

Development of Media with Pictures for Kindergarteners' Reading Readiness

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ABSTRACT

This is a developmental study that began with observations of some early childhood children in Siak Sri Indrapura, Indonesia, who lacked reading readiness. Seeing the potential of Malay folklore, a learning media for Malay folklore pictorial stories was developed. The process of creating media begins with the determination of the story and theme, followed by the creation of designs and product models. Validator assessment is feasible and may be used to determine a child's readiness for reading. To determine the effectiveness of the media, this study used a quantitative method with a two-group post-test design. According to the t-test results, a t-observed value of -8,175 with a significance value of 0.000 indicated that there was a difference in reading readiness between the experimental and control groups, indicating that the Malay folklore pictorial story media was effective for early childhood reading readiness in Siak Sri Indrapura.

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1. INTRODUCTION

Readiness to read is inextricably linked to child's interest in reading, implying that readiness is not merely a capacity. Reading readiness is a developmental stage in which the child prepares mentally, physically, and socially for reading experiences (Akuibulo, Okorie, Onwuka, & Uloh-Bethels, 2015). Susanto specifies reading readiness as a state of self-motivation and behavior that shows mental readiness or desire to learn about the surroundings, especially reading texts or images (Susanto, 2011). It can be classified into the following categories: 1) Curiosity about objects, living creatures, and mechanisms; 2) ability to associate or read images through recognition and drawing; (3) comprehensive learning; (4) ability to interact in conversational language; (5) quite good ability to distinguish sound; (6) a desire to learn to read; (7) sufficient emotional ability to concentrate and stay on task; and (8) self-confidence and emotional balance.

However, it is the process of preparing a child for reading by encouraging and engaging the child in reading (Zamani, Yekta, Hassanzadeh, Bonab, & Kakajooybari, 2020). For that reason, there is a need for the stakeholder to conduct research related to the students reading readiness and the things related to the supported facilities.

Observations at several kindergartens in Siak Sri Indrapura Regency revealed that some children appear to lack reading readiness. Concerning the existing learning facilities, some institutions already have good reading materials such as picture books, but there were still some children with low reading readiness. Based on these problems, media for the readiness of children to read, namely the development of media for pictorial stories of Malay folklore for readiness for early childhood reading, must be developed. For further, the following will be described later: 1) Development of media story with Malay folklore for early childhood readiness from media design to media model; 2) Children's interest in Malay folklore pictorial story media; 3) The suitability of the Malay folklore pictorial story media concept with the objective of early childhood reading readiness; 4) The influence of the Malay folklore media story of reading readiness in early childhood Siak Sri Indrapura; 5) The effectiveness of Malay folklore media stories for readiness for early childhood reading. By using picture media in Kurnia's (2017) research, the reading ability of children at an early age can be affected (Sosial & 2017, 2017).

Learning facilities, such as the availability of writings, magazine articles, and other educational materials, are factors that influence children's development at home, particularly in terms of intelligence (Sun et al., 2022). Furthermore, learning facilities both at school and at home influence mind representation. There are three modes of mind representation in children's language development: enactive, in which the child's mind operates through action; iconic, in which the child's mind operates to create a picture or image of the object being observed; and symbolic, in which the child has mastered the use of symbols in thinking, particularly language (Kurnia et al., 2020). Bruner's description demonstrates that to support children's language development, additional facilities, particularly those related to reading (verbal/speaking/telling) with visuals or pictures, are necessary. Of course, this also includes folklore presented with pictures, i.e., pictorial stories of Malay folk tales (Kurnia & Zulkifli, 2016)

2. METHODS

To see the effectiveness of the media, experimental research was carried out using quantitative methods, with a control group and an experiment group. Data analysis is a different test or t-test that is designed to look for differences between two groups. The type of test used was the polled variants. A detailed description of your method in conducting research needs to be provided in this section. This section explains how long the research was conducted, the population and sample (research targets), data collecting techniques and instrument development, and data analysis. For research using tools and materials, please write down the specifications for the equipment and materials. For qualitative research such as classroom action, case studies, etc., there should be an increase in the existence of the research, research subjects, informants that participate in supporting the data of research, location, and duration of the research, and details regarding the validity of the research.

3. FINDINGS AND DISCUSSION

The design of the learning media for the pictorial stories of Malay folklore is carried out in stages; 1) Choosing the folklore that is considered appropriate (group discussion); 2) Creating a story script; 3) Creating a pictorial media image design with sample images. The story chosen is a folk tale with the character mouse deer and several animal characters such as the turtle, the tiger, and the elephant.

The initial design of the drawing was made manually with a pencil. After being considered following the needs of the media concept, the next step is to create a computerized black-and-white image.

