Development of Learning Video Media for Graphic Arts Courses of Relief Print in the Department of Fine Arts

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ABSTRACT

The development of technology and information is progressing very rapidly and is seen in various fields of life without exception in the world of education. Learning that is highly dependent on technology, as it is today, is becoming a challenge for both learners and educators who have a dominant background in practice learning materials such as in the fine arts department at universities. To improve the learning process, learning outcomes, and the quality of education at universities majoring in fine arts, it is necessary to conduct development research. Writing this paper aims to produce learning media that can support the learning process in the graphic arts course in the relief print technique in the fine arts department. The media produced is in the form of learning video media, which is believed to be able to increase the interest and learning outcomes of students at universities majoring in fine arts. This study uses research and development methods with the DDD-E model. The data obtained in this development research are sourced from the validity test, practicality test, and effectiveness test. The results of this research on the development of instructional video media reached the valid, practical, and effective categories by getting a good response from educators and students. The developed learning video media can also increase learners' interest and learning outcomes and influence learners' understanding.

Keywords: DDD-E, Learning Video, Fine Graphic Arts, Relief Print Linoleum Cut, Reduction Printing

INTRODUCTION

The impact of the COVID-19 problem was not only felt in Indonesia but throughout the world, which in the end implemented distance learning solutions or commonly known as online learning (in the network). This is one example of the rapidly growing role of technology and information in education, where everything is done remotely and requires the ability to both infrastructure and skills in mastering the technology and information. This technology and information can be said to have occupied the most important role, especially in the world of education.

One of the challenges felt by educators is how the learning process is no less innovative than previous direct learning. During the Industrial Revolution 4.0 which is known as the era of disruptive innovation, education is required to accompany the advancement of technology and information that continues to develop to be able to create something innovative. This is related to several problems that arise as a result of online learning that the educator feels (Rahardja et al., 2019). Muirhead (2007) explains online learning requires the creativity and skills of educators, one of which is choosing learning media that can support learners' abilities in material aspects and mastery of technology and information. The challenge felt by learners is that in addition to limited facilities, learning media has a very important role in learning. This is evidenced by several articles that discuss the difficulties of learners in online learning, namely learning media. In practical
learning such as vocational and tertiary education, where the learning is already leading and requires soft skills and hard skills training, this certainly deserves to be discussed. This raises several obstacles, such as in practical learning not achieving graduate learning outcomes. Because practical learning requires a simulation of the steps of the working process so that learners understand and can understand quickly.

In universities, many majors and study programs have practical material. One of them is in the Department of Fine Arts, whose courses prioritize creative skills and come from exercises that are taught by practice in learning. As stated in the Semester Lesson Plan, the Relief Print Graphic Arts course is a course that provides information related to the knowledge and skills of pure graphic arts, especially relief print graphic arts with the aim that students can apply the theory and practice of fine art printing, and display it in the end-of-semester exhibition. According to Trianto et al (2009) Learning is an aspect of a complex activity and cannot be fully explained. In simple terms, learning can be interpreted as a product of continuous interaction between development and life experience. In essence, Trianto et al (2009) revealed that learning is a conscious effort of an educator to teach his students (directing the interaction of students with other learning resources) with the aim that the goal can be achieved. From the description, it is clear that learning is a two-way interaction of educators and students, between the two there is communication that is directed towards the set targets.

This practical and online learning process will be effective and efficient if it is supported by the availability of quality and supportive learning media. Even not only for online learning, it is hoped that learning media will also be useful when the COVID-19 pandemic ends. The learning media in question is in the form of video media. Where video media has enough advantages to be a solution to the perceived problems. Learning media is anything that can be used to convey messages or information in the learning process so that it can stimulate the attention and interest of learners in learning (Havizul, 2020). Video media is assumed to be an effective medium because it can help the learning process, both conceptual and procedural. Especially for learning which requires a demonstration or simulation that makes the media a guide for students. Video media can also summarize many events in a long time to be shorter and clearer accompanied by audio-visual and in its use, it can be repeated or dismissed which is the interaction of students with the media. Video media can represent educators in the learning process which can be accessed by students at any time. The choice of media should not be separated from its content, as media is a component of the overall instructional system. Because even though the purpose of the content is known, other factors such as learners' characteristics, learning strategies, study group organization, allocation of time and resources as well as the assessment procedure also need to be considered (Andriantoni, 2016).

