RAGERIPAT LEARNING MEDIA FOR CLASS X KPR 2 STUDENTS AT STATE VOCATIONAL HIGH SCHOOL 2 MALANG

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Abstract*:* Learning the cultural arts sub dance field at State Vocational High School 2 Malang is still not optimal. Besides being caused by factors from teaching materials in interactive videos and printed books, arts and culture teachers are teachers with fine arts graduates. This condition makes learning of dance still not optimal. This research aims to produce learning media products in mobile games that students can implement to improve their learning outcomes and develop new methods in teaching arts and culture sub dance fields. This research uses the Research and Development (R&D) method that modified under research needs, namely: (1) potential and problems, (2) data collection, (3) product design, (4) product validation, (5) product revisions, (6) *Rageripat* mobile game products. This research accommodates both quantitative and qualitative data. The data collection instrument was in the form of a validation test of material experts and media experts. The results of research and development in the form of *Rageripat* learning media products in the form of mobile games are as follows: (1) the validation of material experts reaches 83.33%, (2) the validation of media experts 95.31%, (3) the revision of the final product states that the product is valid for use as a learning medium. This research and development expect other researchers to develop learning media in the form of rhythm games by utilizing motion sensors or motion capture so that it becomes 3-dimensional, the results of which will be apparent.

Keywords: *M-Learning, Rageripat Games, Patih Mask Dance*

INTRODUCTION

SMK Negeri 2 Malang is a vocational high school that implements arts and culture learning in the dance sub-major in class X. Besides, the teaching of cultural arts is implemented once a week, with three hours of learning every 45 minutes. The Minimum Mastery Standard or *Standar Kelulusan Minimum* (SKM) score in learning dance is 75. However, some students have not reached the specified SKM. Those students are from class X KPR 2. The number of class X KPR 2 is 30 students. Ten students have not reached the SKM, while the percentage has not reached the SKM of 33.33%. Learning dance at SMK Negeri 2 Malang only utilizes the printed books and *YouTube* media. The lack of learning media used as a teaching utilization for teachers makes learning dance still not optimum.

The subject that also applies to the vocational high schools in Malang is schools that use arts and culture subjects. One of the vocational schools in Malang is SMK Negeri 2 Malang. The selection of SMK Negeri 2 Malang as a research objective is caused that SMK 2 Negeri Malang was one of the vocational high schools which had achievements related to the art of dance. This school won a traditional creation dance competition, getting second place and in SMA Negeri 7 got 3rd place in East Java.

There is a problem at the school in arts and culture that there is a class where almost half of the students have not reached the Minimum Mastery Standard or so-called *Standar Kelulusan Minimum* (SKM). This score is to know whether the students already pass the competence or not. The SKM specified for learning cultural arts is 75. The class that has not reached SKM is in the class X KPR 2. Class X KPR 2 refers to class X Nursing 2, which consists of 30 students. Ten students have not reached SKM, so the percentage that has not reached SKM is 33.33%.

The observational data of learning arts and culture attended at SMK Negeri 2 Malang only utilized *YouTube* media and textbooks in printed books. The material of arts and culture presented was unsuitable. Therefore, it is necessary to have an innovative media in learning cultural arts that can support student learning quality in learning dance. According to Arshad (2013), learning media is seen as all forms of physical communication equipment in hardware and software, which are part of the learning technology that must be created. The results of this research produce learning media in the form of software.

In addition to these factors, the cultural arts teacher who teaches at the school is an art teacher with a graduate of one art subject, a fine arts graduate. While the material taught in Cultural Arts, various art fields must

be mastered, especially local culture. Thus, the mastery of dance material in learning cultural arts is limited. The other factors can be discovered from an interview on March 2, 2020, with one of the arts and culture teachers at SMK Negeri 2 Malang.

SMK Negeri 2 Malang is a school that applies the 2013 curriculum system. Learning arts and culture in the dance sub-field of class X First Semester uses KD 3.1, which understands the concept of culture implemented into a form of *Rageripat* material. *Rageripat* is an abbreviation of the *Patih* Dance range of movement. It is taught in the even semester with indicators, namely observing the variety of movements and clothing of the *Patih* Mask Dance, identifying the names of the various movements and apparel of the *Patih* Mask Dance, and explaining the types of movements and apparel of the *Patih* Mask Dance. Students of class X KPR 2 will study cultural arts learning with those indicators

The *Patih Mask Dance* used in the lesson uses the *Kedungmonggo* version of the *Patih Mask Dance*, packaged into 4 minutes. According to Hidajat (2012), the *Patih* dance is usually danced by two male dancers wearing white masks or red and white. The media is made using the white *Patih* mask character.

