LEARNING MEDIA DEVELOPMENT I-SPRING TECHNOLOGY ON THE SUBJECT OF ART AND CULTURE VISUAL ART 2D MATERIALS

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Abstract: I-Spring program is a computer application used to create instructional multimedia. This study aims to find out the design of I-Spring technology learning media on cultural arts subjects and its influence on students cognitive development on two-dimensional art material. Research methodology used is research and development (R & D) with research subjects of grade X Batik 2 Surakarta Senior High School. The development of I-Spring technology learning media includes four main stages namely; (1) preliminary research, (2) development design, (3) production, (4) product validation. The result of the research shows that I-Spring teaching media can improve students' cognitive ability in two dimensional art material.

Keywords: Instructional Media, I-Spring, Art & Culture

INTRODUCTION

Alternative development of appropriate media to improve student achievement in learning the material Arts Two Dimensional including the development of technology-based learning media such as I - Spring. I-Spring program serves to make Powerpoint files more interesting and interactive Flash-based and can be opened on any computer. Manufacture of technology-based learning media, especially computer using Flash applications is the selection of favorite teachers, using Flash allows for presenting interesting learning materials and presented interactively (Muh Taminudin, 2014: 1-2). One of the advantages of the most fundamental I-Spring program is an interactive quiz, where there are several different types of quizzes therein (Kuswari Hernawati, 2010:1). True/False, Multiple Choice, Multiple response, Type In, Matching, Sequence, Numeric, Fill in the Blank, Multiple Choice Text, Hot SpotA type featured quiz program offered by I-Spring.

The observations made through observation class documents and interviews with students, especially regarding subjects Cultural Art materials Art class X SMA Batik 2 Surakarta in the academic year 2015/2016 shows that the achievement of the quality of learning in the subjects of Art and Culture on the material Arts Two Dimensional less than optimal , These deficiencies can be seen through the results of student learning in the form of a competency test values (daily tests, mid-term and end of term replications) in Table 1 below:

Table 1.1. List Average competency test every class X Batik 2 Surakarta High School academic year 2015/2016 subject matter Visual Arts Two Dimensions.

Competence test Visual Arts 2 Dimensions.	UH 1	UH 2	UTS	UAS	Final Average Value Visual Arts 2 Dimensions.
Average value	64,7	71,2	74,6	70,5	70,25

Departing from the problems that have been described above, it is necessary to develop instructional media that can help limit the ability of teachers and the limitation of learning modules on the material of Art Two Dimensions. The developed I-Spring media should be able to deliver more interactive, interesting, and fun material to the students, so that it can improve the quality of learning materials of two dimensional art, either in terms of process or learning outcomes. The purpose of research article writing is to know the benefits and procedures to develop I-Spring technology learning media on two-dimensional art material in High School.

METHODS

This research uses approach and type of research development or often called Research and Development (R & D). Sugiyono (2009: 297) states that research development (Research and Development) is a research method used to produce a particular product, and test the effectiveness of the product. The development of I-Spring technology learning media includes four main stages namely; (1) preliminary research, (2) development design, (3) production, (4) product validation.

RESULTS AND DISCUSSION

I-Spring learning media of two-dimensional art material is produced through four basic stages adapted and modified from Borg and Gaal's developmental research model (2003), that are ;

Preliminary Research

Preliminary research includes observation and interviews of teachers of visual art lesson in Batik 2 Surakarta High School to find the problem of learning material of Two Dimensional Art. The preliminary study also aims to collect the data needed in the study of the development of learning media in the form of learning media of Two Dimensional Art, such as: syllabus, lesson plan, student presences, two dimensional art material, etc.

Design Development

At the design stage of development, the activities undertaken are to formulate the aspects of learning and multimedia aspects that will be developed into a product of learning media in the form of learning media of Two Dimensional Art. Aspects of learning include: learning objectives, materials, teaching methods, evaluation, and time

allocation. Multimedia aspects include: text, color, sound, video, image, animation. The next step is to design the product by creating a story board. Story board is a design drawing that explains the layout or sequence of a true visual, audio, color, duration, and animation.

Production Stage

Production stage is the stage to compile and produce all aspects of multimedia (text, color, music, image, video, animation) using computer program referring to story board that has been made, so it becomes a softfile (program) media learning material Two Dimensional Art Computer-based of tutorial model that can be packaged inside a Compact Disc (CD).

