

The Influence of Information Technology Utilization and Classroom Supervision on Teacher Performance at SMA Negeri 1 Lempuing OKI

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ABSTRACT

This study aims to determine how information technology and class supervision affect teacher performance at SMA Negeri 1 Lempuing, Ogan Komering Ilir Regency. To achieve this goal, research was carried out using descriptive quantitative methods; the population and sample consisted of 54 teachers, and the technique of collecting data was using documentation and questionnaires. The operational definition of the variables of information technology utilization (X_1), class supervision (X_2), and teacher performance at SMA Negeri 1 Lempuing OKI (Y). Based on the research that has been done, the results show that (1) there is a positive and significant influence on the use of information technology on teacher performance or the t -value $>$ t -table. It means that the H_{a1} is accepted and H_{o1} rejected; (2) there is a positive influence and significant classroom supervision on teacher performance because of the t -value $>$ t -table. In other word, H_{a2} is accepted H_{o2} is rejected; and (3) there is a positive and significant influence on the use of information technology and class supervision together on teacher performance because the F -value $>$ F -table which means that H_{a3} is accepted and H_{o3} is rejected.

Keywords: Information Technology; Class Supervision; Teacher Performance.

INTRODUCTION

The world of education demands teachers to be " at the forefront in mastering technology as a form of acceleration that absolutely must be met." and transfer it to the next generation. This is to avoid the gap that is too wide between the teacher's knowledge and students' knowledge. The teacher, who was originally a source of scientific information, has now shifted his position to become a facilitator who must be able to bridge the gap between technological developments and students. This shift in function should motivate teachers to continue learning to develop their potential so that the delivery of knowledge in the teaching and learning process in the classroom becomes something students no longer find boring.

Based on the learning principles in the 2013 curriculum, teachers must change their old teaching habits in front of the class. In line with what is expected in *Science educators in Kenyan*, the use of information technology can substantially assist teachers in developing efficient and effective learning because findings from developed countries have shown the ability of information technology to increase students' scientific knowledge (Odera, 2011) ". However, the reality conveyed by Destiana (2014) to aligning technological advances and teacher quality is still difficult to do because most teachers are still accustomed to the old methods in the learning process, namely the content-oriented lecture method to complete the material, even though schools already have facilities and infrastructure to support information technology-based learning such as computer laboratories, *LCD projectors* and internet access.

Husain (2014) argues that we still have some problems in today's education. In this study, from the initial observations, the problem is the source of Power is still the dominant problem for teachers at SMA Negeri 1 Lempuing OKI. There is a difference in the ability to use information technology in the teaching and learning process among older teachers. Of course, differences in the ability of teachers to use information technology give rise to the phenomenon of unequal levels of teacher achievement.

This research is also based on the findings of Renata , Wardiah and Kristiawan (2018) in Palembang, which state (1) there is an influence of school principal supervision on teacher effectiveness, (2) there is an effect of achievement motivation on teacher effectiveness, (3) there is an influence of head supervision school and achievement motivation on teacher effectiveness. The results of Khun et al.'s research in Kedah (2019) show a significant influence between the dimensions of knowledge and technical skills and teachers' attitudes towards supervision, while the dimensions of interpersonal skills do not significantly affect teacher attitudes.

Once again, the ability to use information technology resources in education today is needed. *An agency at Unesco (Institute for Statistics)* recognizes that information technology has an important role in expanding access, eliminating exclusion and improving the quality of education (UNESCO, 2014: 6)". According to Masong (2012: 5), to realize good teaching performance for teachers, supervision activities must be carried out as an effort to provide assistance and services to improve the quality of teachers teaching in the classroom as a form of developing the potential and quality of teachers. Improving the quality of learning and the professionalism of teachers in their performance is very closely related to the effectiveness of supervision services.

In ensuring the quality of education, the principal becomes the instructional leader in maintaining and improving the quality of effective and efficient learning, as Egwu (2015:99) said. With the supervision carried out by the principal, later, he can evaluate what the teacher has done and what needs to be improved. It will be related

to teacher competence. Or in other words, teachers and principals will evaluate deficiencies and which things need to be fixed from the supervision results. In the end, this will affect the competence of the teacher itself.

Teacher competence is important as " Teachers' ability and authority in carrying out their profession, while professionalism means special qualities and behaviors that characterize professional teachers, teachers are also expected to be able to carry out teaching and learning activities which are integral and reciprocal between teachers and students in instructional situations (Zahroh, 2015: 73) ". Under the Law of the Republic of Indonesia No. 20 of 2003, concerning the National Education System, " the position of a teacher as an educator is a professional position. Teacher professionalism is required to continue to develop according to the changing times, science and technology. In carrying out their duties, teachers where teaching is considered a professional job, so teachers are required to be professional in carrying out their international duties (Sani, 2017:20-21) ".

