# IJGD: International Journal of Graphic Design Vol.1, No.2 November 2023

e-ISSN: 2987-9434; p-ISSN: 2988-0343, Hal 68-80

# Java Language Learning Media Folk Story Material Using Multimedia Based Demonstration Methods

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Abstract: Based on the results of observations, the learning method used at SMP Negeri 35 Semarang is in the form of lectures, discussions, questions and answers using books. The learning methods that have been applied so far have not had enough impact on the level of students' understanding of the material taught by the teacher. The method used was less successful because of the lack of visualization so that students felt bored and fed up. This research offers a solution for utilizing multimedia with a demonstration method through interesting learning media where computer media can display images, text, audio and video so that folklore can be better visualized and attract students and the learning process can be fun. This research uses the Research and Development (R n D) product development method using 6 of the 10 research stages. The results of the research show that from the media expert validation test, material validation test and user validation test results, the product can be said to be effective and suitable for use.

Keywords: Folklore, Multimedia, Learning Media, Demonstration.

#### 1. INTRODUCTION

The development of science and technology has an impact on various areas of life. This increasingly rapid technological progress has a strong influence on various areas of life, one of which is education. In this field of education, computers are a familiar tool to use in the learning process.

It is felt that among teachers, Javanese language subjects in schools have not received enough attention. Javanese language subjects are underappreciated or even underestimated because they are only local content subjects. There are even some students who think that Javanese language subjects are additional subjects and do not need to be deepened. The impact of students' lack of interest in learning affects student achievement. From the results of teaching and learning activities carried out at SMP N 35 Semarang, researchers obtained data on the average value of subjects in group b (local content) class VII. The results of this research can be seen in the table below:

Table 1. 1 List of Average Scores for Daily Test VII 2017/2018

MARK	SB	Physical education	Pracr	B. Java
AVERAGE RESULTS	79	80.5	79	76.5

Current learning methods tend to be monotonous, where teachers deliver material such as lectures and expect students to listen, take notes and understand the material presented. Use repetitive method Also will make it a learning process becomes boring. Innovation and new and appropriate teaching methods can help students' understanding process so that students can apply the knowledge gained in everyday life.

Education units starting from elementary, middle school, high school/equivalent levels are given the obligation to teach Javanese mulok. Schools that do not allocate a minimum of 2 hours per week for Javanese language lessons mean they have violated Central Java Provincial Regulation number 9 of 2012 concerning Javanese language, literature and script, which was followed by the issuance of Gubernatorial Regulation Number 57 of 2013.

Based on the interview above, a learning media is needed that can visualize folklore objects. The demonstration method is the use of methods in learning activities by using demonstrations to show students how to do something or the teacher's way of teaching by demonstrating and demonstrating to students a process, situation, event, sequence, carrying out a particular activity or object that is being studied either in real or imitation forms through the use of various media that are relevant to the discussion to make it easier for students to be creative in understanding folklore. In this case, the use of technology applications as a learning medium will be very helpful in explaining abstract concepts more easily because a folklore character object can be visualized.

#### 2. RESEARCH METHODS

Research and development methods or in English *Research and Development* are research methods used to produce certain products and test the effectiveness of these products.

Research and Development (*Research & Development*) in industry is the spearhead of an industry in producing new products needed by the market. Almost 4% of costs are used for research and development, even for the pharmaceutical and computer industries it is 4% (Borg and Gall). In the social and educational fields, the role of research and development is still very small and is less than 1% of overall education costs (Sugiyono , 2015).

In the *Research and Development process* dug or grown develop a variety of ideas. However, it is selected which ideas will produce products that are accepted by the market or have high selling value (Nusa, 2015).

The Research and Development steps are:

- 1. Potential and problems
- 2. Data collection
- 3. Product Design
- 4. Design Validation
- 5. Design Improvements
- 6. Product Trial
- 7. Revision of Field Trial Results
- 8. Feasibility test
- 9. Revision of Feasibility Test Results
- 10. Socialization and Dissemination of Final Products

In this study, of the 10 steps mentioned above, only 6 were used because they were adapted to research needs at the Strata 1 (S1) education level. Instructional media development procedures adapted from Borg & Gall

### 2.1 Software Used

To make a plan In this learning media, the author uses *Adobe Flash software CS6* and other supporting software such as *CorelDraw X7*, *Adobe Illustrator CC 2015*, *After Effects CC 2015*.

