

The Effectiveness of Digital Media in Increasing the Learning of Fashion Pattern Construction

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Abstract

This research aims to produce digital media that is effective and suitable for use in Pattern Construction learning and can also improve student learning outcomes. This research uses research methods using Research and Development (R&D) research methods. The research procedure used in this development uses the ADDIE step. The subjects in this study were students of class X. Data collection techniques were carried out by observation and questionnaires. The result of this study shows that the developed digital media effective and feasible to use. In using the media digital media is proven that the media is very appropriate to use in improving student learning outcomes in Construction learning Patterns in the Vocational High School Fashion Design Group.

Keywords: Digital media, fashion, design

INTRODUCTION

In the era of globalization, humans are required to develop to follow current development. The world of education and technology will always be developing along with the times. The development and progress of communication technology, media, and information technology at this time had a major impact on human civilization (Backhaus et al., 2019; Bakar, 2016; Chen & Wu, 2020; Darsham & Hassan, 2017). In the development of education today, quality quality Education is influenced by the curriculum applied. Curriculum Those that have been implemented in Indonesia include the 2006 education unit level curriculum, the 2013 curriculum and what is currently being implemented is the freedom curriculum (Freedom to Learn). The curriculum is designed to produce quality change student learning to suit educational goals. In independent curriculum gives freedom and is student-centered, teachers and schools are free to determine the learning process that is appropriate for current education (Lince, 2022).

Through education, various aspects of life can be realized in the teaching and learning process that is carried out (Frossard et al., 2012; Jeong & So, 2020; Redel-Macías et al., 2016). On basically the teaching and learning process is a system in which it has components. According to (Treffinger; & Isaksen, 2013) stated that these learning components must be able to interact, and form interconnected systems, so as to be able to create a quality learning process. Components that have a significant influence on the learning process are learning

media (Grant & Bolin, 2016; Holzberger et al., 2013; Nazar et al., 2020; Smith et al., 2020).

Media is one of the tools used in the process learning has a significant influence on the achievement of learning outcomes. Learning media is basically a communication process, namely the process of delivering messages carried out by teachers and students respectively to convey and exchange messages and information. There are many learning media used, but one that is currently being developed is using software on computers as learning media (Eriksson et al., 2018; Garavaglia & Ferrari, 2012; Holzberger et al., 2013). One of the software that can be used as an interesting digital media is Adobe Flash (Hingide et al., 2021).

Adobe flash is an interactive digital medium, which can used to facilitate learning. (Kordaki & Gousiou, 2017) describes the meaning of interactive as a process of empowering students to control the learning environment. In this context the learning environment in question is learning by using electronic equipment and digital media made with the help of software (Software). Digital media has these advantages make learning more meaningful, improve the learning experience and students become more comfortable.

The use of Adobe Flash is expected to develop digital media which received a positive response from students. The use of Adobe Flash as a learning medium for Class X Vocational High School students in the Fashion Skills Group in the Pattern Construction subject has not been used, the learning media used in the Vocational High School

Dressmaking Expertise Group are still unable to attract student interest in learning because it is still limited to the use of blackboard, hand learning media. out and job sheets. By using Adobe Flash, it is hoped that it will be able to create learning media and the material presented can be responded positively by students. The use of Adobe Flash as a learning medium in the Vocational School of the Fashion Design Skills Group, especially the Pattern Construction subject has not been used, the learning media used in the Vocational School of the Dressmaking Expertise Group are still not able to attract student interest in learning because it is still limited to the use of whiteboard learning media, handouts and job sheet, therefore the development of learning digital media-based interactive for the basic pattern of women's bodies in the subject of Pattern Construction in Vocational School students in the Fashion Design Expertise Group in Jambi Province is considered necessary to assist in the teaching and learning process.

RESEARCH METHODS

Respondents who were involved in this study were 25 vocational high school students who were studying fashion construction patterns. The purposive sampling technique is in accordance with the research objectives. Data collection techniques carried out with how to give a set of questions or written statements to respondents to

answer(Sugiyono, 2016). The questionnaire used in this study was a closed questionnaire, in which the researcher provided several alternative answers that were suitable for the respondents. The questionnaire is intended to assess the feasibility of digital media to media experts and experts' material. In addition, it is also to find out the response from students who know the effectiveness of the product being developed. Completion of statements and questions in the form of a checklist with a four-choice Likert scale, where respondents can provide a checklist (V) Data analysis technique is the process of obtaining information in the field to produce comprehensive accurate data about a situation so that the effectiveness of a product can be assessed. The data analysis technique uses the t test with the help of SPSS ver 26.0.

RESULTS AND DISCUSSION

Based on the initial objective of this study was to test the effectiveness of digital media products on fashion archetypes. This effectiveness test is needed to produce learning media that can improve learning outcomes for the basic pattern of clothing in class X Vocational High School students in the Fashion Design expertise group by looking at the results of the average difference between the pre-test and post-test while the test results can be seen in table 1.

Table 1. Results of Pre-test and Post-test

	t-statistic	Asymp. Sig.(2-tailed)
Pre-test and Post-test	-12.256	0.000

Based on the results of the t test, the Asymp.sig value was obtained. as big $0.000 < 0.05$, then H_0 is rejected and H_1 is accepted, meaning that there is a difference in the average learning outcomes between the pre-test and post-test. The results of the calculation of the average value, namely the pre-test is 42.00 and the average post-test value is 77.50 so that there is an increase of 35.50 in the average value after giving digital media treatment to the basic pattern of clothing. This research is in line with previous research that digital media is effective in increasing fashion design skills(Unaisah & Bestari, 2018). Also supported by other research that digital media increases competence and develops sections of women's clothing(Guswari et al., 2020).

Researchers have successfully evaluated and developed the deficiencies that existed in the

previous digital media and modified them to suit the learning objectives of the material. All indicators on the basic competency of Pattern Construction can be achieved optimally. The target of digital media contributions is for SMK students, not for Fashion Design students. So, researchers create and develop learning media on the archetype of the female body in accordance with the basic competencies and goals learning in SMK as well as adjusting to the way of learning and the level of thinking of SMK students.

The development of learning media using Adobe Flash on the female body archetype is designed and produced into a product in the form of learning media to help make it easier for students to understand the material. This learning media can also be used as alternative learning media that are used practically and effectively by students.

According to (Smaldino et al., 2018), learning media consists of six parts, namely: text, visual, audio, video, engineer, and human. Apart from these six types of media, (Pimmer et al., 2016) has also revealed two other types of media, namely realia (real objects) and media digital. Real objects are included as media because plants, animals and natural objects are also often used in the learning process. The digital media itself has a broader meaning. Digital media consists of videos, interactive multimedia, learning applications, web, and virtual worlds.

CONCLUSION

The results of this study are digital media using Adobe Flash on the Pattern Construction subject, the basic patterns of women's clothing. Digital media has a positive impact on the learning process, where students can participate in learning with more enthusiasm and find it easier to understand the learning material provided. Digital media in the subject Pattern Construction of the Basic Patterns of Women's clothing will add to the list of learning media, learning resources and other learning tools, so that teachers can still carry out learning activities well even though learning is done from home.

In this study there are several limitations in developing digital media for women's fashion archetypes, namely: The material developed in this learning media is only material for Basic Patterns of Women's clothing, so that it is not possible for all other fashion pattern material such as Basic Patterns of Men's clothing, and Basic Patterns Children's clothing, and Party Dress Patterns. The learning media that is made is only based on Adobe Flash so that very possible the development of application-based media or other software.

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