Teachers must be able to compete and work professionally. Teacher competence is the ability and authority of teachers in carrying out their profession, while professionalism means special qualities and behaviors that are characteristic of professional teachers; teachers are also expected to be able to carry out teaching and learning activities that are integral and reciprocal between teachers and students in instructional situations. In this situation, the teacher teaches, and students learn (Zahroh, 2015:33). Teacher performance represents all the efforts of a teacher to carry out the learning process to achieve educational goals. Teacher performance includes all activities related to the teacher's professional duties and personal development tasks. The duties of a teacher include a variety of assessment activities. In addition, starting from learning, implementing, assessing, and planning follow-up, teachers must understand educational insights and students' understanding and develop students' potential. Based on the description above, it is interesting and important to do this research to know the effect of information technology and class supervision on teacher performance at SMA Negeri 1 Lempuing OKI.

LITERATURE REVIEWS

Previous Research

Handayani, Lian, and Rohana (2021) conducted similar research titled *Principal's Leadership Style*". Then, Susanti, Lian and Wardiah (2020) also conducted research titled *The Effect of Principal Academic Supervision and School Culture on Teacher Teaching Quality*. From this study, it was concluded that there was a positive and significant effect of the principal's academic supervision variable on the quality of teaching teachers; b) there is a positive and significant influence of school culture variables on teacher teaching quality; and c) there is an influence of the principal's academic supervision and school culture on the quality of teaching.

Kartini, Kristiawan, and Fitria (2020) researched teacher performance in Banyuasin entitled, *The Influence of Principal Leadership, Academic Supervision, and Professional Competence on Teacher Performance*. The results of the study stated there is a significant influence between the principal's leadership and teacher performance; 2) there is a significant influence between academic supervision and teacher performance; 3) there is a significant influence between professional competence and teacher performance; 4) there is a significant influence between the principal's leadership, academic supervision, and professional competence simultaneously on teachers; show ”.

Teacher Performance

Teacher performance evaluation aims to obtain qualified, highly qualified and professional teachers. An ideal teacher with these characteristics *is not* produced in a certain coaching or training period but requires continuous and continuous effort (*Continuous Quality Improvement*). Concerning teacher performance which is the focus of this study, these indicators are relevant to Law No. 14 of 2005 concerning Teachers and Lecturers that teacher performance includes pedagogical, personality, social and professional competencies. Teacher performance results from the maximum work the teacher does to carry out the mandate entrusted on his shoulders with good and correct results. Performance is related to competence owned by the teacher, meaning that to have good performance, the teacher must also be supported with good competence. A teacher must be competent to perform well (Suprihatiningrum, 2013: 136). Included in utilizing technology or media in learning activities by teachers.

In learning activities, using information technology can spur (stimulate) trigger (grow) learning (Hamzah, 2011: 27). This utilization, according to Thompson in Rahmawati (2015: 109) to measure the use of information technology in learning requires three things: 1) intensity of utilization, 2) frequency of utilization, 3) the number of applications/ *software* used. This utilization can also be a reference as an assessment in supervision by the school's principal to the teacher. The purpose of the principal's supervision activities is to evaluate teacher performance (Priansa and Somad, 2014:84) " . In carrying out classroom observation supervision activities, in general, the aspects that are observed, according to Lantip and Sudiyono, 2011: 104) are as follows: a) Efforts and activities of teachers and students in the learning process, b) How to use teaching media, c) Method variations, d) The accuracy of using media with material, d) The accuracy of using methods with material, e) The mental reactions of students in the teaching and learning process " .

METHOD

Design and Sample

This research was conducted at SMA Negeri 1 Lempuing, Ogan Komering Ilir Regency (OKI), in September–December 2021 using a quantitative descriptive method (Arikunto, 201 6:327). The population and sample in the study were 54

teachers at SMA Negeri 1 Lempuing OKI.

Instrument and Procedure

Data collection techniques in this study used documentation techniques (Usman, 2011:69) and questionnaires/questionnaires (Sugiono, 2014: 142). The questionnaire used in this study was a questionnaire that was compiled based on an operational framework that was developed from aspects and indicators related to principal leadership, teacher motivation and teacher performance. The distribution of questionnaires in this study with a *Likert scale of 5* alternative answers was used to obtain data regarding the use of Information Technology, Class Supervision and Teacher Performance of SMA Negeri 1 Lempuing OKI ".

