

Learning of *Grebeg Sabrang* Mask Dance Based on Virtual Reality for Ten Graders

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Abstract: The learning material for ten graders sub-field of dance in the second semester uses local content. One of the local contents used in the learning process at school is the *Grebeg Sabrang* Mask Dance. The *Grebeg Sabrang* Mask Dance is one of the traditional dances from Malang that represents a line of soldiers. The research objective was to determine the learning process of cultural arts with the subject of *Grebeg Sabrang* Mask Dance using virtual reality learning media. Both teachers and ten graders in Malang City can use learning media as a learning resource. This study implemented a Research and Development (R & D) type of research that has been modified with the kind of data used in which quantitative and qualitative data. This Virtual Reality research contains various movements and supporting elements in the *Grebeg Sabrang* Mask Dance. The result of this research was students can learn about the supporting features and various movements in the *Grebeg Sabrang* Mask Dance using Virtual Reality, which can invite students to feel as if they are in their original environment.

Keywords: Learning, Virtual Reality, *Grebeg Sabrang* Mask dance.

INTRODUCTION

The interpretation of learning media is as materials and tools or anything, which teachers can use it to interact with students in the learning process. Suryani [1] concluded that learning media are all forms and equipment of conveying information that is made or used following learning theory, can be used for learning purposes in delivering messages, stimulating students' thoughts, feelings, attention, and desires to encourage the process deliberate, purposeful, and controlled learning. Besides, teachers use the learning media to stimulate students to learn. Several types of learning media can be used as a learning tool, for example, print media, audio-visual media, visual media, audio media and so on.

The learning process of cultural arts, especially in dance in class X uses the 2013 curriculum. The core competencies used in ten graders in the cultural arts subject in the dance sub-field in first semesters are core competencies 3. It is about understanding and applying factual, conceptual, procedural knowledge in science knowledge, technology, arts, culture, and humanities with insight into society, nationality, statehood and civilization related to phenomena and events. Moreover, in this competency, there is about applying procedural knowledge in specific fields of study according to their talents and interests to solve problems. Meanwhile, Basic Competence 3.1 is about identifying the variety of movements and the supporting elements of the dance. The material used in the first

semester for ten graders is using material that contains local dances. The implementation of Grebeg Sabrang Mask Dance material has begun.

Based on the results of a preliminary interview with a teacher of cultural arts at a school in Malang, there were still students who had not reached the specified minimum completeness criteria (KKM). Then, students' interest in learning dance lacked because there were no learning media that can make students interested. Some students felt they did not have artistic talent, so they were not very interested in cultural arts lessons. During the learning process, the teacher only assigned students to view shows on YouTube or search for sources of information about cultural arts lessons on Google. Ten graders sub-material used refers to the traditional dance of the area in Malang, in which *Grebeg Sabrang* Mask Dance. Therefore, cultural arts teachers needed a creative dance learning media to be able to make students interested and have an interest in learning in dance lessons to achieve the predetermined minimum score. Students can utilize a Video 360° learning media in the form of Virtual Reality in the learning process. The reason is that students can easily access this learning media via Android, which is owned by each student and can also access learning through the YouTube website with the internet available in schools.

Virtual Reality is a display that can make the atmosphere 3-dimensional. According to Husna [2], Virtual Reality is a technology through 3D display or visualization that makes users see real-world conditions and can relate to environments that have been simulated by computers. The conclusion is that Virtual Reality users can feel like they are directly in the simulated environment and feel real. The user can see the right, left, up, down, front, back, and the entire cardinal direction. Thus, s/he feels like s/he is really in the video or the environment.

The advantage that students get is that they can feel the sensation of learning videos that are packaged like the real world in 360° videos. Virtual Reality Video offers students the ability to enter a virtual environment, which is like the real environment. Besides, it makes students have a level of involvement so that students remember more of the learning given. Students will get an impressive experience and be able to understand the material that is well presented and interesting due to the use of Virtual Reality; students become the main actors in its use. Also, the use of this media can make students feel as if they are in their real world and can enjoy the video display from any desired direction. Therefore, Virtual Reality can be used as a learning medium that provides an exciting and impressive experience for students in the learning process.

The research objective based on the problem formulation above is to determine the learning process of cultural arts with *Grebeg Sabrang* Mask Dance material using Virtual Reality learning media.

RESEARCH METHODS

The research stages with a modified procedure of the R&D steps were as follows; (A) Identification of Needs, (B) Data Collection, (C) Product Design, (D) Validation Test I, and (E) Last Product Video.

Identification of Needs

Conducting observations and interviews is the first stage in being able to determine the initial conditions of the object of research. Observations were made at one of the schools in the Malang, SMA Negeri 1 Lawang and conducted interviews with class X cultural arts teachers at the school. Observation and interview steps were implemented to obtain information, an overview of learning at school, and finding out the learning process of cultural arts, especially on the local content of the *Grebeg Sabrang* Mask dance using Virtual Reality media.

Data Collection

The results of the collection of preliminary information, in which on observations and interviews, then the researchers began planning related to the learning process using Virtual Reality learning media with the help of Google Cardboard glasses as display optimization. The learning media contained cultural arts subject matter, especially in the regional dance sub-field, which is the *Grebeg Sabrang* Dance for grade X students at SMA Negeri 1 Lawang.