According to Rahayuningtyas (2015), Malang Mask dance combines human faces and puppets using broken dance movements. This style is known as the Malangan style, which depicts knighthood. The use of clothing in the learning media uses animation following the *Patih Mask Dance* costume. The introduction of the names of the various movements and costumes of the Patih Mask Dance is packaged to attract students' interest in studying the learning material. One of the ways is by using learning media in the form of mobile games.

To get more information, the researchers attempted to interview Sri Erlianawati, one of the cultural arts teachers in SMK Negeri 2 Malang. Moreover, to support the interview data, the researcher did observation in March 2020 in the class X KPR 2 presented that cell phones in these schools have an exact strong influence on students. Students are allowed to bring cell phones. The bringing phone's effect has a positive impact, which students will continue to keep up updating about happing nowadays. On the other hand, the negative impact is that students are less interested in their own culture.

Some students consume their cell phones to play games. Games are a form of learning media that involve students in the process of experience and, at the same time, live up to challenges, get inspiration, are motivated to be creative (Dananjaya, 2013). This explanation shows that games can involve students in the learning process actively, so with game media, students will become more active when the learning process takes place. The use of game media, originally only used as entertainment, will be substituted by games as a learning media. According to Almeida (2012), the result suggests that games can assist in classroom content achievement. The conclusion is that games can be used to help achieve the learning goal that has been designed. Therefore, mobile game learning media can make students more interested and enthusiastic about learning dance art material to improve the learning outcomes.

According to Wardhana (2013), games are a medium in the form of programs and require hardware such as PCs, console machines, mobile phones to play them. Based on this opinion, educational games can be developed and used in learning as a medium.

The difficulty of bringing a PC or laptop within using media in some conditions makes the need for more effective tools to carry, such as mobile phones, for accessing information. Several Android applications can be made or used by teachers to help convey information to students (N et al., 2018). Therefore, cell phone media is chosen because it is effective and practical to use in learning.

According to the background, the research objective is to produce learning media in animated games based on mobile games. Students of X KPR 2 can understand effectively by using the learning media; this media can also improve the quality of learning in the subject of Cultural Arts.

METHOD

This research uses a research and development model known as Research & Development (R&D).

The steps for using the R & D method modified by Sugiyono (2015) into six main steps, it can be seen in Figure 1. The modification of the R & D development procedure in Figure 1 was developed according to the researcher's need.
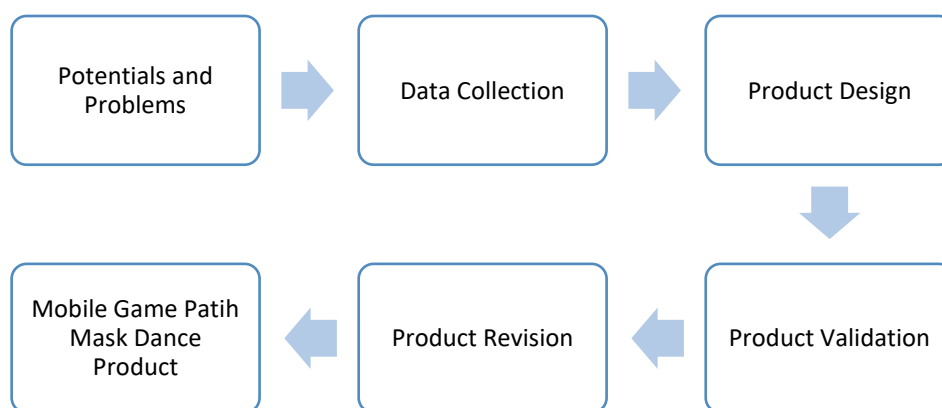
Figure 1. Modification of R&D steps (Sugiyono, 2015: 298) by researchers

Potential and Problems

In this part, the researcher attempted to find the potential, which was useful for knowing the added value of something developed in this study in dance learning media. Meanwhile, the problem was beneficial for identifying deviations between what was happening and what should have happened related to a class's learning problems. This study used the subject of Vocational High Schools in Malang City.