There are three operational definitions of the variables that will be presented, namely the operational definitions of information technology utilization variables (X_1), class supervision (X_2), and teacher performance at SMA Negeri 1 Lempuing OKI (Y). To obtain this data, a research instrument was used with the following grid:

Table 1. Grid Instrument variables Utilization of Information Technology, Class Supervision and Teacher Performance

No	Variable	Indicator
1.	Utilization of Information Technology (Thompson in Rahmawati (2015:109) modified)	<ul style="list-style-type: none"> • Computer operation • Application software • Internet skills
2.	Class Supervision (Suprihatiningrum, 2013:145)	<ul style="list-style-type: none"> • Planning a learning system (learning planning). • Implement the learning system (implementation of learning). • Learning evaluation • Have discipline in teaching • Fostering good relations with others
3.	Teacher Performance Uno and Lamatenggo (2012)	<ul style="list-style-type: none"> • Work quality, • work speed/accuracy • initiative at work • workability, • communication.

Data Analysis

Management of research data was carried out by utilizing the SPSS version 21 application, including (1) descriptive analysis, (2) analysis requirements test, and (3) hypothesis testing.

RESULT AND DISCUSSION

The Utilization of Information Technology Variable Data Description

A description of the variable value Utilization of Information Technology (X_1) can be seen in the table below.

Table 2. Descriptive Utilization Statistics Information Technology Statistics

X1		
N	Valid	54
	missing	0
Means		85,81
std. Error of Means		,695
Median		87.00
Mode		87
std. Deviation		5,110
Variances		26,116
Skewness		-,128
std. Error of Skewness		,325
kurtosis		-.549
std. Error of Kurtosis		,639
Range		21
Minimum		75
Maximum		96
sum		4634

Source: Data processed by SPSS, 202 1

In Table 2 above, it is explained that "the effect of Utilization of Information Technology on Teacher Performance can be seen from the average value (mean) reaching 85.81 , the median value (median) 87.00 , the standard deviation value of 5.110 the value of the tendency to appear (modus) 87 the minimum score is 75 and the maximum score is 9 6. To find out more clearly the descriptive statistical data on the variable utilization of information technology can be seen in (appendix)".

Class Supervision Data Description

The description of Class Supervision variable values (X_2) can be seen in the table below.

Table 3. Class Supervision Statistical Description Statistics

X 2		
N	Valid	54
	missing	0
Means		86,63

std. Error of Means	,688
Median	87.00
Mode	87
std. Deviation	5,059
Variances	25,596
Skewness	-,223
std. Error of Skewness	,325
kurtosis	-,213
std. Error of Kurtosis	,639
Range	23
Minimum	74
Maximum	97
sum	4678

Source: Data processed by SPSS, 202 1

In Table 3 above, it is explained that "the effect of Class Supervision on Teacher Performance can be seen from the average value (mean) reaching 86.63 , the median value (median) 87.00 , the standard deviation value of 5.059, the tendency value to appear (modus) 87 the minimum value is 74 and the maximum value is 97 . To find out more clearly the descriptive statistical data of the Class Supervision variable can be seen in (appendix)".

Teacher Performance Variable Data

Description of value of the Teacher Performance variable (Y) can be seen in the table below.

Table 4. Statistical Description of Teacher Performance Statistics

Y		
N	Valid	
	missing	0
Means		83.35
std. Error of Means		,689
Median		83.50
Mode		86
std. Deviation		5,066
Variances		25,666
Skewness		-.085
std. Error of Skewness		,325
kurtosis		,304
std. Error of Kurtosis		,639
Range		27
Minimum		70
Maximum		97
sum		4501

Source: Data processed by SPSS, 2021

In Table 4 above, it is explained that "the effect of performance can be seen from the average value (mean) reaching 83.35 , the median value (median) 83.50, the standard deviation value of 5.066 , the value of the tendency to appear (mode), 86, the minimum value, 70 and the value max 97 . To find out more clearly the descriptive statistical data on the Teacher Performance variable can be seen in (appendix)".

The Effect of Principal Supervision on Teacher Performance

The study's results indicate that " the use of information technology has a positive and significant effect on teacher performance. The results of this study support the hypothesis that information technology has a positive and significant effect on teacher performance. Based on the results of the calculation of the regression equation data, which is guided by the correlation coefficient table, it can be explained that if the variable value of information technology utilization increases by 1 unit score, the teacher's performance will increase by 0.565 then 1 unit score provided that the value of information technology utilization is constant. Then whether there is a positive and significant influence between the use of information technology on teacher performance can be seen in the value contained in the table of 4.940 and score of t-table of 1.697. In other words $t_{value} > t_{tabel}$ which means H_{a1} accepted H_{o1} is rejected. It shows that there is a positive and significant influence on the use of technology information on teacher performance".

