

Effect of the use of e-learning based on the Skype application on students' learning outcomes at YPSEI vocational school, Palangka Raya, in academic year 2020/2021

Kasepta Agrapta^{1*} 
Krisnayadi Toendan² 
Beta Centauri³ 

¹Faculty of Teacher Training and Education, University of Palangka Raya, Palangka Raya, Indonesia

²Faculty of Teacher Training and Education, University of Palangka Raya, Palangka Raya, Indonesia

³Faculty of Teacher Training and Education, University of Palangka Raya, Palangka Raya, Indonesia

ABSTRACT

The use of electronic technology in learning provides reinforcement for the pattern of changing learning paradigms. The E-Learning system is a form of learning implementation that utilizes technology and is not limited by space and time. Skype is one of the most popular applications and has the most users. In terms of user interface (User Interface) Skype is more attractive, and has complete features but still looks simple. The picture and sound quality is better, so most people prefer to use the Skype application compared to other applications. This study was conducted to determine the effect of using Skype application-based E-Learning on student learning outcomes at SMK YPSEI Palangka Raya for the academic year 2020/2021. This research is descriptive research with a quantitative approach. The research sample is students of SMK YPSEI Palangka Raya for the academic year 2020/2021 as many as 100 74 students. Collecting data using questionnaires and documentation. While the data analysis technique using the Simple Regression test. The results showed that there was an effect of using Skype application-based E-Learning on student learning outcomes at SMK YPSEI Palangka Raya for the academic year 2020/2021 with the acquisition of a count of 14,744 and a significance value of 0.000 < 0.05, so it can be concluded that the better the use of Skype application-based E-Learning, the higher the learning outcomes of students at SMK YPSEI Palangka Raya for the 2020/2021 school year.

KEYWORDS

Use of E-Learning, Skype Application, Learning Outcomes

Received: 9 January 2022

Accepted: 18 February 2022

Published: 28 February 2022

Introduction

E-learning or electronic learning is a popular term in internet and intranet-based online learning. This e-learning technology is a technology that is bridged by internet technology, requires a media to be able to display subject matter and questions and also requires communication facilities to be able to exchange information between students and teachers.

According to Darmawan (2014:26) that:

"E-learning is an acronym for electronic learning, meaning that learning is delivered electronically using computer media. The material is accessed through the internet, such as a website. E-learning is an internet application that can connect teachers and students online. E-learning was created to outsmart the limitations of teachers and students in managing time, space, conditions and circumstances."

CONTACT Kasepta Agrapta  kaseptaagrapt@gmail.com

© 2022 The Author(s). Published with license by Lighthouse Publishing.

This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

According to Kordesh (Subiyantoro, 2013) "Social Learning Network (SLN) or social network for learning refers to interpersonal connections through interaction with the main goal of developing knowledge or in other words Social Learning Network is a combination of components social network with e-commerce. learning so that it can be used for the learning process. One of the SLN applications, including the application Skype.

"The Skype application is an audio-visual application. Through the application Skype, teachers can chat to convey information in the form of text, audio, or video, which is known as video conference or web conference. application is Skype widely used in education. This is because the application Skype can send text messages which are supported by video chat, telephone calls, SMS, and desktop sharing features" (Kembdikbud, 2016:277).

Compared to other similar applications, Skype is one of the most popular applications and has the most users. Skype includes synchronous (synchronous) online communication. Simultaneous online communication or synchronous online communication is communication using a computer as a medium, which occurs simultaneously and in real time. Examples of synchronous communication include the following: Google+ Hangouts, FaceTime and Skype. Asynchronous (asynchronous) online communication is communication using a computer device and is carried out on a delayed basis.

