



Information Technology Ability Factors on Educator Performance that Have an Impact on the Quality of Learning in Equality Education

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Keywords

Abstract

Information Technology, Educator Performance, Quality of Learning, Equality Education

Technological advances in the world of ICT implementation from the policies of the organizers, the impact of ICT is sometimes influenced and technological advances. The purpose of the study was to determine the influence of social factors, determine the influence of task suitability factors, determine the influence of long-term consequences, determine the influence of influence factors, to determine the influence of complexity factors in the use of ICT on educator performance, to determine the influence of educator performance on the quality of learning. This study uses a quantitative descriptive approach by knowing how much influence each variable has on social factor dimensions, task suitability factor dimensions, long-term consequence factor dimensions, influence factor dimensions, and complexity factor dimensions. The tests are carried out Multicollinearity Test, Autocorrelation Test, Heteroscedasticity Test, Normality Test. The results of research data that have been analyzed with PLS, show that: (1) The percentage of ICT ability factors for communication is 0.042 or 4.2%, this shows that the greater the ICT ability of educators will be able to improve communication by 4.2%. (2) The amount of ICT ability factor on educator performance is 0.031 or 3.1%. This shows that the greater the ability of ICT capabilities will be able to increase the performance of educators by 3.1%. (3) The magnitude of the influence of communication and ICT on educator performance is $0.042 \times 0.031 = 0.001302 = 0.1302\%$ This shows that it has a fairly small communication variable influence of 0.1302% on performance The Regression equation is: $Y = 0.042 X_1 + 0.001 X_2 + \text{Error}$. (4) The Regression Equation is, $Y = 0.042 X_1 + 0.001 X_2 + \text{Error}$ Research findings show that communication skills and ICT simultaneously affect educator performance, so the quality of learning is increasing.

INTRODUCTION

The use of information technology has been used by humans since ancient times, starting from pre-historical times until now. Humans use technology to communicate because humans have reason and mind (Setiawan, 2018). With his intellect and mind, man wants to get out of trouble, live better, safer and more peacefully. The development of technology occurs because a person uses his intellect and mind to solve every problem he faces, (Arnomo, 2021). Developments in the field of information technology currently have brought very important benefits to the progress of human life. Various kinds of human activities that were previously carried out by them, are now replaced by automatic machine devices, (Ngafifi, 2014). The development of information technology and its benefits can really be felt in human life, it is undeniable that the development of information technology provides welfare to human life, (Budiman, 2017).

Information technology is the main support for the implementation of globalization (Hermawan, et. all, 2019). With the support of information technology, information in any form and for various purposes, can be disseminated easily so that it can quickly influence the perspective and lifestyle to the culture of a nation. The speed of the rapid flow of information floods with us to absorb it with mental filters and critical attitudes. The more sophisticated the support of this technology, the greater the flow of information that can be channeled with global reach and impact, (Harrison, 2010). As a process, globalization takes place through two dimensions, in interactions between nations, namely the dimension of space and the dimension of time. The dimensions of space that can be interpreted as distances are getting closer or narrower while time is getting shorter in interaction and communication on a world scale, (Kivelä, et.al, 2012).

This is certainly inseparable from the support of the rapid pace of technological

development that is increasingly sophisticated, especially Information and Communication Technology (ICT). ICT is a major supporter for the implementation of globalization. With the support of information and communication technology, information in any form and for various interests, can be disseminated easily so that it can quickly influence the perspective and lifestyle to the culture of a nation. The speed of the flow of information that quickly overwhelms us as if it does not give us the opportunity to absorb it with a mental filter and a critical attitude. The more sophisticated the technological support, the greater the flow of information can be channeled with global reach and impact, (Judge, et. al, 2015).

