

The Effect of the Use of the Independent Teaching Platform on the Mastery of Information Technology of Classroom Teachers in the Implementation of the Independent Curriculum of Elementary School Segugus 5 Trihanggo Sleman

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ABSTRACT

This study aims to determine the Effect of the Use of the Independent Teaching Platform (ITP) on the Mastery of Classroom Teachers' Information Technology in the Implementation of the Independent Curriculum of Elementary Schools Segugus 5 Trihanggo Sleman. In the current era of globalization, the use of technology-based platforms has become one of the factors that is considered to improve the quality of education and learning in schools through the advancement of Information Technology. The method used in this study is quantitative with a survey approach. The sample of this study consists of 33 classroom teachers at Segugus 5 Elementary School Trihanggo Sleman who have used or have accessed the Independent Teaching Platform (ITP) for the purpose of classroom learning. The data in this study was collected through observations, interviews and also questionnaires related to the use of the Independent Teaching Platform (ITP) on the mastery of Information Technology for Elementary School Classroom Teachers in Segugus 5 Trihanggo. The data in this study was analyzed using a simple linear regression statistical test, a correlation test, and a determination coefficient test. The results of the study showed that the use of the Independent Teaching Platform (ITP) could affect the mastery of information technology for teachers in group 5 of Trihanggo by 45.1%. It is hoped that these findings can be a reference for the development of education in the digital era and support the implementation of the independent curriculum through the use of the Independent Teaching Platform (ITP) more effectively.

Keywords: *Independent Teaching Platform (ITP), Mastery of Information Technology, Education, Classroom Teachers.*

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INTRODUCTION

Information technology is an important aspect of modern life that plays a role in the process of storing, processing, and disseminating information. According to Ahmad *et al.*, (2020) Information technology is a set of tools that allow humans to work with information and complete various tasks related to data processing. In the context of globalization, information technology not only facilitates human life, but also becomes an indicator of the progress of a civilization.

The development of information technology has also brought significant changes in the world of education. Nabil (2020), states that the advancement of information technology is the result of human engineering that is carried out consciously to overcome the limitations of ability to meet various needs, including in education. One form of implementation is through the Independent Teaching Platform, which is designed to support teachers in the implementation of the Independent Curriculum by providing materials, training, and space to share good practices.

Although this platform aims to improve teacher competence, its implementation in the field still faces various obstacles. Research Anwar & Utami (2023), shows that around 66.9% of teachers have not graduated or have not received a real action certificate on the Independent Teaching Platform because they have not met the standards set by the Ministry of Education.

This shows that there are still many teachers who are not technologically ready to optimize the use of the platform in the learning process.

In the Trihanggo Sleman cluster 5 area, this condition can also be seen from the observation results that show that 6 out of 10 classroom teachers have difficulties in accessing and operating information technology. These difficulties include the manufacture of digital teaching materials, the operation of computer devices, and unstable internet connections. This situation shows the need for intensive training so that teachers can make the most of the Independent Teaching Platform in the learning process.

The Independent Teaching Platform (ITP) is very important in the current education context because it functions as a strategic innovation that supports the improvement of teachers' competence and professionalism in the digital era. By providing various learning materials, training, and a space to share good practices, ITP is expected to be able to strengthen teachers' ability to integrate information technology into the learning process, so that learning becomes more interesting, interactive, and in accordance with the times. In addition, the existence of this platform is also a solution in overcoming various obstacles faced during the pandemic and post-pandemic, such as limited access to learning resources and lack of technology training. Therefore, the successful implementation of ITP is crucial in improving the quality of education, expanding access to learning, and preparing teachers to be able to face learning challenges in the rapidly growing digital era.

Based on these problems, this study aims to examine the extent to which the use of the Independent Teaching Platform affects the mastery of information technology of elementary school teachers. This research is important to provide a clearer picture of the effectiveness of the implementation of the platform, as well as to be an evaluation material in the formulation of teacher competency development policies. Thus, it is hoped that teachers can be better prepared to face learning challenges in the digital era.

