

Implementation of Innovative Learning Media in Increasing Learning Outcomes in Class X Students of SMK Negeri 2 Padang Sidempuan, Tapanuli Selatan District

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Abstract

This study aims to determine a significant relationship in the implementation of innovative learning media in improving results in class X students of SMK Negeri 2 Padang Sidempuan, South Tapanuli Regency. This type of research is descriptive correlational. The population in this study were all 35 students of class X SMK Negeri 2 Padang Sidempuan, South Tapanuli Regency. The sampling in this study was carried out using a total sample technique so that the entire population was sampled, namely 35 people. Data collection in this study is documentation and questionnaires. The questionnaire consists of 20 items and each has 4 options (a, b, c, and d) which have previously been tested to determine their validity and reliability. The results of the data normality requirement test on the implementation of innovative learning media as learning resources are normally distributed with the results of calculating $X^2_{count} < X^2_{table}$ ($17.40 < 49.80$) and student learning outcomes are normally distributed with the results of calculating $X^2_{count} < X^2_{table}$ ($3.09 < 49, 80$). The results of the linearity test of internet utilization data with learning outcomes are linear with the equation $Y = 33.50 + 0.58$ is linear. The test results for the tendency to use the internet are in the very high category (37.14%) and the learning outcomes are in the very good category (28.75%). To test the hypothesis, the product moment formula is used, where $r_{count} > r_{table}$ ($0.39 > 0.33$). Then the t test was carried out, it was obtained that $t_{count} > t_{table}$ ($2.68 > 1.68$) was declared significant at the 5% level. This shows that there is a significant relationship between the implementation of innovative learning media as a source of learning and student learning outcomes in class X SMK Negeri 2 Padang Sidempuan, South Tapanuli Regency. Thus the hypothesis can be accepted for truth.

Keywords: Innovative Learning, Learning Outcomes, and class X SMK Negeri 2 Padang Sidempuan, South Tapanuli Regency

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1. Introduction

The implementation of innovative learning media at this time is urgently needed in the field of education. One of the innovative learning media is the use of the internet. The Internet is one result of man-made sophistication and progress of science and technology. Internet is an abbreviation of interconnected networking, which when interpreted in Indonesian means a series of computers that are connected in several network circuits. The functions of the internet vary and one of them is a place for virtual world social networking communities. Social networking is a service from a range of internet software systems that allows users to interact and share data with other users on a large scale.

The internet is a collection or network of computer networks that exist all over the world that are globally interconnected which allows internet users to exchange information/data and is an infrastructure consisting of hardware dan software (Surip, 2013).

Students are the next generation of the nation, whether or not the Indonesian nation will be good in the future is determined by the quality of students at the present time. There are several factors that influence students or someone in learning. Globally, the factors that affect student learning can be divided into three kinds of parts, namely internal factors (from within the student), external factors (from outside the student), and from the learning approach.

Science, technology and arts that are increasingly sophisticated, the spread of information technology and access to telecommunications and transformation are increasingly faster and easier. It is undeniable that these things, both directly and indirectly, have an impact on society, both positive and negative influences. Its influence is not limited to certain circles, but has spread to all circles, both among students and non-students.

Lately there have been many reports in print and electronic media reporting on the abuse of the internet and sites on the internet, especially social networking sites as venues for prostitution among teenagers. This situation is very ironic when the main purpose of the internet and social networking sites was created, namely to expand social relations.

It is not only public life that is affected by internet abuse, namely the example above of excessive use of social networking sites which can cause bad things and also other sites, but its influence is starting to be felt in the world

of education. The worst impact in the world of education that might result from internet abuse is starting to decrease student achievement.

Internet use by children and adolescents raises ethical dilemmas. Children and adolescents who may be in the search for identity are very quickly affected by what they see and hear. Children and adolescents often use the internet excessively so that spending hours online makes them socially influenced and participates in activities and experiences that are not good, so that it can damage students' interest in learning. If they see negative things from the internet, of course their morals and ethics will be damaged. They will be people who have no ethics. They will be affected by traits that are far from religious, social and cultural norms and will certainly reduce their learning achievement in school. But if the internet is indeed used for positive things, such as looking for school assignments, knowing about useful sciences and religion, of course they will have good morals, and their academic achievement will increase.