Therefore, so far, the principle of "freedom of information flow" is in the form of a balanced two-way process that can influence each other. In the life of a country, education plays a very important role in ensuring the survival of the state and nation, because education is a vehicle to improve and develop the quality of human resources. Along with the development of information and communication technology, it is time for schools in Indonesia to develop information system-based education to be able to keep up with the changing times, (Shofiyyah, 2019). The development of information technology in recent years has developed at a very high speed, so that with this development it has changed the paradigm of society in finding and obtaining information, which is no longer limited to manual information. What needs to be noted from the beginning is that the use of information technology is not the same as automation.

Information technology does not only solve problems by replacing work that has been done manually to become technologically assisted. If the paradigm thinks that is used, then the use of information technology will not bring significant enough changes. Understanding the role that information technology can play or the potential offered by information technology is the initial capital in inductive thinking (Zamani, 2021). Thus, information technology can be exploited to obtain maximum benefits.

In the current era of globalization, Indonesia must be able to improve education by utilizing information technology, so that it is not inferior to other countries. Our country must produce people who are self-spirited and able to compete at the world level. Currently, Indonesia needs people who can think effectively, efficiently, and

productively. This can be realized if we have reliable educators and are able to produce a smart and moral generation of the nation. Educators or educators have a strategic role in the field of education, even other adequate educational resources are often less meaningful if they are not accompanied by adequate quality educators, (Sudarmi, 2015). Education in order to produce quality Human Resources and improve work performance for the organization occupies an important and strategic position. Education is also a conscious effort to foster the potential of Human Resources through teaching activities. Teaching and learning activities in schools involve several components, namely students and educators, learning objectives, lesson content, teaching methods, media, and evaluation. The desired learning objectives are certainly optimal.

This is in line with the purpose of education, which is to prepare students to become members of society who have academic and professional abilities who can apply, develop and or enrich the characteristics of science, technology, and the arts. The capital and technology owned will be more effective, if handled by people who are adequately capable and who moreover have good performance. For this reason, there are several things that need to be considered by educators as educators related to their performance. Indonesia research on indicators that affect the use of ICT has been widely carried out, including examining the factors that affect the use of ICT on the performance of Public Accountants included in the BIG FIVE in Indonesia. The results of his research show that there is a positive and significant relationship between social factors and the use of information technology, while affect has a positive and insignificant relationship with the use of ICT, (Hudayati, 2021).

The results of his research also showed a negative and significant relationship between the long-term consequences and the use of information technology. On the contrary, the complexity, suitability of the tasks, and the conditions that facilitate have a negative and insignificant relationship with the utilization of information technology. Research conducted by Brousseau (2011) there are six factors that affect the use of ICT, namely social factors (social norm), affect, complexity (complexity), job fit, long-term consequences and facilitating conditions. As has been suspected by researchers, the results of the study showed a positive relationship between social factors, affect, task suitability, long-term consequences, and a negative relationship

between complexity and the use of ICT.

The results of the study also showed a negative and weak relationship between conditions that facilitated the use of ICT. Salamah, 2012 conducted a study to predict the impact of individual performance caused by ICT utilization factors and the suitability of tasks-technologies on individual performance but could not prove the positive influence of ICT utilization on individual performance so it did not support TAM (Technology Acceptance Model) which states that ICT utilization can affect performance (Salamah, 2012). educators as a profession in Indonesia are only in a growing level (emerging profession) whose maturity level has not reached that has been achieved by other professions, so educators are said to be half-or semi-professional professions.

Professional work is different from non-professional workers because a profession requires special abilities and skills in carrying out its profession in other words, work of a professional nature is a job that can only be done by those who are especially prepared for it. The professional development of educators must be recognized as a very fundamental and important thing to improve the quality of education. Professional development is the process by which educators and principals learn, improve, and use knowledge, skills, and values appropriately, (Ntombela, 2011). The profession of educator has the task of serving the community in the field of education. The demands of this profession provide optimal services in the field of education to the community. Educators are required to provide professional services to students so that learning goals are achieved. So that an educator who is said to be a professional is a person who has special skills and expertise in the field of education so that he is able to carry out his duties and functions as an educator with maximum ability.