METHOD

This study uses a quantitative research method with survey data. Quantitative research methods are research methods that collect and analyze data using numbers and statistics. Abdullah et al. (2022), in Sofia et al. (2024), state that quantitative research is a form of systematic scientific research on parts and phenomena and the causality of their relationships. The research used a saturated sample technique, namely all classroom teachers at SD Segugu 5 Trihanggo itself. The number of samples in this study is 33 classroom teachers.

The data obtained in this study will be analyzed using descriptive and inferential statistical techniques. Descriptive statistics are used to describe respondent characteristics and data distribution. Data analysis is carried out with the help of statistical software such as SPSS 27 for Windows. The data in this study were analyzed using a simple linear regression test, a correlation test, and a determination coefficient test.

FINDINGS AND DISCUSSION

This section presents the main findings of the research that has been conducted. The data obtained was then systematically analyzed using SPSS 27 for Windows to answer the research questions and test the hypotheses that had been formulated. The presentation of the results of this research is described as follows:

Table 1. Simple Linear Regression Test Results

ANOVA					
Model	Sum of Squares	df	Mean Square	F	Itself.
1 Regression	320.391	1	320.391	28.016	.000b
Residual	354.518	31	11.436		
Total	674.909	32			

a. Dependent Variable: IT
b. Predictors: (Constant), ITP

As is known, a data is said to be linear or has an influence if the significance value is < 0.05 . Based on the SPSS data in the table above, it is shown that the significance value is .000 ($.000 < 0.05$) which means that the use of the Independent Teaching Platform affects the Mastery of Information Technology for Grade 5 Trihanggo Teachers.

Table 2. Correlation Test Results

Correlations		ITP	IT
ITP	Pearson Correlation	1	.689**
	Sig. (2-tailed)		.000
	N	33	33
IT	Pearson Correlation	.689**	1
	Sig. (2-tailed)	.000	
	N	33	33

** . Correlation is significant at the 0.01 level (2-tailed).

Based on the table above, it can be seen that the significance value of variables X and Y is .000 ($.000 < 0.05$) which means that the two variables are correlated or have a conjunction. The table also shows that the Pearson Correlation value of variables X and Y is 0.689, indicating that the two variables have a strong relationship in the positive category.

Table 3. Determination Coefficient Test Results

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.689a	.475	.458	3.382	

a. Predictors: (Constant), ITP

Based on the table above, the R value is 0.689 while the R Square value is 0.475. So it can be concluded that the use of the Independent Teaching Platform can affect the Mastery of Information Technology of Trihanggo Class 5 Teachers by 47.5% and the remaining 52.05% is influenced by other factors.

In this study, the researcher used an instrument in the form of a questionnaire as the main tool to collect the necessary data from the respondents. The questionnaire was compiled based on indicators relevant to research variables related to the use of the Independent Teaching Platform (ITP) by elementary school teachers. The number of statements in the questionnaire used as an instrument was 22 items, which were designed in the form of a Likert scale with a scale of very agreeing (5), agreeing (4), sometimes (3), disagreeing (2), and strongly disagreeing (1) to measure the level of perception, understanding, and involvement of teachers in the use of the Independent Teaching Platform (ITP). This questionnaire was distributed to 33 respondents who are classroom teachers in elementary schools who are members of Trihanggo Group 5, who have participated in and used the Independent Teaching Platform (ITP) in schools.

The results of the correlation test showed that the significance value was $0.000 < 0.05$ which means that H1 was accepted or there was an influence between Classroom Teacher Information Technology in the Implementation of the Independent Curriculum of Elementary School Segugus 5 Trihanggo Sleman. Based on SPSS data in a simple linear regression test table, it is shown that the significance value is .000 ($.000 < 0.05$) which means that the use of the Independent Teaching Platform affects the Mastery of Information Technology for Grade 5 Trihanggo Teachers. In addition, the R value of the determination test results is 0.689 while the R Square value is 0.475. So it can be concluded that the use of the Independent Teaching Platform can affect the Mastery of Information Technology for Grade 5 Trihanggo Grade 5 teachers by 47.5% and the remaining 52.05% is influenced by other factors.

Information Technology is everything that is synonymous with computers and is related to the system of compiling, storing, processing, and transferring data related to the dissemination of information in a relevant and accurate manner. Information technology according to Cholik (2021) is a form of technology used to process data, including processing, obtaining, compiling, storing, manipulating data in various ways. The existence of information technology basically refers to its various useful capabilities.

