# Development of Local Culture-Based Pop-Up Book Media to Improve Students' Reading Literacy in Elementary Schools

## Hilwa Layyina<sup>1</sup>, Suharini Erni<sup>2</sup>, Isdaryanti Barokah<sup>3</sup>

<sup>1</sup>Master Program, Student of Primary Education, <sup>2,3</sup>Master Program, of Primary Education, Universitas Negeri Semarang, Semarang City, Indonesia

Corresponding Author: Hilwa Layyina

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### **ABSTRACT**

This study aims to develop local culture-based pop-up book media to improve the reading literacy of grade V students in elementary school. This type of research is development or Research and Development (RD) using a design model from Borg Gall. Data collection is carried out by observation, interviews, questionnaires, tests and documentation. The research was conducted at SD Muhammadiyah 1 Kudus. The data analysis technique used is a quantitative data analysis technique. The results showed that the practicality of the media obtained an average percentage of practicality of 97% of the "very practical" category and the results of the T test on the pre-test and post-test of reading literacy achieved a Sig.(2-tailed) score of 0.000. The score showed that there was a difference in the average of pre-test and post-test results in the reading literacy of the students of this study. Then the results of the N-Gain pre-test and posttest reading literacy obtained a score of 0.567 with the category "Medium". The N-Gain score identified an increase in students' reading literacy towards a better one. So it can be concluded that the Local Culture-based Pop Up Book media is effective for improving students' reading literacy.

*Keywords:* [Media Pop Up Book, Local Culture, Reading Literacy]

## **INTRODUCTION**

Education is a fundamental aspect of life for the progress of a nation. One of the factors in the progress of a nation is the development of human resources because education is believed to be able to increase human resources so that it can create productive human beings who are able to advance the nation. Kunaryo in Panut Setiono (2017) states that education is educating, guiding, teaching and training. School is an education that is held outside of teaching and learning schools that do not have to be tiered and articulated. Education is also the key to all quality progress and development, because with education man can realize all his potential both as a person and as a citizen of society.

Education can be taken through the path, one of the paths that can be taken is the formal education path, namely schools. Schools in their implementation are divided into three levels, namely basic education, formal education is intended to develop the potentials of students, one of which is reading literacy skills. Reading literacy is the ability in knowledge related to activities involving certain skills both reading, writing, speaking, and listening. Reading literacy aims to improve the ability to convey and understand information critically, creatively, and reflectively. Gogahu Prasetyo (2020) stated that reading literacy is an ability related to reading, thinking, and writing activities that aim to improve the ability to understand information critically, creatively, and reflectively. However, in reality, the reading literacy ability of Indonesian students is still relatively low.

The above opinion is then supported by the fact that there are facts in the field that show that there are grade V students of SD Muhammadiyah 1 Kudus who are still not focused on the material being studied and their understanding is not deep. This is evidenced by the results of observations and interviews that students' low reading literacy and lack of variation in learning resources are also major factors in the learning process. This affects students who seem less enthusiastic in learning activities. Learning also looks passive due to the lack of student participation in the teaching and learning process. In addition, learning media is not developed creatively and innovatively, so students tend to get bored in following learning.

In addition to students' low reading literacy skills, there are other problems related to lack of knowledge about local culture. Winangun (2020) states that local culture is a positive human behavior in dealing with nature and the surrounding environment that can be derived from values, religions, customs, admonitions of ancestors or local culture, which are built naturally in a community to be able to adapt to the surrounding environment. The local culture is actually still growing and developing in community and is agreed upon and used as a common guideline. This is shown from the low awareness of students about the local culture in their environment which is not fully known to all. A sense of pride and concern for preserving local culture is less ingrained in the current generation of young Indonesians. Their interest in learning is lacking. They are more interested in learning foreign cultures. One of the contributing factors is the lack of information on the wealth owned by the Indonesian nation. With this problem, one of the activities that can be done is to integrate local wisdom in learning. Integrating local culture in learning as a way to increase the sense of local wisdom in the environment and as an effort to maintain the existence of local wisdom in the midst of the rapid flow of globalization.

Ramdani (2018) argues that material sourced from students' local wisdom can make learning contextual and meaningful. So it takes continuous effort and commitment to implement character education based on local wisdom. So that in the end, education in Indonesia has a radiance of local excellence in the midst of global culture. Therefore, in order to develop local culture in the surrounding environment that is not fully known to all, teachers need to provide learning related to this through material in textbooks or learning media. One of the activities that can be done is to connect with local culture in learning. For elementary school children, they need something / a real example so that they can understand what the teacher is saying. So that an interesting learning media is needed to increase student motivation and understanding of the material. The existence of interesting learning media will greatly help students' interest and motivation in the learning process delivered by the teacher. Nurrita (2018) stated that learning media is a tool that can help the teaching and learning process so that the meaning of the message conveyed becomes clearer and the educational or learning objectives can be achieved effectively and efficiently.