METHODS

This study uses a quantitative descriptive approach by knowing how much influence each variable dimension of social factors, dimensions of task suitability factors, dimensions of long-term consequences factors, dimensions of affect factors, and dimensions of complexity factors. The emphasis of data collection in this study was to provide a list of questions with a questionnaire, while other collection methods were used by the authors as necessary. The determination of scores and categories is based on an interval scale

where each question is scored 1 to 5, using the highest and lowest scores. All questions on the questionnaire are positive questions with alternative answers and scores that have been categorized. In this study, the data collection method used the Likert scale with five levels, namely: a. For strongly disagree answers (STS) are assigned a value = 1 b. For disagree answers (TS) are assigned a value = 2 c. For a neutral answer (N) it is given a value = 3 d. For the answer agree (S) is assigned a value = 4 e. For strongly agreed answers (SS) are assigned a value = 5.

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Regarding the Validity Test and the Reliability of the data is said to be valid, if the questions on the questionnaire are able to reveal something measured by the questionnaire. The question items present in the questionnaire were tested against related factors. A validity test is meant to find out how carefully a test or test performs its sizing function. A measuring instrument is said to be valid if it measures what should be measured or can provide results as expected by the researcher. To test the validity of a data, a validity test is carried out on the questionnaire items. The high and low validity of a questionnaire or questionnaire is calculated using Pearson's Product Moment Correlation method, which is by calculating the correlation between the scores of question items and the total score.

This study calculated the validity of the items analyzed using the SPSS 17 program computer. Reliability is an index number that shows the consistency of a measuring device in measuring the same symptoms. To calculate the reliability is carried out using the Cronbach Alpha coefficient. The instrument for measuring each variable is said to be reliable if the Cronbach Alpha is greater than 0.60.

Feasibility tests using multicollinearity tests are carried out to test whether in the regression model there is a correlation between free (independent) variables. A good regression model should not have correlations between free variables. If free variables correlate with each other, then these variables are not orthogonal. The point of the orthogonal here is a free variable whose correlation value between fellow free variables is equal to zero. The Autocorrelation test aims to test whether in a linear regression model there is a correlation between the disruptor error in the t period and the disruptor error in the $t-1$ (previous) period. One way to detect the presence or absence of autocorrelation is to conduct the Durbin-Watson Test (DW test).

This Heteroscedasticity Test aims to test whether in the regression model there is a variance inequality from the residual of one observation to another. If the variance from one observation to another is fixed, then it is called homoscedasticity or heteroscedasticity does not occur. And if the variance is different than it is called heteroscedasticity. A good regression model is that it is homoscedasticity or does not occur heteroscedasticity. The normality test aims to test a regression model, an independent variable, a dependent variable, or whether both have a normal distribution or not. A good regression model is a normal or near-normal distribution. Normality can be detected by looking at the spread of data (points) on the diagonal axis of the graph or by looking at the histogram of the residue.

RESULTS AND DISCUSSION

Relationship of ICT skills with Communication

The effect of ICT capabilities on communication was 0.042 or 4.2%. This shows that the greater the ICT skills educators will be able to improve communication by 4.2%. ICT ability is a very urgent process in improving intelligence, improving skills, character and communication so that we can build deeds proving that ICT can improve and can shape the character and civilization of a nation that is valuable in the spiritual life of the nation. ICT also has the aim of developing one's potential.

ICT is also an alternative to learning aimed at acquiring knowledge, skills, and character, which is continuously passed down from one generation to another through teaching, research and training. Formal ICT skills play an urgent role in achieving a goal. In addition, schools also

play an important role in the performance of children's moral ICT. "The challenges of the future demand learning how to develop critical thinking skills, because of the main goal. Nowadays, the development of the times is always accelerating, causing many changes in a person's mindset and behavior. Such changes can have a positive or negative impact on morale, depending on the response to the change, (Saputra, 2017). This may have a negative impact on children who are still looking for their identity, namely millennials. They are often confused by the changes that exist, thus affecting the mentality, attitudes, and behavior of children which also affects their morals. The number of moral issues today is highlighted.