Based on the results of interviews with lecturers of graphic arts courses at one of the state universities in May 2021, it was found that in learning that is not completely offline, the graphic arts course has several obstacles, such as students finding it difficult to understand the material in the form of the steps of working on a work in an integrated manner. sequential and in-depth and learning is impressed only for the formality of completing the task. This argument is also based on data on learners' scores for 3 semesters obtained by the author from the graphic arts lecturer. It was also found that the media used were in the form of job sheets, books, and videos sourced from the internet with the YouTube site that needed to be developed in several aspects. Therefore, research and development are carried out on learning video media for the relief print graphic art course in the fine arts department.
METHODS

This research is a Research and Development using the DDD-E Model developed by Ivers & Barron (2002). In this DDD-E model, there are four stages including, Decide, Design, Develop, and the last one is Evaluate. The data obtained in the research and development of instructional video media comes from the results of the definition, design, validity, practicality, and effectiveness of the media developed through questionnaires, observation sheets, and interviews. Data on the validity of this research and media development were obtained through a questionnaire which was assessed by experts to assess three aspects, including the media aspect, the material aspect, and finally the language aspect. Practicality data on research and development of instructional video media were obtained from learners’ response questionnaires, educator response questionnaires, and observation sheets. The sample of this research is students of the print relief graphic arts course in the fine arts department. More details can be seen in Fig 1 below.

Figure 1. Research and Development Procedure with DDD-E Model
RESULTS

In this research and development, the product developed is a learning video media that contains material for relief print graphic art in the fine arts department. The design of this learning video media product is based on the results of the analysis process and learning problems, books and graphic art materials, relief prints, lesson plans, and other literature that becomes a connecting source such as articles and other journals.

This research and development use the development model developed by Ivers & Barron (2002), namely the DDD-E Model. At this stage, the general purpose of learning teaching materials is determined, as well as conducting preliminary research. The first step is to determine the general learning objectives and then select appropriate learning materials used in learning activities to achieve these learning objectives. Then do preliminary research such as the initial introduction of learners and the use of resources, whether students can teach materials or not. Furthermore, assessing the available resources, and whether the available resources can support the implementation of the resulting media.

Then the Design stage is the stage of designing learning products to produce learning materials that have been determined at the decision stage. The resulting learning product is in the form of learning video media for the relief print graphic arts course in the fine arts department. At this design stage, there are 3 steps taken including making a flowchart, then designing the interface, and finally making a storyboard.

The third stage, namely Develop, at this stage is the development stage of the resulting media, where the results from the design stage above, at the development stage, have been realized or implemented into real products. After producing the desired product, the media validation stage, media practicality, and media effectiveness are also carried out which are sourced from experts in their fields. The final result of this design stage is the final result of the designed product, namely a validated learning video media. And the last one is Evaluate. At this stage, a formative evaluation is carried out at each stage in this DDD-E model, starting from the decoding stage, the design stage, and finally the development stage. At the design stage, a formative evaluation was conducted on the compatibility between the media produced and the learning objectives and the results of the initial research. Then a formative evaluation is carried out on the final results of the design stage, namely a list of content, flowcharts, interface designs, and storyboards. Then the last is a formative evaluation of the final results obtained from the development stage, namely an evaluation of the elements of the product or media that are produced. each stage of decision, design, and development. This video media with relief print graphic art material can be an independent learning resource that helps students learn, deepen, and develop their ability to work on graphic arts independently. This learning video media was developed using Adobe Premiere Pro CC 2019 software with product output in the form of video files (.mp4). An example of ppt can be seen in Fig 2 below.