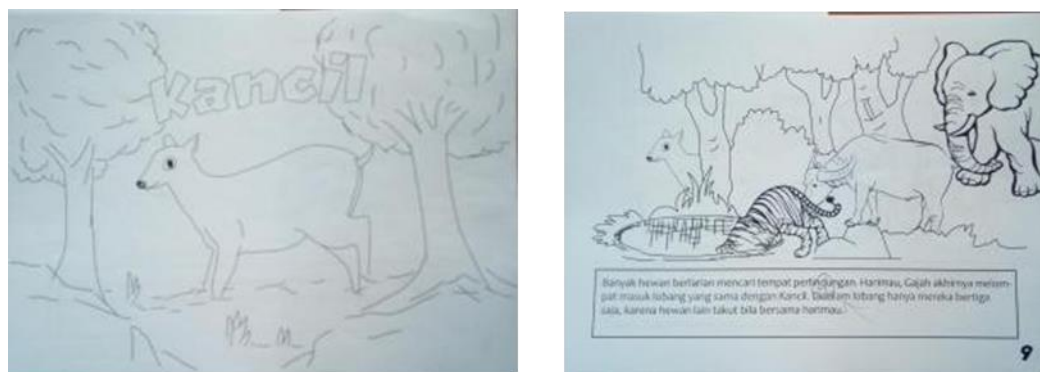


Fig. 1. The original product in computer design

Overall, the first validator considered that the media is feasible according to the following indicators: 1) design is following the concept of pictorial story media of Malay folklore; 2) design is in line with the objectives of early childhood reading readiness; 3) conceptual design is as a medium for early childhood learning; 4) design is easy to be illustrated technically; 5) Design leads to product design with readily available materials; 6) Design leads to user-friendly product design; 7) Design can be used individually; 8) Design can be used in early childhood study groups. The concept is possible to continue with the revision, whereas the request of the validator is: 1) color in line with the interests of children; 2) better with the thicker and flexible paper.

The second validator also evaluated each indicator. As regards the second validator's notes/comments, a review should continue, because it is requested that the medium concept should be presented with images to gain more attention.

The expert's input on the design shows that the concept of media design is further refined, particularly concerning coloring. Improvements in product design are as follows.



Fig. 2. The original product in computer design

The validation results by the first and the second validator based on all evaluation indicators are feasible and deserve to be continued without revision. It is appropriate to continue to be a model for early childhood pictorial story learning media.

Model of Product

The size and paper of the product/media are thicker and brighter. The model of the media is as follows.



Fig. 3. The original product in computer design

The media model is then shown to the validators. The first and the second validator considered the media as feasible by seeing the following indicators; 1) Appearance of the product; 2) Increase the attention of children; 3) The attractiveness of the product used in learning; 4) Increase the activity of children in learning/playing; 5) Ease of use. The notes/comments of the one and two validators are worthy of being continued and tested. This means that the media model can be used as a learning medium, especially in field trials.

Limited Field Testing

The use of media was conducted in two ways in limited field testing. Next, the media was shown to children, and the media should be held and paid attention to. Second, when the storyteller shared the media with children, it turned out the kids were very interested in the media. This can be seen in the following table for observation:

Table 1. Observation Sheet of Media Interest for Children

No	Indicator	Criteria				
		Very low	Low	Moderate	High	Very high
1.	There is the ability of children to see through media observation (children only observe either individually or in groups)					√
2.	Children pay attention to the media (for example focus on content [pictures/writing, or; ask media-related questions [content and others])					√
3.	Children enjoy the time in using the media (for example: paying attention to the inside media use; there is an appropriate response to media use)				√	

In addition to the above observations, observations had also been made on the implementation of the use of media in children's storytelling, such as the following observation table.

Table 2. Observation / Interview sheet on Media Use for Teachers

No	Indicator	Criteria				
		Very low	Low	Mode rate	High	Very high
1.	The attractiveness of the story (theme; character; storytelling)					√
2.	Appeal of image				√	
3.	Efficient use of images				√	
4.	Functionality with the learning interests of children					√
5.	Appropriateness of media concepts in the development of children reading readiness					√

After carrying out a small field test, the next major field test was carried out. The children's curiosity can be seen: (1) There is a response to the storyteller (researcher); (2) The children retell the story that has been told.