2. Method

The population in this study were all students of class X SMK Negeri 2 Padang Sidempuan, South Tapanuli Regency. While the research sample is part of the population that is considered representative which can represent the population for research data collection.

3. Result and Discussion

a. Description of Altered Data Utilization of the Internet as a Learning Resource

Based on the data obtained from the results of the study, the number of respondents was 35 people, with the highest score of 90 and the lowest score of 55 with arithmetic mean ($M = 76.71$) and standard deviation ($SD = 9.350$).

Table 3.1 Frequency Distribution of Altered Data Using the Internet as a Learning Resource

No	Range	Frequency Absolute	Frequency Relatively (%)	Category
1	85 – 90	11	31,42	Very High
2	79 – 84	7	20	High
3	73 – 78	6	17,14	Enough
4	67 – 72	2	5,71	Currently
5	61 – 66	6	17,14	Low
6	55 – 60	3	8,51	Very Low
Amount		35	100	

Based on table 3.1. above, it is known that the very high category is 11 people (31.42%), high is 7 people (20%), enough is 6 people (17.14%), medium is 2 people (5.71%), low is 6 people (17.14%), very low as many as 3 people (8.51%), thus it can be concluded that the use of the internet as a learning resource for class X students of SMK Negeri 2 Padang Sidempuan, South Tapanuli Regency, is categorized as very high, 11 people (31, 42%).

b. Description of Changes in Learning Outcomes Data

Based on the data obtained from the results of the study with the number of respondents 35 people with the highest score of 90 and the lowest score of 60 with arithmetic mean ($M = 76.14$) and standard deviation ($SD = 13.69$)

Table 3.2 Frequency Distribution of Class X Student Learning Outcomes at SMK Negeri 2 Padang Sidempuan, Tapanuli Regency

No	Range	Frequency Absolute	Frequency Relatively (%)	Category
1	≥ 84	13	37,14	Very Good
2	78 – 83	5	14,28	Good
3	72 – 77	11	31,42	Enough
4	66 – 71	4	11,42	Low
5	60 – 65	2	5,71	Very Low
Amount		35	100	

Based on table 3.2. above, it is known that the very good category is 13 people (37.14%), good is 5 people (14.28%), enough is 11 people (31.42%), low is 4 people (11.42%), very low as many as 2 people (5.71%). Thus it can be concluded that the learning outcomes of Class X students of SMK Negeri 2 Padang Sidempuan, South Tapanuli Regency, are in the very good category (37.14%).

c. Normality Test

For the normality of the internet utilization variable (X) and student learning outcomes (Y) it is done using the chi square formula (X^2). Then the normal requirements are met if $X^2_{count} < X^2_{table}$ at a significant level $\alpha = 5\%$, with degrees of freedom ($dk = 5$). The results of the research normality test can be seen in the table below:

Table 3.3 Normality

Research Variable	DK	X ² _{count}	X ² _{table} (α = 5%)	Curve
Internet utilization	5	17,405	49,801	Normal
Hasil belajar	5	3,098	49,801	Normal

Based on table 3.3. above, the data normality test for each variable obtained $X^2_{count} < X^2_{table}$ obtained at a significant level of 5%, thus it can be concluded that the data distribution of the two research variables is normally distributed.

d. Linearity Test

In this study there are two changes, namely one dependent change. In this case there is one independent change which is suspected to affect the dependent change. Therefore it is necessary to test its linearity by applying the regression formula for linear $Y=a+bx$, from the calculation results it turns out that $F_h (38) > F_t (4.14)$, then the hypothesis can be accepted. Based on this table, a summary table of the regression analysis for the line equation $Y = 33.50 + 0.58x$ is compiled.

e. Trend Test

1. Test the Tendency of Internet Utilization

By using research data for the internet utilization variable as a learning resource, the average observation (Mo) can be calculated, namely: $Mo = 76.17$ $Mi = 72.5$ and $Sdi = 5.83$

Table 3.4 The results of the Internet Utilization Trend Test

Class	Interval	Fo	Fr (%)	Category
1	>81,24	13	37,14	Very High
2	75,41 s/d 81,24	8	22,85	High
3	69,58 s/d 75,41	6	17,14	Enough
4	63,75 s/d 69,58	5	14,28	Low
5	<63,75	3	8,57	Very Low
Amount		35	100	

Based on table 3.4. above, it is known that the very high category is 13 people (37.14%), high is 8 people (22.85%), enough is 6 people (17.14%), low is 5 people (14.28%), very low as many as 3 people (8.57%). Thus it can be concluded that the use of the internet as learning resources for Class X students of SMK Negeri 2 Padang Sidempuan, South Tapanuli Regency, tend to be very high (37.14%).

