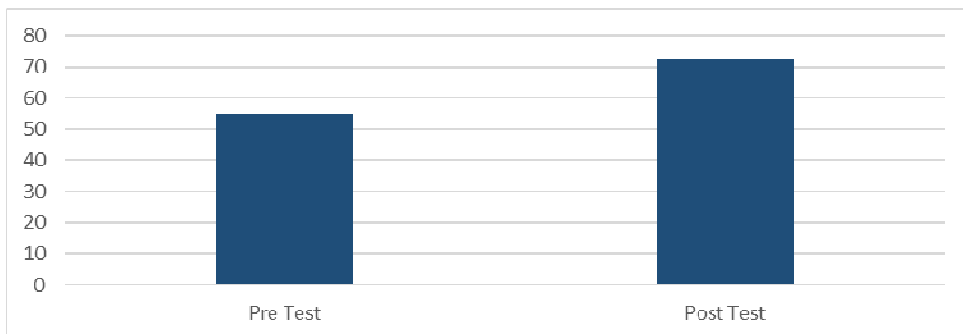


Figure 6. Diagram of Improving Critical Thinking Skills for Class V SDIT Permata Firdaus

Increasing student's critical thinking skills is one of the benchmarks for the success of a product in this study. The increase in students thinking skills can be calculated using the again score.

$$g = \frac{(gain)}{(gain)_{max}} = \frac{(posttes) - (pretes)}{100 - (pretes)}$$

$$g = \frac{72,6 - 55}{100 - 55}$$

$$g = \frac{17,6}{45}$$

$$g = 0,39$$

Based on the results *gain score*, there is an increase in students' critical thinking skills after using illustrated story-based learning media with a value of 0.39, which is in the range of $0.3 < g < 0.7$ classified in the "Medium" category. The criteria for improving student learning outcomes using a gain score can be seen in the following table:

Table 2. Gain Score Criteria

No	Score	Criteria
1.	$g \geq 0.7$	High
2.	$0.3 \leq g < 0.7$	Medium
3.	$g < 0.3$	Low

2. Student Response Questionnaire Data Analysis

Data on student responses to illustrated story-based learning media is known from the distribution of questionnaires conducted to 25 fifth-grade students of SDIT Permata Firdaus. The student response questionnaire consisted of 20 statement items developed from the indicators listed in the instrument grid. Student response questionnaires were given to students after finishing learning using illustrated story-based learning media and after the post-test. The purpose of conducting a student response questionnaire is to find out student's responses to the use of illustrated story-based learning media on the content of Civics in Theme 8 Sub-Theme 3 about the socio-cultural diversity of the community. Among them is the Percentage of Student Response Questionnaire Data for Aspects of Media Display,

Table 3. Recapitulation of Percentage of Student Response Questionnaires

No.	Assessment Aspect	Average Score	%	Category
1.	Media Display	4.37	87.5%	Very good
2.	Material Presentation	4.41	88.3%	Very good
3.	Benefits	4.40	88.1%	Very good
Overall average score		4.39	87.9%	Very good

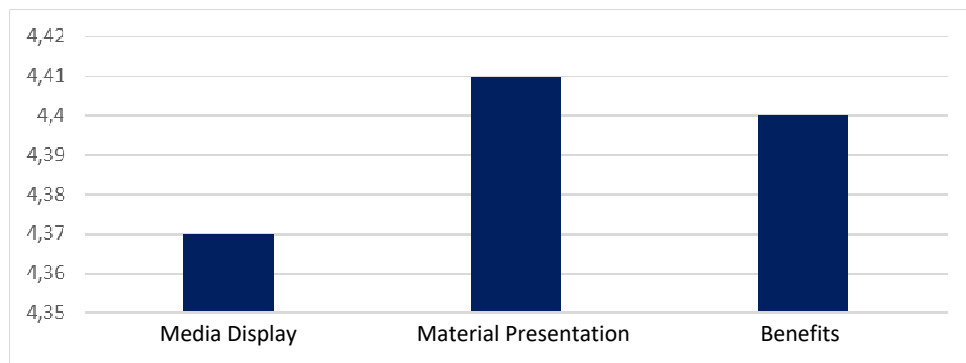


Figure 7. Results of Percentage of Student Response Questionnaire Recapitulation

2. Discussion

a. The Process of Developing Learning Media Based on Picture Stories

Based on the needs analysis, it can be concluded that teachers rarely use media in the learning process. In addition, the teacher (homeroom teacher) uses more textbooks (textbooks) than using learning media. Most of the respondents (1 teacher and 25 students) stated that they already knew about picture storybooks, 80.7%. However, 57.6% of respondents stated that they were not familiar with the picture storybooks used in learning. This means that most of them are familiar with picture storybooks, but many do not know that picture storybooks can be used as learning media. Then all respondents (100%) stated that they needed picture book learning media to be used in learning. This shows the high enthusiasm of students to use picture storybook learning media. In addition, researchers also conducted interviews with teachers (homeroom teachers). From the results of these interviews, information was obtained that teachers rarely use learning media when teaching. This is due to limited time and the manufacture of limited learning media.