The researcher used the preliminary steps to find a problem in the field through preliminary observation and interviews with one of the cultural arts teachers at SMK Negeri 2 Malang. Preliminary observations and interviews included what obstacles were experienced in cultural arts learning, especially dance.

Data Collection

To collect the data, the researcher used qualitative methods to conclude from theoretical studies and used descriptive techniques to describe how the final results or conclusions of the data were obtained.

The researcher took primary data from the literature review to support the topic of the problem related to the various movements of the *Patih* Malang mask dance. Besides, to take from primary data, this study used steps that include observations made in the mask studio in Malang, namely Topeng Asmarabangun Hermitage, Pakisaji, Malang Regency. The *Patih* Mask Dance used in this research was the *Patih* Mask Dance in Kedungmonggo. These observations were made valuable to find out information about the Kedungmonggo version of the *Patih* Mask Dance, which would later be used as material for learning media in the game.

Next, the researcher interviewed with one of the cultural arts teachers in Malang City. The interview included the material taught, the learning media used, student competencies, and targets to be achieved using learning media. By conducting interviews with the cultural arts teacher, the researcher understood learning cultural arts, especially dance.

Games in rhythmic games can be obtained through several books on rhythm games and mobile games. The rhythm game media used was complemented by the gamelan music of the *Patih* Mask Dance. This game was applied via a cellphone or mobile game.

Product Design

Before conducting the research, the researcher needed a design to be prepared in design, process, or manufacturing procedure. The design was something that became the basis for consideration in designing work or products where the product or work was the basis for achieving a solution to the problem. In this step, the product design in this study was a multi-fold game and was applied to a gadget that contained the various movements and clothing of the *Patih* Mask Dance.

The results of potential and problems and data collection were applied to product design to develop the concept. The product design concept consisted of three stages, in which (1) pre-production, (2) production, (3) post-production.

Product Validation

The product validation test was a product test conducted by experts. This test was conducted to determine whether the media created was feasible to be produced to fulfill the learning needs of dance according to the 2013 curriculum.

The product validation test was approved by two experts that were a material expert and a design expert. These experts evaluated the material and appearance of the product. These experts' task was to measure the effectiveness of a product used as a media for learning cultural arts.

Product Revision

Product revisions were implemented based on expert validation tests from two aspects, material and design. Product revision was created if errors or deficiencies were found in the product being made.

These errors or deficiencies will reduce the value in several aspects of the assessment that do not meet the requirements in learning media products. Revisions will be conducted if the average result of expert validation reaches 60% - 79% based on success criteria (Arikunto, 246: 2016). Therefore, product revisions will be very advantageous to complete learning media products in the form of the *Patih* Mask Dance rhythm game.

Mobile Game Patih Mask Dance Product

Rhythm game production was finished after going through several stages of research and development. Production was completed if a new product in the form of a *Patih* Mask Dance rhythm game has been stated that was feasible and effective to be produced after going through several trials and revisions. The game can be applied at SMK Negeri 2 Malang or can be used to learn dance in other schools whose learning material was *Patih* Mask Dance.

FINDINGS AND DISCUSSIONS

The research and development results obtained in a product, *Rageripat,* was one of the mobile game products.

The product specifications acquired are as follows:

Table 1. The specifications of resulting of game products

No.	Spesification	Indicator	Description
Product Specifications			
1.	Game Title	Rageripat	Abbreviation for Variety of Patih Dance Movements
2.	Hardware	*Handphone*	A mobile phone that is operated with the basis of android
3.	*GamePlay*	*SinglePlayer*	Played with one person
4.	Language	Indonesia	
5.	Format	APK	
6.	Graphic Type	2 Dimension	
7.	Application	Unity 2019:.10fl	
8.	Resolution	1920x1080	
9.	Font Type	Evil Empire	
10.	Size	98MB	

Media Operation Steps

This game media can be downloaded through the google drive link or sent via the SHAREit application. This media was complemented by music to accompany the game using the *Patih* Mask Dance music. The explanation of the application was below. First, the application appeared the title of the game. The display can be seen in Figure 2.