**Fig. 4.** Children retell the story in front of the classroom

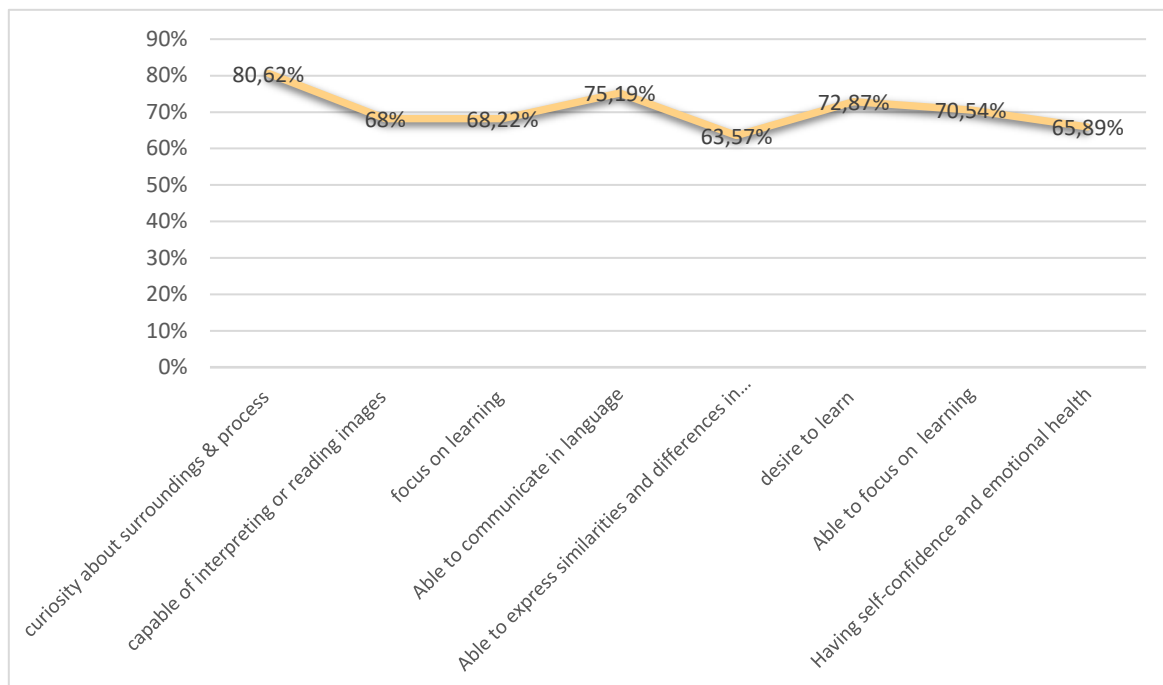
The study data was also quantitatively gathered, which include the two-group-between posttest experimental method only. In the following table, it can be seen the general research data:

Table 3. Control and Experiment Class

Class	Possible Score				Obtained Score			
	Xmax	Xmin	Mean	SD	Xmax	Xmin	Mean	SD
Control Class	24	8	16	2,67	22	13	16.95	2.591
Experiment class	24	8	16	2,67	24	13	20.92	2.475

As for the score obtained from the control group, the following are the score from each indicator. The indicator of curiosity about surroundings, individuals, and the process of something has a score of 104, the optimal score is 129, 80.62 % and in good criteria. The second is capable of interpreting or reading images by identifying and describing them. It is currently scored 88; the ideal score is 129, 68.22 % and requires sufficient criteria. The focus on learning score is 88; the ideal score is 129, 68.22% and includes sufficient criteria. Able to communicate in a language, particularly in sentences, the factual score is 97; the ideal score is 129, 75.19 % and includes sufficient criteria. Able to express similarities and differences in sound is 82, 63.57 % and includes sufficient criteria. The desire to learn the factual score is 94, 72.87 % and includes sufficient criteria. Able to focus on assignments or learning, the score is 91, 70.54 % and contains sufficient criteria. Having self-

confidence and emotional health, the score is 85, 65.89 % in sufficient criteria. The above explanation shows that the average from each indicator is 70.64 %, which is considered sufficient.



Graph 1. Control Group Result of Each Indicator

The result of control group can be seen as follow:

Table 4. Control Group Result

No	Category	Score Range	Frequency	%
1	Good	$X \geq 18,67$	14	32,55814
2	Sufficient	$13,33 \leq X < 18,67$	24	55,81395
3	Insufficient	$X < 13,33$	5	11,62791
	Total		43	100

Seeing the result from the experiment class, the average score from each indicator is 87.18% that includes in sufficient criteria, with the distribution of each indicator as follows. The indicator of curiosity about surroundings, individuals, and the process of something is in good criteria, has a score of 209 from 231 as the ideal score. The second is capable of interpreting or reading images by identifying and describing them is in sufficient criteria with the score of 209 out of 231 and in 90.48%. Focus on learning score is 201 from 231, 87.01% and in good criteria. Able to communicate in language, particularly in sentences is in good criteria as well with a 202 score of 87.45%. Able to express similarities and differences in sound is 195, 84.42% and includes good criteria. The desire to learn the factual score is 212, 91.77 % and includes good criteria as well. Able to focus on assignments

or learning, the score is 192, 83.12% and contains good criteria. The last indicator is having self-confidence and emotional stability, reaching 191, 82.68% in good criteria.