This research is supported by the findings of Erwin, Arafat, and Wardiah (2021) entitled "Utilization of Information and Communications Technology as Learning Resources in the Digital Age." The results obtained from the research stated that "ICT has many impacts on the development of the learning process. The impacts generated by ICT are not only positive but there are also negative impacts. However, in this study, one of the positive impacts of ICT is becoming a learning resource in the digital age. ICT in learning can optimize lifelong learning through distance and an asynchronous mode where students can communicate independently at different times whenever they are online and close to the professional isolation space experienced in learning.

Next that supports the results of this study are the results of the study by Desmaniar, Harapan, and Kesumawati (2020) entitled "The Influence of the Use of Information Technology and Interpersonal Communication on Student Learning Outcomes. " Based on the results of the study, it can be concluded that: " 1) The use of information technology affects the science learning outcomes of class IX students of SMP Negeri Indralaya Selatan for the academic year 2019/2020, (2) interpersonal communication affects the learning outcomes of science learning outcomes for class IX students of SMP Negeri Indralaya Selatan for the academic year 2019/2020, and (3) The the use of information technology and interpersonal communication together affects the science learning outcomes of class IX students of SMP Negeri Indralaya Selatan for the 2019/2020 academic year ".

Then what supports these findings is Wimartono's research (2016) entitled "Analysis of the Influence of information technology on the teaching profession." This study aims to determine the effect of using information technology on the teaching profession in Kebumen Regency. Through linear regression calculations, this study reveals that " the factors that were determined influenced teachers in using them in their professional duties as teachers. This study analyzes the influence of information technology on the teaching profession. Thus, my research differs from the variable influenced by information technology and teacher performance, whereas previous research was on the teaching profession.

Furthermore, the results of this study are supported by the findings of Destiana (2014) entitled "Determinant factors for the use of ICT and their influence on the performance of vocational schoolteachers in Gunung Kidul Regency" one of the objectives of this study is to find out the effect of ICT utilization on teacher performance. The study's results stated that using ICT affected teacher performance. Furthermore, the results of Wimartono's research (2016) entitled "Analysis of the Influence of information technology on the teaching profession." This study aims to determine the effect of using information technology on the teaching profession in Kebumen Regency. Through linear regression calculations, this study reveals that "the specified factors influence teachers in using them in their professional duties as teachers. This study analyzes the influence of information technology on professional teachers. Thus, the difference with my research lies in the variable that is influenced using information technology, namely teacher performance, whereas previous research was the teaching profession.

Effect of Class Supervision on Teacher Performance

The study results show that classroom supervision has a positive and significant effect on teacher performance. The results of this study support the proposed hypothesis that classroom supervision has a positive and significant effect on teacher performance. Based on the results per calculation of the regression equation data, which is guided by the correlation coefficient table, it can be explained that if the value of the class supervision variable increases by 1 unit score, the teacher's performance will increase by 0.555, then 1 unit score with the provisions of the class supervision value. Then whether there is a positive and significant influence between class supervision on teacher performance can be seen in the value t_{hitung} contained in the table of 4.812 and a value is 1.697. In other words, $t\text{-value} < t\text{-table}$ which means H_{a2} accepted and H_{o2} rejected. It shows a positive and significant effect of classroom supervision on teacher performance.

This study's results align with the results of previous findings by Handayani, Lian and Rohana (2021) entitled "Teacher Performance Judging from the Influence of Organizational Culture and Principal's Leadership Style." The research results show that;" 1) There is a positive and significant influence of organizational culture on teacher performance; 2) There is a positive and significant influence between leadership style and teacher performance; 3) There is a simultaneous influence

between organizational culture and the principal's leadership style on teacher performance.

This research is in line with the results of previous research by Susanti, Lian and Wardiah (2020), which states that: "a) there is a positive and significant effect of the school principal's academic supervision variable on the quality of teaching teachers; b) there is a positive and significant influence of school culture variables on teacher teaching quality; and c) there is an influence of the principal's academic supervision and school culture on the quality of teaching. The difference between previous research and this research lies in the sample criteria and theoretical indicators developed, the criteria for research locations and the data analysis techniques used. Meanwhile, the similarities are that they both examine the supervision of school principals as an independent variable (X1).

