Demonstration Learning Method in Business Multimedia Study: Practice Approach

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Abstract: Business learning multimedia is a subject that is demand for students in making learning media using software. Lack of understanding in using software as an obstacle in understanding and achieving the ultimate goal in making business-learning media. This research conducted on students of business concentration in economic education in the multimedia course of business learning. Students do not have the basic in making multimedia learning using software so that they have trouble. Therefore, a demonstration learning method is needed where the lecturer provides theory and exemplifies the technology-based learning media. Based on testing, it was obtained the results that the use of demonstration learning methods in courses that require technical is very useful to facilitate students to better understand and achieve learning objectives. Besides that, it is a technical course that requires skills, with these method students had better understand the process of making learning media without having to have a basic programming.

1 INTRODUCTION

In class learning, the use of methods will influence students' understanding of receiving learning material. So that the mistakes in choosing will have an impact on the achievement of the expected competencies in the subjects taught. The use of learning methods is based on the characteristics of the course so that an understanding of the characteristics and characteristics of the subjects to be taught is needed. This means that each subject cannot be treated equally in the use of the learning method. So that the mastery of learning methods by educators is very important to understand how the subjects can be delivered to students well.

One of them is in the business learning multimedia course. This course aims to enable students to prepare technology-based learning media. This course prepares students as educators in making learning media. This is based on an era of disruption where every activity that is usually carried out manually or in the real world and is now diverted to the digital world according to the goal of reaching Making Indonesia 4.0. Therefore, this course is very important in achieving these goals.
In addition to the current curriculum development, educators prioritize the use of student center methods where students are required to be more active in the teaching and learning process. During this time in the social field, students are more active and independent in the teaching and learning process which emphasizes independence in learning to find learning material.

This course has a scientific basis so that the right learning method is needed to convey learning material. There are problems that occur during the teaching and learning process in this course. This course is a new subject in the IQF-based curriculum so that students do not get basic programming in making learning media. Different in the subject of computer applications that have basic competencies for using Microsoft office where students have gained knowledge about the use of Microsoft offices while multimedia courses in business learning have not yet obtained the basic use of programming. So that students find it difficult to make learning media. At the beginning of learning, a general description of the process of making learning media is given. The software used to make this learning media is Adobe Flash Professional. In the initial survey of software use, students were required to be able to make early introductions of programming. The method used is conventional student learning where lecturers give more lectures and read text books so that students lack skills. The use of this method causes students to experience difficulties. In addition, this course is taught in social fields which basically do not have knowledge about programming so that most students experience difficulties.

Therefore, it is necessary to choose the right method in teaching this course. During this time, students are more often taught with conventional methods which are limited to speaking, writing, or reading text books (Gbamanja, 1999). In addition, this traditional method also cannot solve problems in encouraging problem solving, critical thinking, and creative thinking (Belen, 2014; Wood & Gentle, 2003). The use of traditional methods also causes learning conditions to be more passive than active (Bello, 2011). So it is necessary to do an evaluation in the use of learning methods.

This research was conducted on social study programs that use more traditional methods. Students rarely practice directly because most of the subjects in the social field are cases of everyday life. On the contrary in the field of science prioritizes practices where more students are required to experience directly the process of making.

Initial testing was also carried out by directly practicing the use of adobe programs to ensure that the use of the learning method was right because the subject prioritized practicum. But the results of using these methods are not effective so students do not get maximum understanding. This is in line with (Schaal, 1997) that practicum is better done first by providing learning material. This has a negative impact because students have not gained sufficient understanding and material in solving problems. Therefore, the choice of learning methods in this course is very influential on the success in achieving learning competencies. Because it is a new subject, it is necessary to test the right learning method. One of them is the demonstration learning method.

Demonstration learning methods are learning methods that use teaching aids to facilitate the delivery of learning material (Fartati, 2014). In this method, educators are more active in giving examples to students before they do it (McDermott, 2001). In this method, the participation of students is very important because they have to replicate what has been given so that an effective teaching and learning process will be obtained (Maun & Winnitoy, 1980; Simarmata, 2018; McDermott, 2001). Lack of student participation results in a lack of feedback between students and lecturers so that the use of demonstration methods is expected to increase feedback, especially students' understanding of the core competencies of the business learning multimedia course.