The ability of ICT plays an urgent role in overcoming all problems. Facts prove that ICT can help cultivate skills and can shape the character and civilization of a nation that is valuable in the spiritual life of the nation. ICT also has the aim of developing one's potential. ICT is also a learning process aimed at acquiring knowledge, skills, and character, which is continuously passed down from one generation to another through teaching, research, and training. Formal ICT skills play an urgent role in achieving a goal. The challenges of the future demand learning how to develop critical thinking skills because the main goal of ICT skills is essentially thinking skills, (Erdoğan, 2019). Nowadays, the development of the times is always accelerating, causing many changes in a person's mindset and behavior.

They are often confused by the changes that exist, thus affecting the mentality, attitudes, and behavior of children which also affects their morals. Technological advances will have an impact on changes in human civilization and culture. In the world office implementation of the organizer's policy, the ICT environment is sometimes influenced by the impact of technological advances, the demands of the times, changes in culture and human behavior. Sometimes technological advances become things that make it easier for ICT actors to achieve the goals of the ICT scene more easily. The existence of online in ICT capabilities is very useful for achieving the efficient process of implementing learning in the network, (Sudrajat, 2020). These benefits such as efficiency of learning time, easier access to learning resources and learning materials. Changes in the ICT capability system during this pandemic, which was originally offline to online, resulted in many changes. Online learning results in a lack of interaction between educators and students and even between students themselves. This

lack of interaction can slow down the formation of values in the teaching and learning process. Online learning that is being carried out today is a new thing felt by educators and students.

Through the teaching and learning process directly face-to-face, students can get values that cannot be obtained through online learning, (Jumadi, 2021). These values include, among others, the process of social, cultural, ethical, and moral maturation, which can only be obtained by social interaction in an area of ICT. Digital transformation not only brings a good influence on life but is also accompanied by bad influences. The good influence of digital transformation is dominated by all activities that become practical, while the bad influence is of course caused by humans as the party who creates and enjoys the influence of digital transformation itself caused by ethical and moral crises based on the human ego itself.

Relationship of ICT capabilities to Educator Performance

The effect of ICT capabilities on educator performance was 0.031 or 3.1%. This shows that the greater the ability of ICT capabilities will be able to improve the performance of educators by 3.1%. This can be seen from the use of sikadu with high intensity can improve individual performance. The ease of use of Sikadu does not moderate the effect of sikadu utilization on individual performance, so it can be concluded that the Sikadu ease of use variable is not a moderating variable, (Hardyanto, 2019). This shows that the ease or difficulty of using sikadu does not affect the utilization of sikadu to individual performance. Nurul uses the Technology Accepted Model (TAM) to analyze the relationship between system use and behavioral objectives. This analysis technique can indirectly demonstrate the forms of individual goals to perform positive actions. The relationship between the feeling of usefulness and the purpose of behavior is based on the idea that in the drafting of the organization, people form objectives against his behavior that are believed to improve his performance.

The relationship between communication and ICT skills and educator performance

The effect of communication and educator performance on ICT is $0.042 \times 0.031 = 0.001302 = 0.1302\%$ This shows that it has a small communication variable

influence of 0.1302% on performance As for the Regression equation is: $Y = 0.042 X_1 + 0.001 X_2 + \text{Error}$. The findings showed that communication and ICT skills simultaneously (simultaneously) influenced the performance of educators. The multiple linear regression equation form $-9.200 + 0.723 X_1 + 0.430 X_2$ gives the implication that ICT communication and kindergarten ability are very important in improving performance. The two free variables, namely ICT and communication skills, play a very important role and are needed by educators in the operation of the K-13 report card application. The ICT and communication skills possessed by educators are expected to be able to make the maximum contribution so that educators are able to carry out and complete tasks properly and on time in improving educator performance. The performance of educators will be optimal if there are efforts to improve it through communication and other variables. Educators who are one of the human resources in schools have an important role in achieving school goals. The achievement of school goals can be achieved if educators have the ability and working skills supported by high communication. The performance of educators can be seen in the form of their ability to complete the assessment of student learning outcomes through the operation of ICT. The factors that affect the ICT competence of educators are divided into two parts, namely factors that come from within the educator and from outside the educator.

