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# Interactive Multimedia Development to Increase Basic Movements at Curriculum 2013

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#### **Abstract**

This development aims to help the students in understanding dance art subject to the material of imitating movement based on space, time, and energy. The resulted product was interactive learning multimedia. The research was conducted by using developmental model which was adapted from developmental model of Borg and Gall. This product was through validation test which was conducted by 2 material experts, 1 media expert, small group test for 7 students and large group for 30 students. The user test was conducted in SMP Negeri (Public Junior High School) 1 Malang. Data collection technique was through Likert Scale. Data from test result that been conducted showed that the product of interactive learning multimedia obtained the percentage 84,2% with feasible qualification/no revision.

Keywords: development, learning media, interactive multimedia, dance movement.

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#### INTRODUCTION

Education is a way to provide knowledge to students in order to shape the good or bad character of human . Quality of education becomes one of the most important factors in the development of the nation. Through a good education system is expected to emerge the next generation of quality and able to adapt to live in society, nation, and state. Teachers as educators in schools must follow the curriculum that has been established by the government and applied to the school in the education process. The curriculum holds a key position in education because it relates to the determination of direction, content, and educational process both within the classroom and school (Sukmadinata, 1997: 5)

One of the lessons that must be included in every curriculum in intra-school activities is the education of Art of Culture. Soehardjo (2012: 3) in his art education, states as follows. Art education is a special term that appears in the school curriculum throughout Indonesia, for the first time raised in the 1975 curriculum. And so it continues into the 2004 curriculum, for every level of general and elementary education. Starting from elementary level (SD), junior high school (junior / junior high) to high school level (high school / high school). In the curriculum the existence of the term art education as the title of the subject.

The fact that can be obtained from the reality of art and culture education on dance lessons is often regarded as a lesson that gives less contribution to the students, because the subjects of art and culture are not included in national exam like other subjects. Looking at the social side, dance education can improve cooperation, students are more familiar and appreciate the cultural arts both in the archipelago and abroad, but in the implementation of cultural arts lessons are not as expected by the teacher.

The development of dance in education world is strongly influenced by the creativity of the teachers in the learning process. Teachers are required to create an active, comfortable yet conducive classroom environment. this kind of learning process is also expected to occur at SMP Negeri (Public Junior High School) 1 Malang, from interviews with Susi as the teacher of Art Culture, she explained the existing learning media is only audio that used to amplify the sound of music and LCD to show dance video as a material of appreciation of students. Learning dance that occurred in Junior High School 1 Malang, has fulfilled of criteria in Curriculum 2013, as a result, students are able to play an active role. Students who join in extracurricular of dance can support the other. But need addition of learning media to complete the learning process to create a more optimal results. Limitations of media can make students sometimes feel bored with the lessons that are delivered because of lack of appeal.

The Reality that happened in the field as well as the complaints of teachers, hence encouraged interest to make the development of teaching materials that can be used as an alternative tool aside the demonstrations that directed to students. One of media that is quite effective and can be used in the development of teaching materials is to use interactive multimedia learning. This interactive multimedia will be applied to learning dance art on dance lessons in Basic Competence 4.1 to imitate dance motion based on space, time and energy elements contained in the 2013 curriculum. The material to be given in basic competence 4.1 is an example of traditional dance moves, the movement of the tradition, and examples of dance creations. The learning process that can be done by the teacher through the application of this interactive learning multimedia is, students can imitate the dance movement and understand the elements of dance which consists of elements of time, energy, and space in



a motion exemplified in the video. Students also will not feel bored when the teacher explain or provide learning materials, so hopefully able to enrich students in understanding learning materials, which ultimately aims to achieve a good learning objectives.

Development of dance learning media in addition to supporting education in general is also expected in the experience of receiving dance material sensitivity of children will be easy to receive and re-express experiences creatively, developments are also grounded to develop sensitivity and creativity to express students' experiences.

The existence of media or props used in teaching and learning process is expected to provide variety in the process of teaching and learning activities, so that students will be more active and creative in the learning process. Another benefit that can be obtained from this learning media, if usually students are only able to mimic what he sees from his teacher without thinking to develop, then this interactive multimedia can make students think creatively to the motion of dance.

#### **METHOD**

The method that used in research and development referred to as "Research and Development" is a research method used to produce a particular product (Sugiyono, 2015: 297) This development uses the Borg and Gall (1983) model, a process used to develop and validate research products. This study follows steps such as cycles. The development process consists of studies on product research findings developed, developing products based on these findings, conducting field trials in accordance with the setting in which the product is used, and revising the results of field trials. The development of education itself is based on an industry-based model of development, whose findings are used to design products and procedures, which are then systematically field tested, evaluated, refined to meet certain criteria of effectiveness, quality and standards (Gall and Borg, 2003).

#### RESULT AND DISCUSSION

# Specification of interactive multimedia development on learning the basic motion of dance. Product Content

The result of specification Product from this research in the form of interactive multimedia that contains the motion of dance. This interactive multimedia comes with video, music and text. Interactive multimedia created through the Adobe Flash program and packaged in CD fragments and can also be moved in a flash. Product specifications contained in interactive multimedia include:

- 1. Introductory page explaining Basic Competence, Core Competence, objectives and references
- 2. The evaluation page contains the command sentence for the student as feedback relating to the extent which the student has understood the learning material,
- 3. Pages of material that present examples of motion applications on time, space, and energy elements. This material is presented in video. Every dance motion exemplified in the video contains elements of time, energy, space,
- 4. The compiler page describing the developer profile.