## 2.1.1 Adobe Flash CS6

The following is the display when opening the Adobe program CS 6 Professional Flash:

Figure 2.1.1. Initial Display when Opening the Adobe Flash Program



Figure 2.1.2 Display the main screen and menus of the Adobe Flash program



Adobe Flash is one of the computer software which is a superior product of Adobe Systems. Adobe Flash is used to create vector images and animated images. The files generated from this software have swf extension file and can be played in a web browser that has Flash Player installed. Flash uses a programming language called ActionScript (Ichwan, 2015).

### 2.1.2 Corel Draw X7

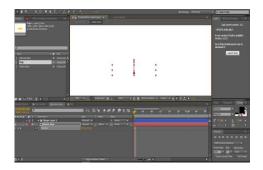
Corel Draw is a vector-based graphic illustration software from the leading *software* development company Corel Corporation (<a href="http://www.corel.com">http://www.corel.com</a>) based in Ottawa, Canada. Compared to other illustration programs such as Adobe Illustrator and Macromedia Freehand. CorelDraw has the advantage of being easy to use, a user-friendly interface and also complete and easy-to-use facilities and features. Corel Draw is a graphics program based on vectors or lines ( Luthfi, 2014).

## 2.1.3 Adobe After Effects CC 2015

Adobe After Effects is a very professional software for Motion Graphic Design needs. With a combination of various existing design software, Adobe After Effects is one of the most reliable design software. More than 50 kinds of standard effects to change and animate objects. Apart from

that, creating animations with Adobe After Effects can also be done by simply typing a few script codes which are usually called Expressions to produce more dynamic movements. (Atep M, 2017).

Figure 2.1.3 After Effects Work Sheet CC 2015



#### 2.1.4 Adobe Illustrator CC 2015

Adobe Illustrator is graphic design software that is used to create vector illustration images. Vector objects have an advantage in terms of image sharpness. However, this object cannot handle objects with a realistic appearance such as photos.

Broadly speaking, Adobe Illustrator is used for:

- 1. Create graphic designs.
- 2. Painting objects.
- 3. Perform tracing on bitmap objects.
- 4. Arranging writing (typography).
- 5. Create a website design. (Jubilee Enterprise, 2018)

Figure 2.1.4. L Adobe Illustator CC 2015 worksheet



# 2.2 Design Validation

Design validation is one of the development processes carried out to determine the level of effectiveness of the product. The validity test presents material experts and media experts with an assessment using a questionnaire. In Table 1 it is explained that the assessment uses a questionnaire,

divided into 3 questionnaires, namely questionnaires aimed at validators (design experts), students (media users), and teachers (material experts).

Table 2 . 2.1 Media Expert Validation Questionnaire

No	Indicator	1	2	3	4
A	Input Activities				
1.	Application running as it should			V	
2.	The animation works as it should		√		
3.	Suitability of layout placement			√	
4.	Text readability (font)			√	
5.	The button function works well				√
6.	Ease of operating learning media			√	
7.	Color match				
8.	Sound suitability (sound)			√ √	
9.	Suitability of icon images for buttons		√		
	Communicative; in accordance with the message			√ √	
10.	and can be accepted or in line with the target's				
	desires				
	TOTAL SCORE		4	21	4
	TOTAL SCORES	2 9			

**Table 2. 2.2 Material Expert Validation Questionnaire** 

No	Indicator	1	2	3	4
A.	Input Activities			4	
1.	Learning media facilities have been met			√ √	
2.	The use of learning media helps the learning				1
۷.	process				V
3.	Suitability of material delivery			√	
4.	Learning media comes in an interesting way				√ √
5.	The language used for junior high school students			1	
6.	Learning media motivates you to follow the Solar			2/	
0.	System material			\ \ \	
7.	Its function is as a companion to printed books			√	
	Students can easily answer questions about the				
8.	subject matter and memorize the planets in the				√ √
	Solar System material				
9.	Its function is as a teacher's assistant			V	
10.	Appropriateness of the level of evaluation to what			2/	
10.	is being taught			V	

TOTAL SCORE		21	1 2
TOTAL SCORES	3	3	

The assessment is divided into 4 scores, namely:

- 1. Score 4: very good, very decent, very interesting
- 2. Score 3: good, decent, interesting
- 3. Score 2: not good, not worthy, not interesting
- 4. Score 1: not good, not worth it, not interesting

Validation calculations can be implemented with formula:  $\mu = \Sigma x$ .