2. Trends in Learning Outcomes

By using research data for the learning outcome variable (Y) it can be calculated the average observation (Mo), namely: $Mo = 76.17$; $Mi = 75$ and $Sdi = 5$

Table 3.5. Result of Learning Outcome Tendency Test

Class	Interval	Fo	Fr (%)	Category
1	>82,5	10	28,57	Very Good
2	77,5 s/d 82,5	5	14,28	Good
3	72,5 s/d 77,5	9	25,71	Enough
4	67,5 s/d 72,5	9	25,71	Low
5	<67,5	2	5,71	Very Low
Jumlah		34	100	

Based on table 3.5. above, it is known that the very good category is 10 people (28.57%), good is 5 people (14.28%), enough is 9 people (25.71%), low is 9 people (25.71%), very low as many as 2 people (5.71%). Thus it can be concluded that the learning outcomes of students in class X SMK Negeri 2 Padang Sidempuan, South Tapanuli Regency tend to be very good (37.14%).

f. Research Hypothesis Test

To test the hypothesis proposed above, it is carried out using the product moment correlation formula as follows:

$$r_{xy} = \frac{N\sum XY - (\sum X)(\sum Y)}{\sqrt{\{N\sum X^2 - (\sum X)^2\}\{N\sum Y^2 - (\sum Y)^2\}}}$$

Based on the calculation, it was obtained $r_{count} = 0.39$ consulted with critical price r at a significant level of 5% ($\alpha = 0.05$) with a total of 35 respondents obtained $r_{table} = 0.33$, because $r_{count} > r_{table}$ ($0.398 > 0.334$) this shows that there is the relationship between the use of the internet as a source of learning and student learning outcomes in class X SMK Negeri 2 Padang Sidempuan, South Tapanuli Regency.

To test the significant correlation is done by using the "t" test formula, namely:

$$t = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$$

Based on the calculation results obtained $t_{count} = 2.69$ then consulted with the "t" distribution at a significant

level of 0.95% obtained $t_{count} = 1.68$, because $t_{count} > t_{table}$ ($2.689 > 1.689$), then the hypothesis that says there is a relationship the significant use of the internet as a source of learning with the learning outcomes of Class X Students of SMK Negeri 2 Padang Sidempuan, South Tapanuli Regency, is acceptable.

The results of the study show that there is a significant relationship between the implementation of innovative learning media as a source of learning and learning outcomes in Class X students of SMK Negeri 2 Padang Sidempuan, South Tapanuli Regency, because through the use of the internet students find it easier to find and do assignments given by the teacher, discuss online, transferring files or sending data quickly to teachers or schoolmates concerned with lessons at school.

The use of the internet conditions students to study independently, students can access online to obtain information and knowledge as needed that is relevant to the subject matter. So that the use of the internet network as a learning resource will help, simplify and speed up the completion of school assignments so that student learning outcomes are getting better. If the internet is put to good use in learning, it supports a better learning process, it will certainly have a positive impact on students, this makes it easier for students to learn and can ultimately improve student learning outcomes.

4. Conclusion

Based on the results of the research and discussion described above, several conclusions can be drawn, including:

1. The use of the internet as a learning resource for students in class X SMK Negeri 2 Padang Sidempuan, South Tapanuli Regency, tends to be very high (37.14%).
2. Student learning outcomes in class X SMK Negeri 2 Padang Sidempuan, South Tapanuli Regency tend to be very good (37.14%).
3. There is a significant relationship between the use of the internet as a learning resource and student learning outcomes in class X SMK Negeri 2 Padang Sidempuan, South Tapanuli Regency, based on the "t" test obtained $t_{count} > t_{table}$ ($2.68 > 1.68$).

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