Examples of asynchronous online communication are forums, recordings of visual simulations, and reading and writing online documents via the World Wide Web. In terms of user (interfaceUser Interface) Skype is more attractive, and has complete features but still looks simple. The picture and sound quality is better, so most people prefer to use the application Skype compared to other applications. Besides being able to be used with a computer or laptop, Skype can also be used on a mobile phone via a cellular phone. This makes it very easy to interact with friends, relatives or family using Skype without being limited by space and time. Based on this background, the researcher will examine the use of E-Learning Application-based Skype. And the title of this research is "The Influence of Using E-Learning Based Skype on Student Learning Outcomes at SMK YPSEI Palangka Raya, Academic Year 2020/2021".

Methods

The method used in this research is descriptive quantitative research method. The population in this study were students of SMK YPSEI Palangka Raya for the academic year 2020/2021 with a total of 98 students. If the number of respondents is less than 100, all samples are taken so that the research is a population study.

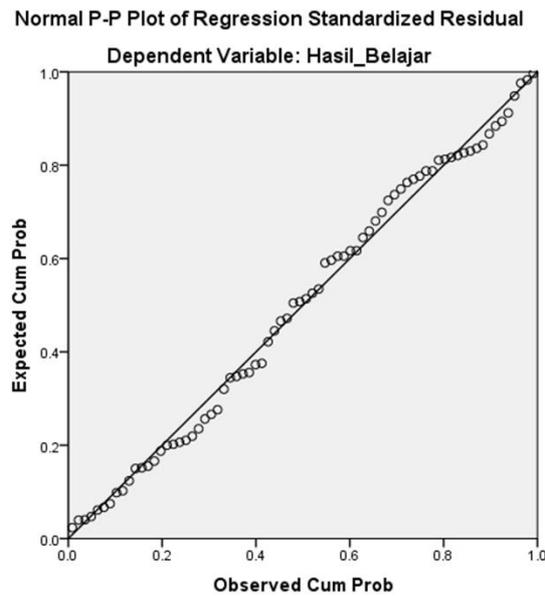
Meanwhile, if the number of respondents is more than 100, then the sampling is 10% - 15% or 20% - 25% or more" (Arikunto, 2012: 112). Based on Arikunto's opinion, the sample of this study was class X and XI, while class XII was not used as a research sample because they were preparing to take the exam. So the sample of this study was 74 students. Data collection techniques used questionnaires and documentation. Data analysis technique using regression test.

Results

Classical Assumption Test

1. Test Normality

To determine whether the dependent variable (dependent) and independent (free) both have a normal distribution, near normal or can't be viewed using the normal curve p-plot can be seen in the image below.



The results of the SPSS program processing in the image above can be explained that the data can be said to be normal because the data points are spread around the diagonal line and the distribution of data points is in the same direction following the diagonal line, so it can be said that the data in this study is normally distributed. Therefore statistical testing can be carried out on research to test hypotheses.

2. Linearity Test

Based on the results of the linearity test conducted through the program SPSS, the following results were obtained

Table 1. Test Linieritas

			Sum of Squares	df	Mean Square	F	Sig.
Hasil_Belajar	Between	(Combined	4427.74	35	126.507	7.875	.000
*	n)		8			
Aplikasi_Skype	Groups	Linearity	3784.69	1	3784.69	235.608	.000
		Deviation from	643.054	34	18.913	1.177	.311
		Linearity					
	Within Groups		610.414	38	16.064		
	Total		5038.16	73			
				2			

From the output above, it can be seen that the significance value (P Value Sig.) in the line is Linearity 0.000. Because the significance is less than 0.05, it can be concluded that between the use E-Learning of application based Skype there is a linear relationship (X) and learning outcomes (Y).

Data Analyze

Hypothesis testing is intended to test the significance of the effect of the independent variables, namely between the use E-Learning of application based Skype (X) on student learning outcomes (Y). The t test is a test to show the effect of the independent variables in the model on the dependent variable. This is intended to determine how far the influence of the independent variable in explaining the dependent variable. To show the effect of the independent variable on the dependent variable.