Information:

 $\mu$  = average value

 $\Sigma x = \text{total number of validation values}$ 

n = number of validators.

In this research, students' responses to the use of learning media were seen through questionnaires and grades. The questionnaire is given to students at the end of the learning process activities. Students are asked to answer as honestly as possible to questions related to students' opinions regarding the teacher's use of media. The percentage score per item from each student's questionnaire answer can be seen in the table.

## 3. RESULTS AND DISCUSSION

# 3.1 Development Results

In the development results, the media chosen for multimedia-based folklore learning for class VII students is to display explanations of folklore material with an attractive design and appearance, adapting to part of the concept.

# 3.2 Visual Media Design

The final result of this learning media is in EXE format which can be opened on any computer without having to have Adobe Flash CS 6 software.

Figure 3.2.1 Image of Initial Display of Learning Media



The title page contained in the Javanese language learning media is *vintage-themed folklore material*. The background design uses a *doodle illustration style*. This design has the characteristic that the illustrations are not very neat in the lines and at the end of the shape of each design element.

font type used on the title page is of the *Handdrawing type* which is used to write descriptions for menus called Sacred Bridge.

Figure 3.2.2 Image of the Initial View of the Button Navigate to the Main Menu



The opening page in the Javanese language learning media is *vintage -themed folklore material* with a neon effect in it. The color of the button is different from the color of other neon effect ornaments.

# Figure 3 . 2.3 Image of Learning Media Main Menu Display

The main menu design contained in the Javanese language learning media, folklore material with the theme of tourist attractions in Central Java, displays *flat designs* from the Surakarta Palace, Borobudur and Lawang Sewu as menu buttons. The background design of the main menu uses the illustration style of a *flat map design* from Central Java Province.

font type used in the material menu is the Sans-Serief font type which is used as the material menu button font called Century Ghotic.

## 3.3 Final Product Discussion

Determination of design feasibility Multimedia-based Folklore learning media at SMP Negeri 35 Semarang is measured based on assessment (validation) from experts, namely media experts, material experts and validation from users during product trials. Suggestions contained in the instrument are used as consideration for further improvement of the tool. The following are the test results from each validator.

# 3.3 .1. Media Expert Validation

In table 3 .3.1 The following are the validation results expert media a

**Table 3.3.1 Media Expert Validation Assessment** 



Mark	Validity Criteria		
3.26-4.00	Very Valid		
2.51-3.25	Valid		
1.76-2.50	Invalid (revised)		
1.00-1.75	Invalid (total revision)		

From the test results via a questionnaire totaling 10 questions, the values obtained:

a. Minus  $(1 \times 2) = 0$ 

b. Simply  $(2 \times 1) = 8$ 

c. Good  $(3 \times 5) = 12$ 

d. Very good  $(4 \times 2) = 8 +$ 

28

So the validation value can be calculated:  $\mu = \frac{\sum x}{n} = \frac{28}{10} = 2.8$ 

Based on the calculations above, it is known that the validation results from media experts are 2.8. This criterion is between 2.1 - 3.0, which is classified as valid, so it can be said to be feasible.

#### 3.3.2. Material Expert Validation

From the test results via a questionnaire totaling 10 questions, the scores were obtained.

- a. Less  $(1 \times 0) = 0$
- b. Simply  $(2 \times 0) = 0$
- c. Well  $(3 \times 6) = 12$
- d. Very good  $(4 \times 4) = 24 + 36$

So that the validation value can be calculated

$$\mu = \frac{\sum x}{n} = \frac{36}{10} = 3.6$$

Based on the calculations above, it is known that the validation results from material experts are 3, 6. This criterion is between 3.26 - 4.00, which is classified as very valid. So this product can be said to be worthy.