At the planning stage, the researcher selects KI and KD, formulates indicators, selects materials, and makes an initial sketch of the product (product draft). The material chosen is about the community's socio-cultural diversity, which is the content of Civics in Theme 8, "The Environment of Our Friends" Sub Theme 3.

At the product development stage, the researcher designs a character image used in a picture storybook. The figures are drawn using the Infinite Design application. The topics covered in the book are about appreciating other people's efforts and being tolerant of differences.

b. Discussion of Product Feasibility Test Research Results

Based on the validation results carried out by material experts and media experts, picture storybooks were declared suitable for use as learning media. The questionnaire results submitted to the material expert gave a response of 89.7%, which means that the illustrated story-based learning media "Very Eligible" is used because it has met the eligibility criteria in terms of learning, material, and language aspects. Media experts responded 87.9%, which means that the illustrated story-based learning media "Very Appropriate" is used because it has met the eligibility criteria in terms of physical, characterization, and graphic aspects.

In addition, based on the results of the student response questionnaires given after finishing learning, as many as 87.5% stated that the illustrated story-based learning media was "Very Good" seen from the aspect of the media display, 88.3% viewed from the aspect of material presentation and 88.1% viewed from the aspect of benefit. Based on these results, the average score of the overall student response questionnaire is 87.9% which means the category "Very Good." This

shows that the learning media received good responses and responses from students.

c. Discussion of Product Effectiveness Test Results

The results of the pre-test showed that, in general, the student's scores had not met the predetermined learning mastery, namely 70. There were three students who had met the KKM scores, which was only 12% of the total students. From the results of the pre-test assessment, the average score of the students was 55. At the next meeting, the students were given more evaluation test questions. This test is carried out after the implementation of learning media in the learning process in the classroom or also called post-test. The results of the post-test carried out experienced a significant increase. Of the 25 fifth-grade students of SDIT Permata Firdaus, as many as 20 have met the KKM score. There are five people who have not met the KKM score but have shown a fairly good improvement. The average score of student learning outcomes is 72.6 with the "Good" category. Then, the effectiveness of the product is seen by using the n-gain score. The results of the gain score on the results of the pre-test and post-test are 0.39, which is in the range of $0.3 \leq g < 0.7$ classified in the "Medium" category.

Based on the data that has been described above, the picture story-based learning media is declared feasible and effective to be used in the learning process.

D. Conclusion

Based on the exposure of the results of the research data and discussion and findings after the implementation of illustrated story-based learning media, several conclusions were obtained, which were

answers to the questions posed in the problem formulation. The conclusions are as follows:

1. Based on the results of the validation carried out to material experts and media experts, picture storybooks are declared suitable for use as learning media, with the following details:
 - a. The assessment of material experts from learning, material, and language is 89.7%, categorized as "Very Eligible."
 - b. The expert's assessment of the physical, characterization and graphic aspects is 87.9%, categorized as "Very Eligible."

Based on the student response questionnaire results, which is seen from the aspect of media display, presentation of material, and benefits, it shows the average score obtained is 87.9%, which means the "Very Good" category.

2. Based on the pre-test and post-test results given to students, it can be seen that there is an increase in students' critical thinking skills, from an average score of 55% during the pre-test to 72.6% during the post-test.

Based on the n-gain score assessment criteria, the effectiveness of picture story-based learning media obtained a value of 0.39 which means it is in the range of $0.3 \leq g < 0.7$ classified in the "Medium" category

Bibliography

- Hanafi. 2017. *Konsep Penelitian R&D Dalam Bidang Pendidikan*. Saintifika Islamica: Jurnal Kajian Keislaman, Volume 4 Nomor 2 Juli-Desember 2017, Halaman 129-149.
- Mamik. 2015. *Metodologi Kualitatif*. Sidoarjo: Zifata Publisher
- Salim dan Haidir. 2019. *Penelitian Pendidikan (Metode, Pendekatan, dan Jenis)*. Jakarta: Kencana Prenada Group
- Suardi, Moh. 2018. *Belajar dan Pembelajaran*. Yogyakarta: Deepublish

- Supriyono. 2018. *Pentingnya Media Pembelajaran untuk Meningkatkan Minat Belajar Siswa SD*. Volume II, Nomor 1, Mei 2018, Halaman 43-48.
- Surya, Hendra. 2011. *Strategi Jitu Mencapai Kesuksesan Belajar*. Jakarta: PT. Elex Media Komputindo
- Widoyoko, Eko Putro. 2017. *Teknik Penyusunan Instrumen Penelitian*. Yogyakarta: Pustaka Pelajar
- Yuberti. 2014. *Penelitian & Pengembangan yang Belum Diminati dan Perspektifnya*. Jurnal Ilmiah Pendidikan Fisika Al Biruni Vol. 3 No. 2, Tahun 2014, Halaman 1-15