The use of demonstration methods in multimedia learning has benefits including: saving time and costs, providing more motivation, providing feedback, providing real situations and giving attention and motivation to learning. Previously, that this course was required to produce technology-based learning media. The use of technology will improve students' skills and readiness in increasing competition. In addition, the use of technology will make it easier to understand the core of learning. Such a learning video is very helpful in conveying learning material (Basheer, Hugerat, Kortam, & Hofstein, 2017). In addition, the use of this method also increases creativity and learning outcomes so that it is very good to be used in multimedia business learning courses (Sadewa, 2015). It is expected that the use of this method will improve the students' skills in achieving the basic competencies of multimedia courses in business learning and develop the use of demonstration learning methods for the better.

There are several studies which show that the use of demonstration learning methods is useful in enhancing the abilities and skills and creativity of students. Like the research conducted by (Ameh & Dantani, 2012; Basheer et al., 2017; Fartati, 2014; Giridharan & Raju, 2016; Iqbal, 2017; Maun & Winnitoy, 1980; Tuah, Harrison, & Shallcross, 2010; Umar, Bala, & Ladu, 2016) which states that the use of demonstration methods is very good in
improving student learning outcomes. This is also supported by research conducted (Schaal, 1997) that demonstration methods can solve learning problems. But in research conducted by (Iline, 2013; M. Furo, 2014; McKee, Williamson, & Ruebush, 2007; Noah, 2013) show less effective use of demonstration methods in the learning process. This is because the demonstration method is more effective if done in elementary or junior high school (M. Furo, 2014). Therefore, in this study will be known the benefits of using demonstration learning methods in the teaching and learning process in the multimedia course of business learning.

2 THEORICAL FRAMEWORK

Demonstration Learning Method
Multimedia business learning is one of the development subjects of the IQF-based curriculum in the face of an era of disruption. In this course, it is required to obtain the ability to create learning media using software. Therefore, we need the right learning method in the delivery process. One of them is a demonstration learning method. According to (Maun & Winnitoy, 1980), the demonstration method is a technique where the teacher combines formal learning and personal instruction. Besides that, according to (Noah, 2013), the demonstration method where the instructor is an actor while the students are observers where in the end they act. According to (Yamin, 2010) the method of demonstration can be done by demonstrating the use or method of doing activities so that it looks like a real activity.

This method is often done in science learning where practicum is required to practice the process of occurring an event (Tuah et al., 2010). This method is also required to use teaching aids and teaching materials that serve as proof of theory and concept (Toernaliyah, 2012). According to (Djamaram, 2006) there are advantages and disadvantages of the demonstration method, namely: the advantages of the demonstration method are as follows; (a) Can make teaching more clear and concrete, (b) Students more easily understand what is learned, (c) The teaching process is more interesting, (d) Students are stimulated to actively observe, adjust the theory with reality and try to do it themselves. While the shortcomings of the demonstration method are as follows; (a) This method requires teacher skills specifically, because without being supported by it, the demonstration is not effective, (b) Facilities such as equipment, places and adequate media are not always available. The demonstration method causes students to be more active and follow instructions compared to traditional methods (McDermott, 2001).

3 RESEARCH METHOD

The type of this research is quantitative descriptive. The location of the study was conducted in the Business Education Study Program, Faculty of Economics, Medan State University. The course that will be conducted is multimedia business learning which is a new subject based on the IQF-based curriculum. This study follows a research model from (Arikunto, 2006) where research between one cycle and another cycle. The stages are by planning, implementing, observing, and reflecting. The steps in this research are by planning which is then evaluated and revised, implemented, and final evaluation through reflection. The data used is activity data during the teaching and learning process, learning outcome test data.

4 RESULT AND DISCUSSION

This study looks at the difference in treatment between before and after an action is given. The comparison is also made to the difference between the sexes to the value so that a comparison between the sexes is obtained before and after the treatment.

Pre Test

Table 1: Average Value

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>22</td>
<td>67.4545</td>
<td>8.55641</td>
<td>1.82423</td>
</tr>
<tr>
<td>Female</td>
<td>70</td>
<td>70.5286</td>
<td>8.85425</td>
<td>1.05829</td>
</tr>
</tbody>
</table>

Based on table 1 above can be seen the average value of men and women before being given treatment. It can be seen that the number of men as many as 22 people with an average value before being given treatment amounted to 67.45 while the number of women as many as 70 people had a greater average value of 70.52.
Table 2: Results of Levene's Test

<table>
<thead>
<tr>
<th>Equal variances assumed</th>
<th>t-test for Equality of Means</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>Sig.</td>
<td>t</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>.032</td>
<td>-.1432</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.458</td>
<td>36.263</td>
<td></td>
</tr>
</tbody>
</table>

Based on the results of Levene's Test, the significant value of F is 0.859 or above 5%, so it can be concluded that there is no difference or has the same variance between men and women before being treated. While the average value of students before being given treatment there was no difference between men and women seen from the t value of 0.156 or greater than 5%.