Figure 2. The Display of Game Title

Second, the application game displayed the platform game. There was also a tutorial about playing the game. The display of the platform game can be seen in Figure 3.
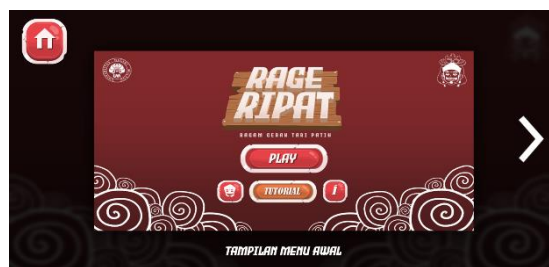

Figure 3. The Display of Game Platform

As users, they can choose the option based on the buttons that were available on the application. There were four buttons on the game platform. The play button was to start the game. Meanwhile, the tutorial button is to guide the user using this game. Then the mask image was to give information about the Patih Mask Dance. The last button was the (i) button, which presented the information of core competencies and basic competencies for learning. Figure 4 showed the buttons on the platform game.
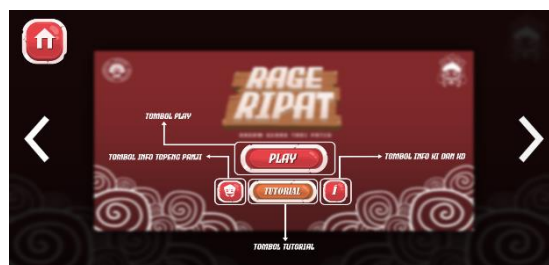

Figure 4. The Buttons on the Platform

The information of Patih Mask Dance was presented in Indonesian. In this part, students can learn the history of the Patih Mask Dance itself. Besides, students can know that Patih Mask Dance should be played with a different mask color. Figure 5 displayed the information of Patih Mask Dance.
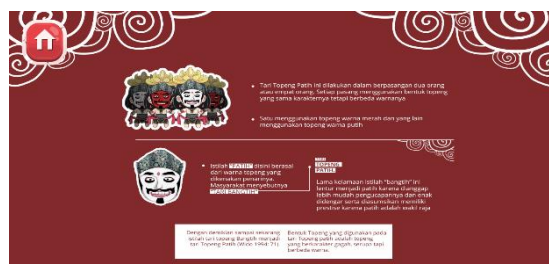

Figure 5. The Display of Patih Mask Dance Information

Not only presenting the information of Patih Mask Dance, but students also comprehend the core competencies. This section will help students improve their comprehension skills and analyze the material—displaying core competencies presented in Figure 6.
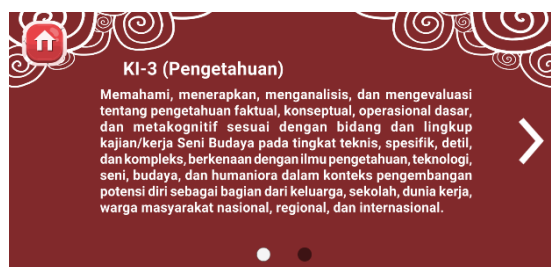
Figure 6. The Display of Core Competencies

To know the learning goal, students can open the (i) button because there was an explanation of basic competencies. Students can identify and mention the various motion name and the dress of Patih Mask Dance through this application. Figure 7 presented the display of basic competencies.
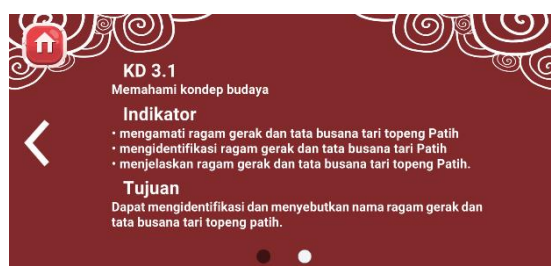

Figure 7. The Display of Basic Competencies

Then the following was the tutorial on how to play *the Rageripat* game at each level.
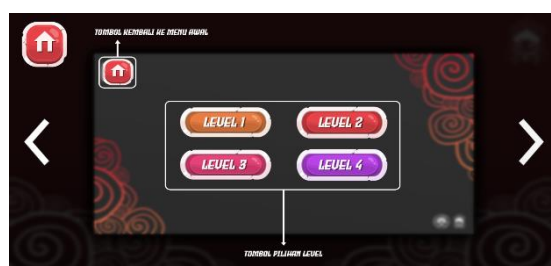