Next, the findings of Pahlawanti, Harapan and Wardiah (2020) in Prabumulih show that " 1) There is a significant influence of principal school supervision on the quality of education in public junior high schools in West Prabumulih Regency; 2) There is a significant influence of School Committee Participation on the Education Quality of State Junior High Schools in West Prabumulih Regency; 3) There is a significant influence between the supervision of the principal and the participation of the school committee jointly on the quality of education in public junior high schools in Prabumulih Barat district. The difference between previous research and this research lies in the sample criteria and theoretical indicators developed, the criteria for research locations and the data analysis techniques used. While the similarity is that they both examine the supervision of school principals as an independent variable (X1)".

Then the results of this study are also supported by the research results of Aripin, Arafat and Fitria (2020) in Palembang, which state there is an influence on teacher performance; 2) there is an effect of the supervision of the principal on teacher performance, and there is an effect of certification and supervision simultaneously on teacher performance". The difference between previous research and this research lies in the sample criteria and theoretical indicators developed and the criteria for research locations and data analysis techniques. In comparison, the similarities are that they examine the supervision of the school principal as the *independent variable* (X1) and teacher performance as the *dependent variable* (Y). Furthermore, what supports this research is the findings of Kartini, Kristiawan and Fitria (2020) in Banyuasin entitled, The Influence of Principal Leadership, Academic Supervision, and Professional Competence on Teacher Performance.

The results of the study state that 1) there is a significant influence between the principal's leadership and teacher performance; 2) there is a significant effect between academic supervision and teacher performance; 3) there is a significant effect between professional competence and teacher performance; 4) there is a significant effect between head leadership school, academic supervision, and professional competence simultaneously for teachers show.

The Influence of Using Information Technology and Classroom Supervision Together on Teacher Performance

The study results show that the use of information technology and class supervision positively and significantly affect teacher performance. The results of this study support the proposed hypothesis that the use of information technology and classroom supervision has a positive and significant effect on teacher performance. It can be seen from the F-value is 11.996 and the value of F-table is 3.320, which means that that the value is H_{a3} accepted and vice versa, H_{o3} is rejected. It means there is a positive and significant influence on teacher performance between information technology utilization and class supervision variables.

The research results are supported by the findings of Arijino et al. (2016) in Blitar. The study results show that "academic supervision and work motivation have a significant positive effect on teacher performance. The calculation shows the results of the estimation of the principal's supervision variable with a probability of 0.038, while the estimation results of the principal's motivation variable with a probability of 0.046. The difference between previous research and this research lies in the sample criteria and theoretical indicators developed and the criteria for research locations and data analysis techniques. While the similarities are that both examine supervision as the independent variable (X1), motivation as the independent variable (X2) and teacher performance as the dependent variable (Y)".

Next, the results of this study are supported by Riastuti's research (2017) in Salatiga. The estimation of the principal's motivation variable with a probability of 0.046. The difference between previous research and this research lies in the sample criteria and theoretical indicators developed and the criteria for research locations and data analysis techniques. While the similarities are that both examine supervision as the independent variable (X1), motivation as the independent variable (X2) and teacher performance as the dependent variable (Y)".

The difference between previous research and this research lies in the sample criteria and theoretical indicators developed and the criteria for research locations and data analysis techniques. Meanwhile, the similarities are that they examine school principal supervision as an independent variable (X1) and motivation as an independent variable. (X2) and teacher performance as the dependent variable (Y), there is a significant positive effect on academic supervision and work motivation jointly on teacher performance. The calculations show the results of the estimation of the principal's supervision variable with a probability of 0.038, while the estimation results of the principal's motivation variable with a probability of 0.046. The difference between previous research and this research lies in the sample criteria and theoretical indicators developed and the criteria for research locations and data analysis techniques. At the same time, the similarities are that they both examine supervision as the independent variable (X1), motivation as the independent variable (X2) and teacher performance as the dependent variable (Y).

CONCLUSION

Based on the description of the results and discussion above, it can be concluded that show that (1) there is a positive and significant influence on the use of information technology on teacher performance or the $t\text{-value} > t\text{-table}$. It means that the H_{a1} is accepted and H_{o1} rejected; (2) there is a positive influence and significant classroom supervision on teacher performance because of the $t\text{-value} > t\text{-table}$. In other word, H_{a2} is accepted H_{o2} is rejected; and (3) there is a positive and significant influence on the use of information technology and class supervision together on teacher performance because the $F\text{-value} > F\text{-table}$ which means that H_{a3} is accepted and H_{o3} is rejected.

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