This shows that there is a lack of interest in teachers to utilize creative and innovative learning media in developing learning. This problem can be overcome by developing pop up book media based on local culture. Media Pop Up is a book that has parts that can move or have three-dimensional elements and provides a more interesting visualization of the story, starting from the display of images that can move when the page is opened Dewanti et al. (2018) This Pop Up Book is designed with the most creative creations possible so as to foster student interest in learning which will have an impact on students' reading literacy. Based on the description above, this study will describe the development of local culture-based Pop Up Book media to improve the reading literacy of grade V students of SD Muhammadiyah 1 Kudus.

### LITERATURE REVIEW

## Media Pop Up Book

Media Pop Up Book is a three-dimensional that stimulate can imagination and increase knowledge so that it can make it easier for children to know the depiction of the shape of an object, enrich the increase vocabulary and children's understanding (Hanifah, 2014). Pop Up Book is a type of book in which there are folds of images that are cut and appear to form a three-dimensional image when the page is opened (Nancy, 2002). This Pop Up Book is designed with the most creative creations possible so that it can foster student interest in learning which will have an impact on students' reading literacy.

It will also help teachers so that students can implement examples to be more concrete. In the application of Pop Up Book learning media, the media game relates its learning with the material of various jobs with local wisdom or culture in Kudus. So that students in this learning not only know the material for sharing work but also know what local wisdom is in Kudus.

## Local culture

Local culture is defined as the original culture of Indonesian culture, various kinds of diversity that exist in Indonesia from a local community group in every region in Indonesia. According to Winangun (2020) states that local culture is a positive human behavior in dealing with nature and the surrounding environment that can be derived from values, religions, customs, admonitions of ancestors or local culture, which is built naturally in a community to be able to adapt to the surrounding environment. Based on the explanation above, it can be understood that local culture is an indigenous culture that exists in an area where the local culture is the hallmark of the area. Asih et al. (2019) stated that the notion of local culture can be formulated as a form of local values that are manifested from the results of the thoughts and behaviors of these communities that are formed naturally over time. In general, it can manifest as a result of art, tradition, customary law, or mindset. Because the vast territory of Indonesia is so vast and has a truly varied form of society, there are various local treasures that are listed as local culture.

## **Reading Literacy**

Literacy can be interpreted as the same as literacy, proficiency in reading and writing and the ability to read and write. Where a reading and writing skill can develop into a reading ability. writing, talking, listening and utilizing technology. The demand for a deeper knowledge of education in Indonesia now, can add to the broad understanding of literacy, Fayza et al. (2021). Thus, literacy is the ability to read, speak, write, listen and use technology. According to Pangesti et al. (2016) stated that for this reason, literacy culture plays an important role in this era of globalization. Because that is what causes the development of the notion of literacy, the concept of teaching literacy is defined as the ability to read and write. Gogahu Prasetyo (2020) stated that reading literacy is an ability related to reading, thinking, and writing activities which aims to make it important for that literacy plays an important role in the development of the globalization era so that a person can develop himself in the social, economic and cultural fields of the literacy learning process to improve the ability to understand information critically, creatively, and reflectively.

## **MATERIALS & METHODS**

This research is a development or Research Development (RD). Development research is research used to produce a particular product and test the effectiveness of that product. This study used a design model from Borg Gall. As for the implementation of the steps of the researcher, namely (1) potential and problems; (2) preliminary studies; (3) data collection; (4) design validation; (5) design revisions; (6) field trials; (7) revisions and development results, and will be discussed further in the development procedure section. research was conducted in class V of SD Muhammadiyah 1 Kudus for the 2022/2023 Academic Year. The subject in the study of class V in class A and B. Data collection techniques are carried out by observation, questionnaires. interviews. documentation. Observations and interviews were conducted with teachers to collect data on problems that must be studied and find things from respondents excessively. The test is used to measure student achievement in reading literacy after learning something with the use of Local Culture-based Pop Up Book media. Meanwhile, the researcher's documentation collected photo files in the results and use of Local Culture-based Pop Up Book media in social studies subjects. Data analysis in this study uses quantitative data analysis techniques to ensure that the development of Pop Up Book media can improve students' reading literacy in grade V SD Muhammadiyah 1 Kudus.