Figure 8. The Level Game

Select the level from level 1, level 2, level 3, and level 4 to start. Then play one by one from the level. Step by step of operating this game was explained, as follows:
1. Press the circle button precisely according to the direction if the coming circle.
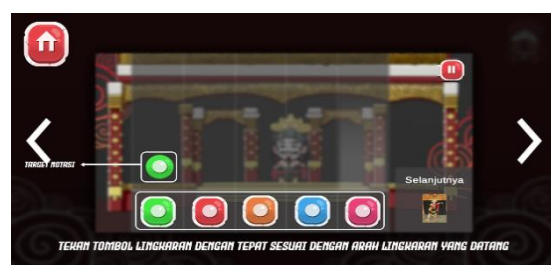

Figure 9. The Game Tutorial on Level 1

2. If you get a picture and the name of a variety of motion, pay attention to this section. The name of the various motion was used to fill on level 2.

Figure 10. As an Example of the Motion Mode Image that Appears

3. The accuracy score in the game that had been playing will appear at the end of the game.

Figure 11. The Result Score

The tutorial at level 2 was the same as the previous level, but level 2 was examined correctly from filling in the various Patih Dance movements.

Figure 12. Filling the names of the Various Movements of the Patih Mask Dance on Level 2

The score will be presented after playing the game. The example can be seen from Figure 13.

Figure 13. Assessment of the Final Score of Accuracy in Filling In the Various Mode on Level 2

The way of operating level 3 was the same as the previous level. In this level, students will comprehend the name of the Patih Mask Dance outfit or dress. Moreover, the assessment will appear at the end. The example of level 3 can be seen in Figure 14.

Figure 14. The Picture of Patih Mask Dress on Level 3

The material presented at level 4 was to fill the name of the Patih Mask Dance dress code correctly. The sample of level 4 can be seen from Figure 14.

Figure 15. Filling the name of Patih Mask Dance dress on level 4

Students' scores in this game can be a reference for how much they comprehend the material being taught. After playing the game, students got the results if the score result exceeded the SKM; they can continue to the next level.

Product Research

This learning media can effectively help comprehend the Patih Mask Dance material in terms of fashion style and various movements. It was based on trials on material experts and content media experts or materials used with a good appearance. This opinion can strengthen that this game is effective to use by students in the arts and culture subjects in the sub-field of dance with the Patih Mask Dance material.

The learning media for this Patih Mask Dance was valid and can be used by students as learning media. The followings are the criteria for the success rate, according to Arikunto (109: 1998).

Table 2. Criteria for success (Arikunto, 1998)

No.	Percentage	Success Criteria	Qualification
1.	76 % – 100 %	Valid	No Revision
2.	56 % – 75 %	Sufficiently Valid	Not Revised
3.	40 % – 55 %	Less Valid	Partial Revision
4.	<40 %	Invalid	Overall Revision

Two experts validated this media, the first was a material expert, and the second was a media expert. Regarding the material expert, the researcher cooperated with Dr. Robby Hidajat, M.Sn., an expert in the Malang mask puppets. He also conducted various studies on Malang mask puppets. Mitra Istiar Wardhana, S. Kom, S.T, has been chosen for the media expert because he is an expert in creating games and has produced books related to games. According to these experts, this media was valid after going through validation with the acquisition of results from material experts of 83.33%, which is stated in percentage 1, precisely 76% - 100% declared valid and not revised. The media validation test obtained 95.31%, which was started at 76% - 100% claimed as valid and not modified.

The obtaining of the validation test result used qualitative and quantitative data. Quantitative was obtained from the results of the validator's assessment. Meanwhile, qualitative was examined from the advice given by the validator. This game media received revisions from media experts. One of the revisions was the

addition button about the tutorial of playing this game. Since the validation test results had reached a valid value, the game was organized again on the tutorial menu, and there was no validation test 2.

CONCLUSIONS AND RECOMMENDATIONS

Based on the research and development results, the conclusions are that obtaining a product is a learning media in the form of a mobile game with the title Rageripat, which engages the Patih Mask Dance material is valid and effective. It can be used by students or teachers of class X KPR 2 SMK Negeri 2 Malang and schools that learn the cultural arts lessons in the sub-field of dance with the Patih Mask Dance material.

Suggestions for other research can be developed into learning media in the form of rhythm games by utilizing motion sensors or motion capture to become 3-dimensional, and thus the results will seem real.

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