# **Contents Material**

The contents of the lesson that will be taught for the seventh grade students of SMP Negeri 1 Malang are adapted to the 2013 curriculum and take the material to imitate motion based on space, time, and energy. Students will learn the elements of space, time, and energy and its applicated in the movement of dance. The motion of dance taken as the material is the movement of traditional dance that is the motion of *labas* and motion gejugan in Remo dance, the example of development from traditional dance movement that is from the motion of *labas* and motion *gejugan* at Remo dance, and the example of dance creation motion is the movement of archery. The learning video created will contain 15 videos. The element of space contains 5 videos that include masculine *labas* motion, feminine feminine motion, masculine gejugan movement, feminine gejugan movement, and masculine archery movement. The timing element contains 5 videos that include 2/4 *labas* motion, 4/4 *labas* motion, 2/4 *gejugan* movements, 4/4 *gejugan* movements, and 2/4 archery. The power element contains 5 videos that include strong labas, weak flaccid motion, strong gejugan motion, weak gejugan movement, and strong archery movement. Meanwhile, for motion of archery based on feminine space, 4/4 time, and weak energy serve as a matter of evaluation for students as a benchmark of their understanding of the given material.

# Interactive Multimedia development process on learning the basic motion of dance

The development of interactive multimedia is based on a Borg and Gall model that has several stages, including research and data collection (needs analysis), planning, development of initial product form, initial field trials, product revisions, and field test. Here is an explanation of interactive multimedia development according to Borg and Gall model.

# 1. Identify Potentials and Problems.

Identification is an initial activity that must be done before doing production activities. The first step is to



observe the purpose to know and get a real picture of the media that has been used in the process of daily learning, especially on the subjects of Art Culture in the field of dance arts competence standards mimic the movement of dance based on space, time, and energy, so that developers can knowing the right media to be developed in the learning process so as to achieve effectiveness in learning. The result of observation that can be from SMP Negeri 1 Malang is the teacher doing the learning process by using lecture method, discussion, and demonstration, while the media contained in each classroom is LCD which is used to play video. The playing video shows a dance that makes students pay less attention to the lesson, so from here it can be seen that teachers and students need other media alternatives to attract students' interest in following the lesson.

### 2. Planning

The development of instructional media has resulted in the form of software used in computer and multimedia-based interactive. Here is a product plan developed and using the following software:

- a. Adobe Flash CS3 is used as software to create interface design or backround.
- b. Coreldraw X6 is used to create an environment design, is the design of additional materials
- c. CyberLink is used to emphasize images and text on video.
- d. Microsoft Windows 7 is used as a Computer Operating System used in the development of this learning media software.
- e. Microsoft Office Word 2007 is used as a writer's device of matter before it is included in instructional media.

# 3. Development of initial product form

The development of the original form of the product is made in the form of storyboard. Storyboard is a script that includes the development of media and material display design in the media. So the final display of interactive multimedia is shown in the images:



Figure 1. page interface



Figure 2. introductory page





Figure 3. material page



Figure 4. simulating the space menu



Figure 5. evaluation page

# 4. Initial field trials

Initial field trials were conducted to obtain an evaluation of the validator and were conducted on a small group trial of 7 students. Initial field trials used questionnaires with suggestion spaces for validators of validated media, both material validation, media and small group trials.

#### 5 Revision

Interactive multimedia revision is done after validation test and field test. Media learning interactive multimedia that have been tested by the students will be able to know the level of feasibility. The multimedia of ineligible interactive learning can be revised as a follow-up of the development of instructional media. This revision is ready to improve the interactive multimedia learning that has been tested in relation to the things that must be improved in the learning media that has been made.

## 6. Product Trial

The trial of the product was performed after an evaluation of the material expert and the media expert was revised by the developer later. Evaluation is done to get the product result as needed. Furthermore, validation by material experts and media experts to get the final result. media trials were also conducted with grade VII students at SMP Negeri 1 Malang. The trials were conducted with a large group test of 30 students. The last



result Media trials stated interactive multimedia is feasible with a percentage 84.6% of material experts, 83.6% of media experts, and 84.5% of users / students. So the average value of the entire trial is 84.2%.

#### Conclusion

Based on the research and development of interactive multimedia by taking the basic motion of Remo dance, namely motion gejugan and motion labas and motion of archery dance, which has been done, then obtained the following conclusion:

- 1. This interactive multimedia displays material in the form of dance videos arranged in a systematic and structured packaged in Compact Disk (CD) or stored in a flash.
- 2. The process of making using Borg and Gall model which currently has been implemented in seven stages, namely needs analysis, planning, development of initial product form, field trials, revisions, and product trials
- 3. Interactive multimedia has been successfully implemented in accordance with the design that has been made before by the combination of blue, red, green, and yellow. Bright colors are selected according to the characteristics of junior high school students.

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