In line with its meaning, information technology also has its own essence. By Simanjuntak *et al.*, (2020) said that the essence of information technology is as a driving tool for the progress of the nation. Information technology is a foundation that bridges society to a developed nation. With information technology, people can navigate the development of the century with the help of various access frameworks available.

Information technology as a body of science certainly has varied functions and uses. Explained by B.Uno & Lamatenggo (2010) In the book entitled Communication Technology and Learning Technology, information technology can function in improving quality and reach if used wisely for education and training, and has a very important meaning for economic welfare.

Mastery of information technology is an ability possessed by an individual in mastering, understanding, using and utilizing every available information technology. This statement is supported by the opinion of the Hilardi *et al.*, (2022) which states that the mastery of information technology is the ability or skill of a person in using information technology to acquire, process, store, and disseminate information effectively and efficiently.

To find out the measure of a person's mastery of information technology, an indicator is needed. From several studies that have been conducted previously, it is known that there are forms of indicators of information technology mastery itself. According to Siregar (2019) in Umaroh & Bahtiar (2022), In a research journal entitled The Influence of School Field Introduction (PLP), Mastery of Information Technology, and Mastery of Accounting Materials on Students' Readiness to Become Accounting Teachers in the Era of the Industrial Revolution 4.0, five forms of information technology mastery are explained, namely the intensity of information technology, the availability of experts, investment in technology, the ease of exchanging information, and the ease of access to cooperation.

The development of Information Technology has a great influence on the change in all aspects of people's lives, ranging from education, business, health, and so on. Technological developments according to Bimantoro *et al.*, (2021) has taken over the boundaries between each other so that ethics have become backward. The existence of technology seems to have taken away people's view of ethics, and they seem to be thirsty for technology. The many changes caused by the development of information technology also have a significant impact on human life.

The development of information technology has had a positive impact on human life. One of the positive impacts of the development of information technology is that information technology can simplify various aspects of human life. Syujak (2023) argues that information technology has very big benefits, including accelerating the flow of information, making it easier to find information, social media and so many other benefits. This means that the existence of information technology is very helpful for the community in finding a fact.

On the other hand, there is a positive impact on the development of information technology, there is also a negative impact of the development of this technology. The negative impact of information technology development can be caused by the use of inappropriate technology components. Currently, there are many applications as a branch of information technology in various forms and versions. Explained by Munti & Syaifuddin (2020) That there are 4 negative impacts of the use of information and communication technology on social aspects and life patterns, namely, delinquency and deviant acts among adolescents by accessing pornographic sites, and individuals who use other social media. These things are one of the factors causing the increase in domestic crime rates.

The Merdeka Mengajar Platform (ITP) is one of the modern platforms that utilizes technological developments as its main object. The Merdeka Teaching Platform provides an opportunity for educators to get to know more about the information technology system. Deep (Qathrunnida *et al.*, 2024) explained the definition of the Independent Teaching Platform, which is an educational platform that is made to support the implementation of the independent curriculum quickly and is expected to be able to be a means of development for teachers in teaching, learning, and working to develop their competencies. The use of

technological developments in the independent teaching platform provides opportunities for educators to learn to develop every competency they have anytime and anywhere.

The Merdeka Mengajar Platform is an educational forum that acts as a partner presented to support educators in realizing Pancasila Students (Elpin *et al.*, 2024). This Independent Teaching Platform is provided to strive for the competencies possessed by a teacher in order to provide learning according to the required competencies. The Independent Teaching Platform provides various features that can assist teachers in understanding, implementing, and developing the Independent Curriculum.

CONCLUSIONS

Through various forms of studies that have been carried out, it is known that the use of the Independent Teaching Platform (ITP) can affect the mastery of information technology for teachers in group 5 of Trihanggo. This is proven by the results of the coefficient test showing that the significance value is $0.000 < 0.05$ which means that there is a rejection of H_0 . In addition, it was also shown in the results of the determination coefficient test that the R Square value was 0.475 which means that the use of the Independent Teaching Platform (ITP) affected the mastery of information technology for teachers in group 5 of Trihanggo by 47.5%, while the remaining 52.05% was influenced by other factors outside the use of ITP.

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