## **RESULT**

The validation test aims to determine the validity of the Local Culture-Based Pop Up Book media developed. This validation is carried out by lecturers who provide criticism, suggestions, input, as material for the revision of the Local Culture-based Pop Up Book media developed. The following are the results of the recapitulation of the results of the Local Culture-Based Pop Up Book valiadasi by expert validators.

Table 1. Interpretation of N-Gain Magnitude

Expert | Mean | (%) | Categori

Expert	Mean	(%)	Categori
Media	4,68	94	Very Decent
Materi	4,78	96	Very Decent

The research has the results of an analysis of the effectiveness of Local Culture-based Pop Up Book media in improving the reading literacy of grade V students of SD Muhammadiyah 1 Kudus. The results of the analysis of the effectiveness of Local Culture-based Pop Up Book media were obtained from the assessment of pre-test and post-test students' reading literacy data using the T test and the normalized gain (N-Gain) test by conducting a prerequisite analysis test first. As data to support the reading literacy of grade V students of SD Muhammadiyah 1 Kudus, observations were made related to changes in student behavior.

Pretest and posttest results on students' reading literacy are normally distributed. This is because both data have a significance value greater than 0.05. the reading literacy pretest data had a significance value of 0.312; and student reading literacy posttest data had a significance score of 0.133.

Table 2 Results of Pre-Test and Post-Test Data Normality Test of Reading Literacy

		Kolmogorov- Smirnov <sup>a</sup>			Shapiro-Wilk			
	Kelas	Statistic	df	Sig.	Statistic	df	Sig.	
Reading	PreTest	.153	25	.134	.954	25	.312	
Literacy	PostTest	.197	25	.013	.938	25	.133	
Results								

After all data are declared normal in substance, the calculation process can be continued on the T test and the N-Gain test. According to Sukestiyarno (2016: 166), the paired sample t test is intended to determine the difference in results in one group of people between before and after being given the perpetrator. The paired T test in this study was conducted to determine the difference between the results of the pre-test and post-test of students' reading literacy. More details can be found in the following table and explanation:

**Table 3 Paired T Test Results** 

Paired Samples Statistics									
		Mean	Z	Std. Deviation	Std. Error Mean				
Pair 1	PreTest Reading Literac	59.64	25	11.030	2.206				
	PostTest Reading Literac	81.00	25	8.426	1.685				

Paired Samples Test									
	Paired Differences								
					95% Confidence Interval of				
			Std.	Std. Error	the Difference				Sig. (2-
		Mean	Deviation	Mean	Lower	Upper	t	df	tailed)
Pair	PreTest Reading Literac -	-	13.723	2.745	-27.025	-15.695	-	24	.000
1	PostTest Reading Literac	21.360					7.783		

Based on the calculation of the results of the t test in the Table, the results can be known as follows:

- 1. Based on the output of paired samples statistics, it can be seen that in reading literacy get an average pre-test score of 59.64, while in the post-test get an average of 81.00 from 25 students.
- 2. Based on the output of paired samples test on reading literacy skills, a Sig. (2-tailed) value of 0.000 was obtained. In the decision-making guidelines if the value of Sig.2 (tailed) < 0.05, then Ho is rejected and Ha is accepted. In this case, it shows that the value of Sig. (2-tailed) of 0.000 is less (<) than the significance value of 0.05. So it can be concluded that Ho who stated "There is no average difference between the pre-test and post-test results

in the reading literacy of grade V students of SD 1 Muhammadiyah Kudus" was rejected. Meanwhile, Ha, who stated "There is an average difference between the pre-test and post-test results in the reading literacy of grade V students of SD Muhammadiyah 1 Kudus, was accepted.

The normalized gain (N-Gain) increase test is carried out to determine the effectiveness of a certain method or treatment (treatmentnt) in one group pre-test and post-test design research or research using the control group. The N-Gain score test is carried out by calculating the difference between the value before and after treatment. The description related to the N-Gain test results on the students' pre-test and post test results can be seen in the following table.

Tabel	4	Hasil	Uji	N-	Gain
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Variabel	Average pre-test score	Average post-test score	Increased (N-Gain)	Criteria
Student Reading Literacy	59,64	81	0,567	Medium

Based on Table 4.14, in the analysis of pretest and post-test data, it is known that there was an increase in the average score in the reading literacy variable which was originally 59.64 to 81, with an N-Gain score of 0.567 and was on medium criteria. The score can be interpreted that the Local Culture-based Pop Up Book media is effective in improving the reading literacy of grade V students of SD Muhammadiyah 1 Kudus.