Based on the results of the calculation of the effect of using -E-Learning application based Skype on learning outcomes, the regression coefficient value is 0.719. At the significance level, it 5% can be seen that tcount is 14,744 with a significance value of 0.000 because the regression coefficient has a positive value and a significance value (p) <0.05, the hypothesis that reads "There is an effect of using E-Learning application based Skype on student learning outcomes at SMK YPSEI Palangka Raya for the academic year 2020/2021" was accepted. Which means that the better the use -E-Learning of application based Skype, the higher the learning outcomes of students at SMK YPSEI Palangka Raya for the 2020/2021 school year.

Discussion

The results of data processing related to the effect of using -E-Learning application based Skype on learning outcomes obtained a regression equation $Y = 33.201 + 0.719 X$ with a significance level of tcount (0.000 <0.05). This indicates that there is a significant effect between the variables of using -E-Learning application based Skype (X) on learning outcomes (Y).

Based on the information above, the findings from this study indicate that there is a positive and significant effect on the use -E-Learning of application based Skype on student learning outcomes at SMK YPSEI Palangka Raya for the academic year 2020/2021. This means that there has been an increase in student learning outcomes at SMK YPSEI Palangka Raya for the 2020/2021 academic year due to the variable use -E-Learning of application based Skype.

Conclusion

Based on data analysis and discussion, the conclusion from this research is that there is an effect of using *E-Learning* application based *Skype* on student learning outcomes at SMK YPSEI Palangka Raya for the academic year 2020/2021 with the acquisition of a count of 14,744 and a significance value of 0.000 <0.05. So it can be concluded that the better the use of *E-Learning* based on the application *Skype*, the higher the learning outcomes of students at SMK YPSEI Palangka Raya for the 2020/2021 school year.

References

- Arifin, D. 2020. Pengertian Skype: Fitur, Fungsi, Cara Menggunakan. Diakses pada tanggal 24 Desember 2020 dari <https://dianisa.com/pengertian-skype/>.
- Arikunto, S. 2014. *Prosedur Penelitian Suatu Pendekatan Praktik*. Jakarta: Rineka Cipta.
- Bétranourt, M., & Tversky, B. (2000). Effect of computer animation on users' performance: a review. *Le Travail Humain*, 63 (4), 311-330.
- Chrystanti, Y. C., & Sukadi, S. (2015). Media Pembelajaran Pengenalan Huruf Dan Angka Di Taman Kanak-Kanak Tunas Putra Sumberharjo. *Journal Speed - Sentra Penelitian Engineering Dan Edukasi*, 7(3), 23-29.
- Darmawan, D. 2014. *Pengembangan E-Learning Teori dan Desain*. Bandung: Remaja Rosdakarya.
- Donnelly, R., & Mc Sweeney, F. (2009). *Applied E-Learning and E-Teaching in Higher Education*. Information Science Reference. Hersey: New York
- Hameed, S., Badii, A. & Cullen, A.J. (2008). *Effective E-Learning Integration with Traditional Learning in a Blended Learning Environment*. European and Mediterranean Conference on Information System. May 25-26.
- Lee, W. W., & Owens, D. L. (2004). *Multimedia-based instructional design: computer-based training, web-based training, distance broadcast training, performance-based solutions*. John Wiley & Sons.
- McCormick, R., & Scrimshaw, P. (2001). *Information and communications technology, knowledge and pedagogy*. *Education, Communication, and Information*, 1(1), 39-57.
- Kemdikbud. 2016. *Panduan Penggunaan Aplikasi Video Conference Cisco Webex*. Jakarta: Dirjen dikdasmen- Direktorat PSMK.
- Priyatno, D. 2016. *Belajar Mudah Internet; Browsing, Download-Upload, E-Mail, Chatting, Mailing List, Friendster, Blog, dan Facebook*. Yogyakarta: Media Kom.
- Suprihatiningrum, J. 2016. *Strategi Pembelajaran*. Jogjakarta: Ar-Ruzz Media.