The result of the experiment group can be seen as follow:

Table 5. Experiment Group Result

No	Category	Score Range	Frequency	%
1	Good	$X \geq 18,67$	65	84,42
2	Sufficient	$13,33 \leq X < 18,67$	11	14,29
3	Insufficient	$X < 13,33$	1	1,30
	Total		77	100

In table 3, the average score of experiment class is 20.92. As seen in the above table, the distribution of the score is included as a good category.

Based on the prerequisite tests conducted: 1) The homogeneity test has obtained a value of 0.111, ensure that the information is homogeneous. 2) The linearity test was 0.004, which means that the data has a linear relation. 3) Normality test values of 0.667 and 0.111, which implies normal distribution of the class control and experimental class.

The table below shows the results of t-test:

Table 6. Result of t-test

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Reading Readiness	Equal variances assumed	.338	.562	-8.283	118	.000	-3.969	.479	-4.917	-3.020
	Equal variances not assumed			-8.175	83.703	.000	-3.969	.485	-4.934	-3.003

The t-test attempts to see variations of reading readiness on children in the control and experimental class. Based on the results of the t-test conducted, it shows that there is a significant difference between the two classes, namely -8,175. After the t-test, the outcome was -8,175 with a significance of 0,000 when the gap between both groups was evaluated (control and experiment). This indicates that there were substantial differences between the two groups after the t-test was performed. As for the pictorial story of Malay folklore with mouse deer characterization, which is

so common for the society, it is considered to provide inspiration and direction for change and improvement toward reading readiness.

This research on development describes the story of the hare and the tiger, involving tortoises and elephants. Authors adopt this story because, basically, children like fables or animal character stories. Fables attempt to educate us by allowing us to imagine the world while having fun; additionally, adults will most likely interpret philosophical fables as well (Hatooka, 2022). The two validators were very excited about the original media design intended to be a medium for the improvement of the reading readiness of children. This, of course, is closely connected to the success and enthusiasts of the fable in general for the community. This shows that fable is a story favored by society, especially by children worldwide (Literature & 2022, n.d.).

This illustrated storybook of Malay folk tales is very attractive, and the colors used are interesting. It is hoped that the children will be inspired and grow their interest in seeing and reading it. However, children aged six years and under should be interesting books and color images (Hafiz, of, & 2022, n.d.). The model is increased in size and printed on glossy paper so that it is more attractive to children. As a result of limited field studies, it turns out that the media are interested in children, both when the media are still in the form of books, and when the media are used for demonstrations to tell stories. This is in line with the view that the appearance of photos or illustrations shown in an object or book can make children feel more interested (Polyzou, Botsoglou, Zygoris, & Stamoulis, 2022).

Generally speaking, when you use the media to tell stories, it's great for children. In accordance with the opinion of (Kharisma, Usada, Cendekia, & 2016, n.d.), this is that storytelling strategies not only aid the production of language for children, but are also believed to be able to impact the interest of learning for children. After limited field research, the main field testing continued. Children are very involved in watching the media in practice and are very sensitive to the stories shared. Storytelling would be easier if it is performed using media in the form of storybooks (Ady Prasetyo, Seni Rupa, Bahasa dan Seni, & Negeri Semarang, 2014).

The control group included 43 children in the study, and their reading readiness was 70.64, which is appropriate for the criterion (C). The reading readiness of the experimental class children after treatment was 87.18, indicating that the experimental group received a higher score than the control group after treatment. This illustrated the benefits of fables or storytelling, such as the development of children's imagination and the improvement of early childhood language skills (Fip et al., n.d.).

This illustrated storybook of Malay folk tales is a learning tool that can be used to increase the interest of children. Although the children cannot read yet, but children can tell stories by looking at the images in the picture storybook, in line with the opinion that learning media used to provide teaching resources that can stimulate the feeling ("Sardiman. 2009. *Interaksi Dan Motivasi Belajar Mengajar....* - Google Scholar," n.d.).

4. CONCLUSION

This research produces media-illustrated story Malay folklore for early childhood reading readiness that is suitable for increasing children's interests. This Malay folklore can influence the growth of reading readiness on early childhood in Siak Sri Inderapura, Indonesia. It can be seen that 87.18 % of the experimental group is in good category and 70.64 % of the control group is in the moderate category. Pictorial story media is effectively used for early childhood reading readiness, because there is a significant difference in t-test between the control class and the experimental class, namely $t_{count} = 8,175$ with a significant degree of 0.000

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