Figure 2. Learning Video Media Cover Page
After the video media has been developed and assessed by expert validators, the next step is analyzing the data. In this research and development, the analysis of media validity uses the Aiken's V formula with validity analysis using a Likert Scale. The Validation formula is

\[
\text{Validation} = \frac{\sum s}{n (c - 1)}
\]

Description:
s = r - 10
10 = Low validity assessment scores (in this matter = 1)
c = The highest value of the validity assessment (in this matter = 5)
r = Numbers given by validator
n = Number of Respondents

The validity category of learning video media using the Aiken's V formula can be seen based on the Table 1 below.

<table>
<thead>
<tr>
<th>No</th>
<th>Score</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>≥ 0,6</td>
<td>Valid</td>
</tr>
<tr>
<td>2</td>
<td>&lt; 0,6</td>
<td>Invalid</td>
</tr>
</tbody>
</table>

Source: Azwar, S., (2015)

The results showed that the video learning media developed was suitable for learning in the fine arts department which reached a validity value of 0.91 with a percentage of 91% categorized as valid (details in Table 2). The developed media had a clear identity, an attractive appearance, with a different color composition, interesting, and with the material in sequence.
Table 2. Validation Result

<table>
<thead>
<tr>
<th>No.</th>
<th>Validity</th>
<th>Percentage Score (%)</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Media</td>
<td>87 %</td>
<td>Valid</td>
</tr>
<tr>
<td>2</td>
<td>Material</td>
<td>93 %</td>
<td>Valid</td>
</tr>
<tr>
<td>3</td>
<td>Linguist</td>
<td>91 %</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>Mean Values of Validity by Expert</td>
<td>91 %</td>
<td>Valid</td>
</tr>
</tbody>
</table>

The learning video media that has been developed contains material and understanding of graphic art works. The learning video media that has been developed provides a more detailed picture of the relief printing material for the linoleum cut reduction printing technique. The advantages of this learning video media are, attractive appearance, a lot of information. The learning video media that was developed also received a positive response, judged very good and practical by the graphic arts lecturer, with a score of 1.00 with a percentage of 100%, and students with a score of 0.87 with a percentage of 87% in the practical category. (details in Table 3).

Table 3. Practical result

<table>
<thead>
<tr>
<th>No</th>
<th>Practicality</th>
<th>Percentage Score (%)</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Educator</td>
<td>100 %</td>
<td>Practical</td>
</tr>
<tr>
<td>2</td>
<td>Learners</td>
<td>87 %</td>
<td>Practical</td>
</tr>
</tbody>
</table>

The material from the developed learning video media has its own charm, which directly links the material that can be used by students to work and becomes the capital to be continued in the final project which aims to complete university studies. Respondents also hope that the learning video media can be distributed to the public online through several available sites, so that learners and educators can access the learning video media whenever and wherever. The value of the effectiveness of the learning video media can be seen from the value of the learners before and after using the learning video media. Based on the assessment of student learning activities and learners learning outcomes, obtained an average value of 93.00% and 91.59% with the category "High".

**CONCLUSIONS**

Based on these results, shows that the learning video media that was developed was declared valid, practical, and effective because it received a good response from educators and learners. The value of the media validity is 0.87, the percentage is 87% with a valid category. The material validity value is 0.93, the percentage is 93% with a valid category. The language validity value is 0.91, the percentage is 91% with valid category. The learning video media that was developed also received a positive response, considered very good and practical by the graphic arts lecturers at 1.00, a percentage of 100% in the practical category. Learners' responses with a value of 0.87, a percentage of 87% in the practical category. The effectiveness of the use of relief print graphic art video media in the fine arts department can be seen through the activities of learners and the assessment of learning outcomes in the form of learners’ work. The results of observing student activities and the results evaluating learners' work provide a very good picture, meaning that the use of instructional video media in relief print graphic arts learning in the fine arts department has been effectively implemented.
REFERENCES


