

IJCT_LearningMedia

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Submission date: 04-Jan-2023 01:47AM (UTC-0500)

Submission ID: 1988439334

File name: IJCT-V2I5P1_1.pdf (521.99K)

Word count: 2437

Character count: 13618

Learning Media Introduction of Yogyakarta Culture For Early Childhood 2-3 Years

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Abstract:

Early Childhood Education (ECE) is very important to do well in a home environment as well as in the educational environment of pre-school. Education pre-school children at age 2 to 3 years is the formation of character, where education is stressed here in the picture, sound and movement combined with an attractive shape and color. At this age children begin to recognize the objects around it. The introduction of culture is also one of the curriculum in pre-school education.

To help children recognize the surrounding culture then designed introduction to the culture medium of learning for children aged 2 to 3 years. Where learning media aims to help children in recognizing culture.

In this study generated media that can provide an alternative to teachers in pre-school learning environment. In addition the children will be easier to recognize the culture while also able to train the child's motoric skill in moving the mouse and clicking on the image. Children's learning also feel happy and not bored.

Keywords — Learning Media, Motoric Skills, Culture.

I. INTRODUCTION

UNESCO argued that education should be put on the four pillars, namely learning to know, learning to do, learning to live together, and learning to be [1][2]. In the learning process, especially for children is learning that spawned a pleasant atmosphere. The pictures and sounds that emerge will make the children do not get bored quickly, so as to stimulate learning in children [3].

While the child's development with regard to the overall personality of the child, because of personality forming an integrated whole. In general it can be distinguished some aspects of child development. Aspects of early childhood development of children of 2-3 years age group consisting of [4]:

1) Aspect of moral and religious values

- 2) Aspect of social, emotional and self-reliance
- 3) Aspect of language
- 4) Aspect of Cognitive
- 5) Aspect of physical / motoric
- 6) Aspect of art

The world's children are playing. children will learn something new and doing various activities that are useful for the development itself, both from the aspect of cognitive, psychomotor, affective and spiritual [5]. Thus, in early childhood learning must also be within the context of learning and play.

Multimedia is one of the applications that are used as a medium of learning for childhood. Learning media based on multimedia in the classroom is developed on the basis of the assumption that the communication process in an active learning approach (active learning) can

strengthen and expedite the stimulus and the response of the students in the learning [1].

Interactive learning is the media that is designed for students to learn independently, actively and controlled. Multimedia is a very complex medium that combines some elements of the media that involve text, graphics, images, photographs, audio, video, and animation are integrated. Excess multimedia learning, among other [6]:

- 1) Enlarge objects very small and not visible to the eye.
- 2) Minimize the very large objects, which is not possible in the school.
- 3) Presenting objects or events are complex, complicated, and takes place sooner or later.
- 4) Presenting a distant object or event.
- 5) Presenting dangerous objects or events.
- 6) Provide convenience and practical learning.
- 7) Make the child active and independent learning.
- 8) Potential passion.
- 9) Allow more direct interaction between students with the environment and reality.
- 10) Allow the students to learn on their own according to their ability and interest respectively.

One of the curriculum in early childhood education, 2-3 years is the introduction of the culture. To introduce the local culture may include aspects of child development would require a tool. Where these tools can enhance students' creativity in learning, especially in the introduction of the culture. The tools used in the introduction to the culture of learning is learning introduction to the culture media. Where in this learning media in addition students can learn also can play, because in this learning media are in the form of a puzzle game.

Computer gaming is a form of real-time interactive software wrapped in creatively crafted media that offers game-players engaging, goal-directed play [7]. Thus, this concept combines games and technology to provide game players with more interesting playing experience[8]. Games play a substantial role in shaping learning techniques for kids [9].

II. LITERATURE REVIEW

Children today live in different cultural settings. The pre-school culture is one of them and the media culture outside the pre-school another. These cultures are in different ways characterised by opposite and often even conflicting traditions. This article shows how educators and children handle this dilemma by using interaction as a tool to bring changes into the discourse in an educational setting while making stories in the pre-school by means of the multimedia functions of the computer. The interactional processes from three observations are described. In the discussion a comparison with another study with a constructivist point of departure is made. The comparison between the two studies showed contrasting results. The use of a socio-cultural perspective in the presented project make the context and the community visible, while the other study with its underlying assumptions of individually constructed knowledge make context and community invisible [10].

Multimedia learning occurs when students build mental representations from words and pictures that are presented to them (e.g., printed text and illustrations or narration and animation). The promise of multimedia learning is that students can learn more deeply from well-designed multimedia messages consisting of words and pictures than from more traditional modes of communication involving words alone [11].

The most basic effect of presentation method concerns whether multimedia presentations are more effective than single medium presentations, and in particular, whether adding pictures to words helps students understand an explanation. The *multimedia effect* refers to the finding that students learn more deeply from a multimedia explanation presented in words and pictures than in words alone. Let's consider how this effect fares under two learning environments with printed text and illustrations on a page and with spoken text and animation on a screen [11].

The influence of aspects of home and preschool environments upon literacy and numeracy achievement at school entry and at the end of the 3rd year of school. Individuals with unexpected performance pathways (by forming demographically adjusted groups: overachieving, average, and underachieving) were identified in

order to explore the effects of the home learning environment and preschool variables on child development. Multilevel models applied to hierarchical data allow the groups that differ with regard to expected performance to be created at the child and preschool center levels. These multilevel analyses indicate powerful effects for the home learning environment and important effects of specific preschool centers at school entry. Although reduced, such effects remain several years later [12].