# 3.3.3. User Validation

Based on data from the average value of a class with 32 students before using the product, the following data was obtained:

Table 3.3.1 List of Average Daily Test Scores for Class VII 2017/2018

MARK	SB	Physi cal educ ation	Pracr	B. Java
AVERA GE RESULT S	79	80.5	79	76.5

Based on the data above, it can be concluded that the average daily test scores and class VII assignment scores in Javanese language lessons are the lowest in group B (local content) class VII

subjects with a Minimum Completeness Criteria (KKM) of 70, even though the average score is 70. This average is higher than the specified KKM, but a solution must be found to increase the score as a reference for student understanding.

Table 3.3.2 User Trial Value after Product Use

No	Name	Mark	Information
1	Daffa	80	Passed
2	Rahma	82.5	Passed
3	Ahmad	77.5	Passed
4	Iqbal	80	Passed
5	Alvi	72.5	Passed
6	Khusnul	77.5	Passed
7	Nadia	92.5	Passed
8	Approval	85	Passed
9	Nindia	72.5	Passed
10	Maulida	77.5	Passed
11	Rizal	85	Passed
12	Raditya	90	Passed
13	Hanida	72.5	Passed
14	great	85	Passed
15	Rendita	87.5	Passed
16	Naura	80	Passed
17	Juwita	92.5	Passed
18	Erline	87.5	Passed
19	Febri	72.5	Passed
20	Rifki	80	Passed
21	Saphira	77.5	Passed
22	Angelica	90	Passed
23	Aditya	77.5	Passed
24	Safira KN	75	Passed
25	Alrafi	72.5	Passed
26	Tofa	80	Passed
27	Sign	90	Passed
28	Zaky	85	Passed
29	Azka	80	Passed
30	Son	85	Passed
31	Adinda	75	Passed
32	Aisha	87.5	Passed
Amount			2605
	Average		81.4

Based on the table above, it is known that the average score from users is 8 1.4. This value is obtained from the results of carrying out evaluation exercises in the learning media. So it can be concluded that the average value above is classified as effective.

Based on research conducted at SMP Negeri 35 Semarang, it shows that the teaching media that has been used in the form of lectures, textbooks have not been able to visualize students to better understand the lessons and there is also no learning media for understanding lessons, especially folklore material. This results in low interest in learning and less than optimal grades.

Based on this problem and data collection, a learning media design was created using multimedia and demonstration methods for learning Javanese language folklore material. After designing the images, making animated videos and completing the evaluation questions, the learning media design is then created. A validation test was carried out by a media expert, then to determine the teacher's response, a material validation test was carried out and then a user test was carried out to determine the student's response.

Based on the value data before and after using the product, it can be concluded that the average class value increased by 6.4% from the original class average of only 76.5 to 81.4. The following is a diagram of the increase in class average scores after using learning media:

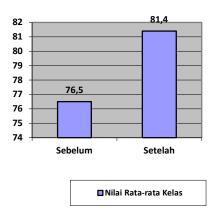


Figure 3.3.1 User Value Diagram Before and After Using the Product

Based on the diagram above, it can be concluded that the class average score for the Javanese language subject increased by 6.4% after using the product.

### 3. CONCLUSION

Based on the results of research, design and testing of learning media carried out at SMP N 35 Semarang, the following conclusions can be drawn :

- The development of science and technology has an impact on various areas of life. These
  technological advances have had a strong influence on the field of education. The teaching
  media currently used are still in the form of lectures, books and textbooks so that students
  cannot visualize them to better understand the lessons, especially folklore material at SMP
  Negeri 35 Semarang.
- 2. Creating multimedia-based learning media by selecting demonstration learning methods is one of the tools that teachers can use to help students visualize and understand lessons on folklore material and can increase students' interest in learning. In making this product, researchers used *Adobe Flash Professional CS6*, *Corel Draw X7*, *Adobe After Effect CC 2015*, *Adobe Illustrator CC 2015 software*. The next step is that the product is validated by media experts with a score of 2.8 which means the product is valid and material experts with a score of 3.6 which means the product is very valid.
- 3. The results obtained through multimedia-based learning media using the demonstration method are that users can understand Javanese language lessons on folklore material because the teaching media can visualize. This results in an average value of 81.4, which means an increase of 6.4% from the previous average value of 76.5, so the product can be said to be effective and suitable for use.

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