Product Validation

Validation of products is the stage where the product in the form of media learning media Learning form of Art Two Dimensions produced in this study will be tested feasibility by going through several stages, that are ; (1) expert test, (2) revision I, (3) small group trial, (4) revision II, (5) large group trials, (6) revision III, (7) field test. The four stages of the above research procedure can be illustrated in the scheme as follows:

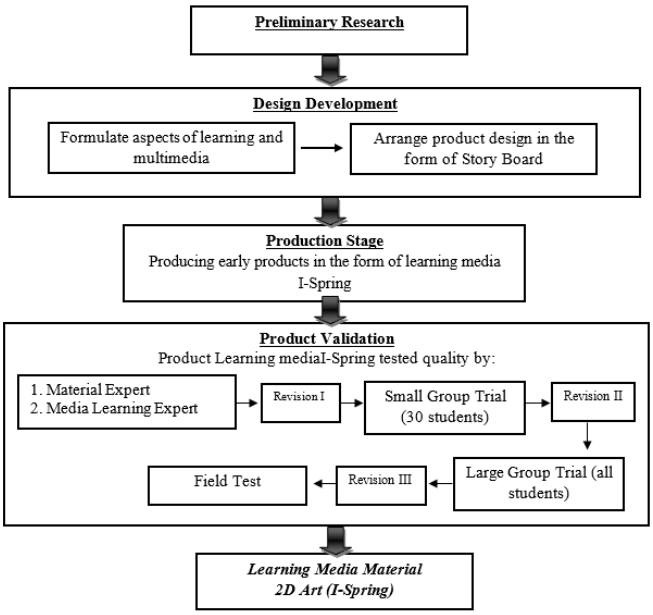

Chart 3.1. Development Procedures, adopted and modified from Borg and Gall (2003).

Development of instructional media-based I-Spring must be in accordance with the purpose of learning the art of two-dimensional material. Learning materials must be adapted to the syllabus and should be accurate in explaining a concept. Media-quality computer-based learning should be teaching method selected should be appropriate and can be applied through the media used. An evaluation tool in the form of exercises need to be provided to determine the level of students' understanding of the material presented. On the duration of time in conveying the material through the medium of

computer-based learning should be shorter than the normal allocation of instructional time, so students can take advantage of the remaining time of learning for independent study, discuss, practice, chores, etc. Typography (letters) on the media I-Spring must be adapted to the screen and easily read by the user, in addition to the use of the composition, and the combination of the right color resolution can attract the attention of students in the information (materials) submitted. Sound (audio) on the media I-Spring can bring learners to shades of joyful learning, in addition to the need for a video which can give you a direct example of the use or application of a science that is studied, where the speed of the video in presenting the material greatly affect the level of students' understanding the material presented. The use of images should support the learning process and can motivate students.

I-Spring learning media before being used by the students, has been through the stages of product validation that includes: (1) validation of instructional media experts, (2) validation of two-dimensional art material experts, and (3) validation of computer technology experts. The whole series of expert tests stated that I-Spring media deserve to be used as a medium of learning of two-dimensional art material for class X high school students. The results obtained after applying I-Spring media-based learning showed an increase in the cognitive abilities of students of class X Batik 2 Surakarta high school against two-dimensional art material. All students of class X experience an increase in material understanding that is measured using evaluation tools in the form of pre-test and post-test.

CONCLUSION

Validation Test states that I-Spring media deserve to be used as a medium of learning two-dimensional art material for students class X of senior high school. Program I-Spring has the advantage in the evaluation tool that allows to train the students' ability to understand the material of two-dimensional art. I-Spring can make a quiz with different types of questions / problems are: True / False, Multiple Choice, Multiple Response, Type In, Matching, Sequence, numeric, Fill in the Blank, Text Multiple Choice, Hot Spot. The theory can be used to develop the instructional media tech product I-Spring is a multimedia development theory proposed by Chee and Wong (2003) by considering two important aspects which aspects of learning and multimedia aspects. Aspects of learning include: learning objectives, materials, methods, evaluation and allocation of time (duration) of learning. Multimedia aspects include: text, color, sound, video, graphics and animation.

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