## **DISCUSSION**

The validity of Local Culture-based Pop Up Book media was obtained from validation testers by two media expert validators and two material expert validators. Media expert validation is known that validator I gave an assessment score of 91 out of a maximum score of 100, an average of 4.55 and a percentage of 91%. Then Validator II gave an assessment score of 96 from the maximum score of 100, an average of 4.8 and a percentage of 96%. If added together as a whole on the acquisition of validation test scores by 2 media expert validators, the total

score of 187 is obtained from the maximum score of 200, with an average of 9.35 and a percentage of 94%.

Meanwhile, material experts know that validator I gave an assessment score of 87 out of a maximum score of 90, an average of 4.83 and a percentage of 97%. Then Validator II gave an assessment score of 85 from the maximum score of 90, an average of 4.72 and a percentage of 4%. If added together as a whole on the acquisition of validation test scores by 2 media expert validators, the total score of 172 from the maximum score of 180 is obtained, with an average of 9.55 and a percentage of 96%.

The results of expert validation and responses from teachers and children in accordance with suryadi (2013) stated that game tools are tools specifically designed as tools to help learn and can optimize child development that is adjusted to the level of child development. According to (Ariawan Pratiwi, 2018) educational game tools are everything that can be used as a means or game tool that contains value and can improve all aspects of children's

developmental abilities. Based on the validation test results, the Local Culture-based Pop Up Book learning media obtained an average score of 93.5 with the category "Very Worthy". Utariyani (2015), states that, there are

three aspects that are assessed in Pop Up Book-based learning media include attractiveness appearance, of content/ completeness of media. content. and Referring to these opinions, an assessment sheet was developed for media expert validators based on aspects of the display of content/ content, and the completeness of the Local Culture-based Pop Up Book media. The effectiveness of Local Culture-based Pop Up Book media is obtained from the results of pre-test and post-test on students' reading literacy in grade V at SD Muhammadiyah 1 Kudus. As supporting data for the pre-test and post-test on reading observations were literacy, made determine the changes in attitudes shown by students.

Analysis of differences in the average scores of pre-test and post-test in students' reading literacy was obtained through the T test in this study conducted using the paired sample t test technique. 2. Based on the output of paired samples test on reading literacy skills, a Sig. (2-tailed) value of 0.000 was obtained. In the decision-making guidelines if the value of Sig.2 (tailed) < 0.05, then Ho is rejected and Ha is accepted. In this case, it shows that the value of Sig. (2-tailed) of 0.000 is less (<) than the significance value of 0.05. So it can be concluded that Ho who stated "There is no average difference between the pre-test and post-test results in the reading literacy of grade V students of SD 1 Muhammadiyah Kudus" was rejected. Meanwhile, Ha, who stated "There is an average difference between the pre-test and post-test results in the reading literacy of grade V students of SD Muhammadiyah 1 Kudus, was accepted.

An average improvement test (N-Gain) was conducted to determine the increase in students' reading literacy scores. Testing is carried out through the du stage, namely the

initial test before being given (pre-test) and the final test after being given treatment (post-test). Based on the analysis of pre-test and post-test results on reading literacy, students have increased from the original 59.64 to 81, with an N-Gain score of 0.567 at the "Medium" category level. Mulyasa (2007: 254), stated that learning is declared effective if it obtains a gain value of >3 to <1.0. So it can be concluded that the Local Culture-based Pop Up Book media is effective for improving students' reading literacy.

### **CONCLUSION**

Based on the results of research and discussion which includes the results of the development and effectiveness of Local Culture-based Pop Up Book media to improve reading literacy of grade V students of SD Muhammadiyah 1 Kudus. It was concluded that the results of the validation test by two media validators, obtained an average percentage score of 94% and were categorized as "Very Feasible". Then on the results of product validation by two material expert validators, obtained a percentage score of 96% and was categorized as "Very Feasible". Both results show that the Local Culture-based Pop Up Book media is very worthy of being used in learning. Meanwhile, the results of the T test in the pre-test and post-test of reading literacy showed a Sig. (2tailed) score of 0.000. The score showed that there was a difference in the average rara-of pre-test and post-test results in the reading literacy of the students of this study. Then the results of the N-Gain pre-test and post-test reading literacy obtained a score of 0.567 with the category "Medium". The N-Gain score identified an increase in students' reading literacy towards a better one. So it can be concluded that the Local Culturebased Pop Up Book media is effective for improving students' reading literacy.

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