**Post Test**

Table 3: Treatment

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>22</td>
<td>80.812</td>
<td>6.09946</td>
<td>1.30041</td>
</tr>
<tr>
<td>Female</td>
<td>70</td>
<td>84.9429</td>
<td>4.80605</td>
<td>.57443</td>
</tr>
</tbody>
</table>

Based on Table 3 above, after the treatment, there was an increase in the average value obtained by students, which was 67.45 men before being 80.81 while the previous 70.52 women became 84.94.

Table 4: Independent Samples Test

<table>
<thead>
<tr>
<th>Equal variances assumed</th>
<th>t-test for Equality of Means</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>Sig.</td>
<td>t</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>8.622</td>
<td>-3.285</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.901</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on the results of Levene's Test obtained a significant F value of 0.004 or less than 5% so that the results obtained are differences after being treated between men and women. While the significant t test value was 0.001 or less than 5% so that the average score between men after being given treatment had differences with women.

**Same Sample Difference Test**

Table 5: differences and increases

<table>
<thead>
<tr>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre</td>
<td>69.7935</td>
<td>92</td>
<td>8.83616</td>
</tr>
<tr>
<td>Post</td>
<td>83.9565</td>
<td>92</td>
<td>5.40637</td>
</tr>
</tbody>
</table>

From Table 5 above, the results show that there are differences and increases in values between before and after treatment. Before being treated, students obtain an average score of 69.79. After being given treatment there is an increase in value to 83.96.
Table 6: Significant result

<table>
<thead>
<tr>
<th>Paired Samples Test</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Paired Differences</td>
<td>Mean</td>
<td>Std. Deviation</td>
<td>t</td>
<td>Sig. (2-tailed)</td>
</tr>
<tr>
<td>Mean Pre - Post</td>
<td>14.16304</td>
<td>9.12342</td>
<td>14.890</td>
<td>1</td>
</tr>
</tbody>
</table>

Based on table 6 above, it is obtained a significant result of 0.000 or smaller than 5% so that there is a difference between before being treated with after being treated.

Based on the results of the above research, it was concluded that before being given treatment there was no difference between male and female students. So it can be concluded using conventional methods that there is no variance that is different and students do not get graduation in multimedia courses. Whereas after being given treatment there is a difference in value between men and women where the value obtained also increases from before being given treatment (Crouch, Fagen, Callan, & Mazur, 2004). These results indicate that the use of demonstration methods in business learning multimedia learning leads to an increase in student learning outcomes (Basheer et al., 2017; Fartati, 2014). In addition, the use of demonstration learning methods enhances students' creativity and their learning outcomes so as to produce interactive learning media (Basheer et al., 2017; Iqbal, 2017; Sadewa, 2015; Tuah et al., 2010; Umar et al., 2016).

In addition, the use of this method in the teaching and learning process requires educators to play an active role in the learning process (McDermott, 2001; Tuah et al., 2010). In this method it is also useful in giving students a sense of thinking so that they make them more creative (Maun & Winnitoy, 1980). The use of this method must be based on planning and must be adapted to the needs and characteristics of the course so that effective value and learning enhancement for students will be produced. Like the research conducted by (Iline, 2013) that the use of demonstration methods that lack planning will lead to less effective results. This result is also supported by research conducted by (M. Furo, 2014; McKee et al., 2007).

5 CONCLUSIONS

Based on the results and discussion above, it can be concluded that the use of demonstration learning methods in which the teaching staff gives examples and then the students pay attention and take actions taken by the teacher will lead to an increase in the value of learning and student creativity. The use of this method also requires students to be more active in the learning process in class. The results of this study also provide suggestions for some subjects that prioritize practitioners more recommended the use of demonstration methods to increase creativity and ease in receiving material. In addition, in the use of demonstration methods it is recommended that the material be given beforehand before carrying out the practice.

REFERENCES


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