Learning Effect Using Illustration in Multimedia Communication to Student Achievement

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Abstract: Multimedia communication is the presentation of digital information in the form of text, images, sound, motion graphics, web sites, and video. Multimedia communications program offers a balance of web design, digital photography and illustration, video editing, art instruction, interactive technologies, and academic courses. Learning achievement can be demonstrated through the value given by a professor of the subjects that have been studied by a student such as creating E-Learning or university broadcast like radio communication. Each student who participated in the lecture course always expect will generate good learning achievement. Similarly, the professors who expect success in teaching subjects that are difficult to understand by students. It is therefore expected that the good cooperation between faculty and students. Lecturer held learning to use illustrations on subjects of multimedia communication, not just theory. This study shows the influence of learning multimedia communication using illustration of the achievements of the students' scores on the course.

Keywords: Multimedia communication, Regression Analysis, Illustration.

1. Introduction

Multimedia communications degrees are designed to develop the technical skills essential for professional competence in the contemporary digital media environment. Visual literacy, creativity, and collaboration are integrated into a curriculum that teaches you how to create multimedia content that responds to human interaction. Learning achievement can be demonstrated through the value given by a professor of the subjects that have been studied by a student such as creating E-Learning or university broadcast like radio communication. Many students have some difficulties to learn this lecture so they take the other course for this lecture. This paper will appear whether the learning using illustration can help this problem.

Success in education is influenced by several factors which are interconnected through internal and external factors. Internal factors such as the level of emotional intelligence, psychological state, motivation and interest in learning. Interest in learning is also influenced by the readiness of students to receive lessons. While external factors include the state of the economy, environment, friends, and enthusiastic students to the courses taken. Students will be enthusiastic about the professors who teach can be seen from the appearance, speech, seriousness, many tasks assigned, and the most important is the method of teaching provided. In this study will be discussed with the teaching effect illustration / case study on students' academic achievement.

Learning achievement can be demonstrated through the value given by a professor of the subjects that have been studied by a student. Each student who participated in the lecture course always expect will generate good learning achievement. Learning achievements for students who follow courses Polytechnic multimedia communication is the value of science subjects multimedia communication itself. This study has tested every item that will be given to students by using SPSS 17.0 is to test the validity and reliability testing. The result is that each item is given a valid and reliable.

2. Classical Assumption Test (Influence of Multimedia Communication Learning using Illustrations and Case Studies of Student Achievement)

2.1 Normality Test

In the histogram, the data distribution of the residual value (error) showed a normal distribution (bell-shaped picture). Residual normality test by using the graph is to see the spread of the data on the source of the diagonal in the graph Normal PP Plot of regression standardized residuals. As a basis for decision-making, if the dots spread around the line and follow the diagonal line of the residual value of the normal distribution. Because the points are spread around the line, then the assumption of normality of the distribution of residual met.
2.2 Homoscedasticity Test

Residues that there should have constant variance (homoscedasticity). If the variance of the residuals is increasing or decreasing in a certain pattern, it is called with heteroscedasticity. This test uses the following Scatterplot:

![Scatterplot](image)

Scatter visible above data do not show a specific pattern, e.g. pattern of ascending to the upper right, or down to the upper left, or certain other patterns. This shows the regression model is free from heteroscedasticity.

2.3 Partial Test (Uji T)

Partial test is used to determine the effect of each independent variable on the dependent variable. If Sig.Hitung > 0.05, tolak H₀, H₁ accepted. Partial test results of this study can be seen in the following table:

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>20,570</td>
<td>1</td>
<td>20,570</td>
<td>1.264</td>
<td>0.272</td>
</tr>
<tr>
<td>Residual</td>
<td>525,430</td>
<td>25</td>
<td>21,017</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>550,000</td>
<td>26</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on Table Annova above, the probability value or Sig. is 0.272. Because the value is greater than 0.05, then the influence of the two variables simultaneously (simultaneously), the influence of learning multimedia communication using illustration / case studies of student achievement is real or meaningful (Hₐ accepted).

3. Result and Discussion

3.1 General description of test result of student

- The average value of multimedia communication with illustrations (the number of 30 pieces of data) is 96.94 with a standard deviation of 4.98.
- The average value of the end of the course multimedia communication (the number of 30 pieces of data) was 79.5 with a standard deviation of 5.48.
- Large relationship between the variables with the value of the final value calculated multimedia communication illustrated by the correlation coefficient is 0.756. This shows a very close relationship (closer to 1). Towards a positive relationship (no negative sign in 0.756) shows that more meetings on subjects multimedia communication using the illustration of students' final grades in the subjects of multimedia communication will be greater or higher.
- The level of significance probability 0.000 means far below 0.05 then the very real correlation between the variables.
On coefficient table, there is a constant value of linear equation will used in this research. Based on the coefficient table, the linear regression equation is as follows:

\[ Y = -1.225 + 0.833X \]

The regression coefficient for 0.833 states that any additions (for the sign +) 0.833 the value of teaching by using illustrations will enhance the students' final grades by 0.833, and vice versa.

### 3.2 Hypothesis test

**Ha:** Significant regression coefficients  
**Ho:** Regression coefficients is not significant  
- If probability > 0.025, then H0 accepted.  
- If probability < 0.025, then H0 rejected.  

The test was done two sides, so that the probability value = 0.05/2 = 0.025.

Decision:  
It appears that the column Sig / significance is 0.000, or probability far below 0.025. Then H0 is rejected, or significant regression coefficient, or learning multimedia communication using illustrations or case study actually significantly affect student achievement in the subject multimedia communication.

### 4. Conclusion

Based on the previous explanation, it can be concluded that learning multimedia communication using illustrations or case study actually significantly affect student achievement in the subject multimedia communication.

### References