Most of the research and teaching has been about media and particularly about moving image media such as television and film. It have explored how these media are produced, the characteristics of media 'text', and how children and young people use and interpret them and also considered how teachers in school might teach about these media, and what happens when they do so. Inevitably, in recent years, this focus has expanded to encompass new media such as computer games and the internet. However, It continue to regard these things as media rather than as technologies. Them as ways of representing the world, and of communicating and to understand the phenomena as social and cultural processes, rather than primarily as technical ones. Technologies or machines are obviously part of the story[13].

III. METHODOLOGY

Learning media constructed through three stages, among others:

- Planning stage;
- Design stage
- Implementation stage.

The design phase includes the design of scenarios, content design, and user interface design.

A. Planning Stage / Design scenario

In planning the development of instructional media introduction of this culture, it must first be made flowchart as shown in Fig. 1.

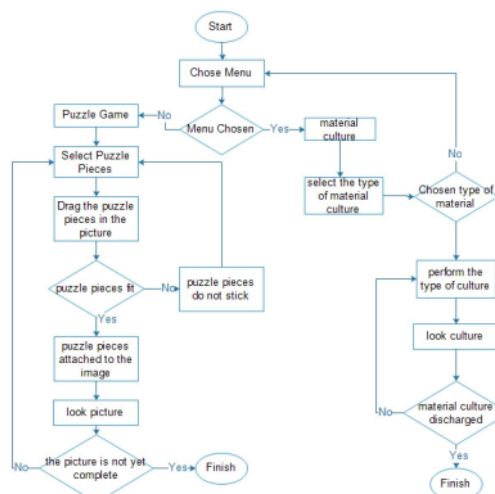


Fig. 1 Flowchart of learning media

Fig. 1 shows that in the learning media begins by selecting a menu, the menu consists of material culture and a puzzle game. If you choose the culture topic then it will go to sub-menu of the culture, in which there are four types of culture that is gamelan, wayang, clothing, traditional dance and cultural heritage. Whereas if you choose a puzzle game that will provide the puzzle pieces. Dragged puzzle pieces to be attached to the picture provided, if it does not fit the puzzle pieces will not stick if it fits then be taped and then choose the puzzle pieces to complete the picture plastered all puzzle pieces.

B. Design Stage

Developing of this application designed in multiple pages and layers that allow users to learn and understand the culture in an interesting way. Selection of different elements in the culture and game design materials such as text, sound, and images will determine the final outcome of this work and the extent to which applications will be most appealing to children. The elements in the design of the game can be described as follows:

1) Text

Texts are used to provide further explanation about the objects displayed. The font types in this application are selected to suit the needs and are compatible with the objects described so as to make them easy to read and to provide comfortable view.

2) Sound Effect

Sound effect is a supporting element which functions as a back sound so that the application looks more alive. The sound format used in this application is *.WAV extension.

3) Image

The images used in this application was chosen to attract children. Image is an image gamelan, wayang image, images dance and traditional dresses and images of cultural heritage.

C. Implementation Stage

User interface design that is used as the basis for interaction between players and gaming applications. Interface design is made by drawing a layout for each page of this instructional media. In this learning media application layout consists of a main menu, sub menus and sub-menus materials puzzle game.

IV. RESULTS AND DISCUSSION

Opening display that will first appear when the user opens this learning media as shown in Fig. 2.



Fig. 2 Opening Display

Fig.2 Shows the opening page there is an action that serves to give effect to the full view at the time the application is opened.

A. Sub Menu Material

Sub menumaterial contains material on the introduction of Yogyakarta culture. In this menu material provides an introduction to the types of gamelan, types of puppets, the types of batik and some cultural heritage. To get in on the types of gamelan then click on the gamelan image, as well as puppets, batik and cultural heritage as shown in fig. 3.



Fig. 3 Sub Menu Material

Detail sub menu describes Yogyakarta culture in the form of gamelan. In this instructional media students are introduced nine types of gamelan, introduced for culture of four puppets name,the custom equipment introduced custom clothing and a dagger,the cultural heritage introduced historic buildings, Detail sub menu as shown in Fig. 4.



Fig. 4 Detail Sub Menu, point a shows the different types of gamelan , point b shows the various types of puppets, point c shows custom clothing and point d shows the cultural heritage

B. Implementation of Game Menu

The game menu contains a puzzle game that has been provided. Puzzle contains only four pieces of the image from the original image. This is because the introduction of this culture is still to early

childhood children. The big picture is the actual image. To be able to arrange the puzzle then the small image below to be dragged placed on the big picture. This is done until all installed following a complete image display game menu as shown in fig. 5.

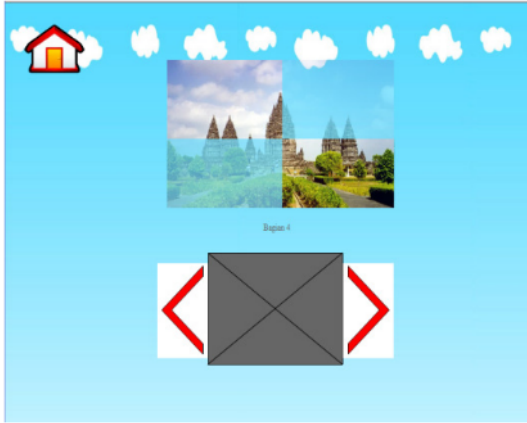


Fig. 5 Display Menu Puzzle Game

V. CONCLUSIONS

Based on development of this learning media application, it can be concluded that:

- 1) Introduction to the material culture of the displayed image is accompanied with text and sound.
- 2) The puzzle game is produced from four pieces at random to be able to train the child's memory.
- 3) The application can be run on Windows operating systems.

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