Product Design

This learning video in the form of VR or Virtual Reality contained material about the *Grebeg Sabrang* Mask dance. The outline of learning materials that matched with KI and KD was in the form of 360o videos by discussing the history, characteristics, various movements, and supporting elements of the *Grebeg Sabrang* Mask Dance.



Figure 1. Grebeg Sabrang Mask Dance

The colours used in video shooting were red, black, white, dark gold and dark blue. The colour selection was matched with the characteristics of the *Grebeg Sabrang* Mask Dance costumes, and these colours give the impression of luxury and elegance in its use.

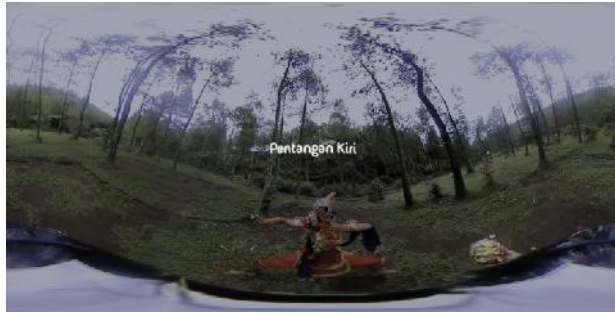


Figure 2. The adjustment of the video display with the colour of the costume

The design produced in this learning media was in the form of 360° Videos in the format of Virtual Reality that will be uploaded via the YouTube website which is already on an Android Smartphone—uploaded via the YouTube website because the website has been equipped to watch Virtual Reality displays.



Figure 3. The display on Youtube after using the display in the form of Virtual Reality

To be able to give a more real and optimal impression in the Virtual Reality display, there were special glasses, namely Google Cardboard. This Google Cardboard was made of compact material and did not have a particular device, but 3D or Virtual Reality images are directly processed via an Android Smartphone. Procedures for using Google Cardboard which can be seen through the YouTube website.

Validation Test I

The production of learning media can be known to be feasible and has met the needs according to its purpose; then a validation test was carried out. This validation test was useful to find any errors and deficiencies in learning media products and to assess the effectiveness of using media in the learning process that takes place in the classroom.

Two validators were carried out the expert validation test: material expert I (1) Robby Hidajat, design expert (2) Andreas Syah Pahlevi. The assessment of material experts focuses on the *Grebeg Sabrang* Mask Dance material, and media experts focused on learning media.

Last Video Products

The data collected in this study were qualitative data and quantitative data. The data analysis technique used was a questionnaire, which was conducted to determine the

feasibility and validity of the media with a percentage of the answers of the material experts and media experts.

The learning process using Virtual Reality with the local content material of the *Grebeg Sabrang* Mask Dance was stated to be effective if before using learning media until after using learning media, there were an increase in learning outcomes in students.

RESEARCH RESULT

The research objective is to know the learning process of cultural arts, especially in the sub-field of dance, on the local content of the *Grebeg Sabrang* Mask Dance. This dance contained various movements and supporting elements in the *Grebeg Sabrang* Mask Dance using Virtual Reality learning media.

Videos can be viewed in Virtual Reality with the help of Google Cardboard glasses and can be viewed on smartphones. The videos that have been made then uploaded through the YouTube website, which was equipped with viewing options with Virtual Reality.

The results of validation I by material experts with the final outcome of the material in learning media are valid for use. With category A, it is valid, namely in the following aspects: (1) The material regarding the *Grebeg Sabrang* mask dance matched with KI and KD; (2) The validity of the material presented; (3) The material was presented in sequence; (4) The material in the 360° Video was conveyed clearly; (5) Examples are presented following the material; (6) Accuracy of material summaries; (7) The picture matched the material; (8) The language used is easy for students to understand; (9) The terms used are following the material; (10) Accuracy of grammar and spelling in the delivery of the material; (11) Attracting students' curiosity about the material presented.

The results of validation I by media experts with the final results declared valid with good criteria, namely, (2) accuracy of font type; (3) the accuracy of the font size; (4) suitability of font colour; (5) letter layout accuracy; (9) suitability of the user's interaction speed with the material provided; (12) The attractiveness of the plot in the *Grebbeg Sabrang* mask dance learning video. Then obtained data with a percentage of 100% which was stated valid with excellent criteria, in which (1) the first display design on the 360° video was appropriate; (6) identity completeness on initial display; (7) the accuracy of the video with the material; (8) colour suitability of the video; (10) accuracy of the sound effect; (11) the accuracy of the background music in the video.

Through the results of the validation test included the material and media expert validation test. In the learning using Virtual Reality in the *Grebeg Sabrang* Mask Dance material for ten graders was included in the valid criteria or suitable for use in the learning process.

CONCLUSION

Students can easily access the *Grebeg Sabrang* Mask dance learning videos through the YouTube website with the smartphones owned by each student. Learning by using this Virtual Reality, students can feel as if they are in the real world. By using Virtual Reality learning media, the learning process of the *Grebeg Sabrang* Mask Dance for ten graders can be more exciting and compelling.

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