The relationship between communication, ICT skills and educator performance with the quality of learning

The effect of communication and educator performance on ICT was $0.082 \times 0.0193 \times 0.001302 = 0.000020$. This shows that the influence of communication and ICT skills on educator performance affects the quality of learning. The Regression equation is $Y = 0.042 X_1 + 0.001 X_2 + \text{Error}$. The findings showed that communication and ICT skills simultaneously (simultaneously) influenced the performance of educators.

The results showed that there was a positive contribution of communication, ICT skills and educator performance with a quality of learning of 61.1%. The results of this study also show that ICT capabilities are included in the moderate category. ICT skills are defined as the ability of educators or homeroom teachers to utilize class potential in the form of providing the widest possible opportunity for each person to carry out creative and directed activities, so that the available time and funds can be used efficiently to carry out

class activities related to curriculum and student development, (Ferri, 2020). The ICT skills applied and implemented by educators will affect the implementation of the teaching and learning process. The selection and application of ICT skills that are appropriate and adapted to the situation and conditions of students will create a good teaching and learning process. The ability of ICT in the teaching and learning process really needs to be done by educators.

The ability of the right ICT by educators in presenting learning materials allows the achievement of good learning objectives, namely obtaining learning outcomes in accordance with the objectives that have been formulated in the RPP which includes three domains, namely affective, cognitive, and psychomotor. There are many factors that can affect the ability of ICT carried out by educators, some of which are communication, mastery of information and communication technology (ICT), and academic supervision, (Perron, 2010).

The results showed that there was a positive and significant contribution to the ability of educators in ICT capabilities by 32.3%. Communication has a positive and very significant influence on educators' ability to ICT skills. If the communication of educators is good, the educator's ability in ICT ability will also be better, and vice versa if the educator's communication is small, the educator's ability in ICT ability will also decrease. Work experience is the communication of educators in carrying out duties as educators in certain educational units in accordance with a letter of assignment from an authorized institution either from the government or community groups providing education, (Rakib, et. al, 2016).

Longer communication shows more experience than other colleagues, so often work or teaching experience is a consideration in the decision-making of an educational institution. The role of educators is so large in the world of education that it is an important factor in determining the high and low quality of education. Educators are not only required to have the ability to teach, but communication also plays a role in improving student learning achievement, (Msila, 2015). This is because knowledge and experience can contribute to the mastery of classroom management skills. Sufficient experience and supported by long communication allow educators to know more and understand various aspects of the implementation of educator tasks that are directly related to improving learning

achievement. Therefore, age level is often considered an indicator of communication.

CONCLUSION

The results of the research data that have been analyzed with Part Least Square (PLS), show that: (1) The percentage of ICT ability factor to communication is 0.042 or 4.2% this shows that the greater the ICT ability educators will be able to improve communication by 4.2%. (2) The amount of ICT capability factor for educator performance is 0.031 or 3.1%. This shows that the greater the ability of ICT capabilities will be able to improve the performance of educators by 3.1%. (3) The amount of communication and ICT impact on educator performance is $0.042 \times 0.031 = 0.001302 = 0.1302\%$ This shows that it has a small communication variable influence of 0.1302% on performance As for the Regression equation is: $= 0.042 \hat{Y}X_1 + 0.001 X_2 + \text{Error}$. (4) The Regression equation is $\hat{Y} = 0.042 X_1 + 0.001 X_2 + \text{Error}$ The research findings show that communication and ICT skills simultaneously (simultaneously) affect the performance of educators, so that the quality of learning is increasing.

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