

Implementation of E-Learning, Motivation and Learning Independence to Improve Learning Outcomes

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ABSTRACT

This study aims to determine the effect of using e-learning, learning motivation and learning independence on student learning outcomes in class XI IPS 1 MAN 1 Nganjuk. The population in this study were 99 students of class XI IPS MAN 1 Nganjuk. The sample was determined as many as 30 students based on Roscoe's that for research, the appropriate sample size in the study was between 30 to 500. The sampling technique used purposive sampling. Data were collected using questionnaires and documentation, which were then analyzed using multiple linear regression analysis with the help of the SPSS Version 26 program. The results of data analysis showed that either partially or simultaneously the use of e-learning, learning motivation and learning independence had a significant effect on learning outcomes.

Keywords: e-learning, learning motivation, independent learning, learning outcomes

INTRODUCTION

As the world of information and communication technology develops, online activities are increasingly recognized by many people, including in the world of education. Online activities are increasingly being carried out under current conditions because the world is experiencing a COVID-19 pandemic, including Indonesia. With this pandemic causing restrictions on community activities to break the chain of spread and transmission of the Covid 19 virus, these restrictions also have an impact

on teaching and learning activities in schools or Islamic School which are usually in the classroom, are now conducted online (Gusty et al., 2020, p. 99). Technological literacy has an important role in the implementation of remote learning during the Covid-19 pandemic, including facilitating the implementation of remote learning, making the implementation of this kind of learning more effective, making it easier to find and process information, facilitating communication and teacher collaboration and learners (Latip, 2020).

Problems of motivation and independence in student learning and student learning outcomes also still occur in the economic learning process at Islamic Senior High School 1 Nganjuk. Islamic Senior High School 1 is one of the Islamic Schools in Nganjuk Regency which is located on Jln. KH Abdul Fattah Nglawak Village of Kertosono Nganjuk. In economic learning activities at school, it is found that student learning outcomes are still around the Minimum Completeness Criteria (KKM) with the determination of the KKM for economic subjects was 76. There are several factors that can affect learning outcomes, including the use of learning devices used during the online learning process during the Covid 19 pandemic, the motivation and independence of students' learning while studying online at home. These three factors are important to study. According to the existing problems, the research objective to

be achieved was to explain the effect of using E-learning, learning motivation and learning independence on the learning outcomes of Economics subjects for class XI IPS 1 Islamic Senior High School 1 Nganjuk's students.

LITERATURE REVIEW

Learning outcomes

Learning outcomes could be explained by understanding the two words that make it up like "results" and "learning". Understanding the results (product) refers to an acquisition as a result of doing an activity or process that results in changing the input functionally (Purwanto, 2011, p. 44) while learning is done to seek behavioral changes in individuals who learn. Behavioral change is an acquisition becomes the result of learning, in addition to cognitive learning outcomes obtained by students. According to a psychological understanding, learning is a process of change called changes in behavior as a result of interaction with the environment in meeting the needs of life. Changes in behavior will be evident in all aspects of behavior (Slameto, 2010, p. 2). Morgan, in the book *Introduction to Psychology* suggests that learning is any relatively permanent change in behavior that occurs as a result of practice and experience. (Purwanto, 2000, p. 84). According to Roger, learning is an internal process that moves students to use all their cognitive, affective and psychomotor potential in order to have various intellectual, moral, and other skills (Nata, 2011, p. 101). Meanwhile, according to Piaget, learning is a process interaction of students with the environment that is always changing and is carried out continuously (Nata, 2011, p. 99).

The point is learning outcomes are abilities obtained by children after going through learning activities. Learning itself is a process of someone trying to acquire a form of behavior that is relatively permanent (Abdurrahman, 2003, pp. 37–38). Learning outcomes are the result of an interaction between acts of learning and acts of teaching (Dimiyati & Midjiono, 2006, p.

3) so learning outcomes are essentially changes in student behavior including cognitive, affective, and psychomotor. So that every teacher will definitely expect that the learning outcomes of their students will increase after carrying out the learning process.

E-learning

One of the uses of information technology and information is the application of online learning based on E-learning. E-learning provides a set of tools that can facilitate digital learning so that it can answer the challenges of globalization. Rosenberg emphasized that E-learning refers to the use of internet technology to deliver a series of solutions that can enhance knowledge and skills. This is almost the same as Campbell and Kamarga which essentially emphasizes the use of the internet in education as the essence of E-learning (Rusman & Cepi, 2012).

E-learning-based learning strategies are expected to provide more motivation and learning independence for students, so that interaction and learning effectiveness will be better (Kristiyani & Budiningsih, 2019). Currently, the concept of online learning has been widely accepted by the world community, as evidenced by the increasing trend in the implementation of e-learning in educational institutions (Park, 2009). Several studies in other countries also get similar results. The reason that online learning has not fully run well and smoothly is caused by the characteristics of students, characteristics of the e-learning system and organizational support for the use of e-learning (Sawang, et.al 2013). Motivation to use information and communication technology in the learning process must be supported by the availability of access to the system (Mayya, 2007) and the success of the application of online learning is also determined by student satisfaction in using it (Sachs and Hale, 2003).

Motivation to Learn

Motivation is a factor that has a large adequately influence on learning outcomes (Slameto, 2010). According to Hamalik (2008) motivation is a change in energy in a person's personal which is characterized by the emergence of feelings or reactions to achieve goals. In motivation contained desires, expectations, needs, goals, objectives, and incentives. Learning motivation comes from within the student and from outside the student which functions as a driving force that encourages students to carry out activities to achieve the desired goals. Students learn because they are driven by the mental strength of the students concerned, namely the student's condition, abilities, concerns and aspirations. The mental strength of a person varies, some are low and some are high. According to Loima & Vibulphol, (2016) in international journals, intrinsic motivation is categorized as internal motivation, namely motivation that is born from itself. So whatever he does is in accordance with what he wants according to the choice of the heart of the students

Independent Learning

Tirtarahardja & Sulo, (2005) suggests that learning independence is a learning activity whose activities are driven by own will, their own choice, and their own responsibility which allows a person to organize and direct himself according to his level of development (Bungsu et al., 2020)

Learning independence is the occurrence of a learning process in a person, and in an effort to achieve these learning goals, they are required to be active individually or not to depend on anyone, including not depending on their parents and teachers (Fajriyah et al., 2019, p. 288). According to (Suhendri, 2011) independence can be interpreted as a positive mental attitude of an individual for the convenience of carrying out planning activities to achieve goals by positioning or

conditioning himself so that he can evaluate himself and his environment in everyday life. The independence of students is functioned to foster self-confidence which is very important for the student learning process and is faster in receiving learning materials so as to shape students' character for the better (Akbar et al., 2018). In general, there are several reasons related to the importance of independent learning for students in the economics learning process, including the problems faced by students in the classroom and outside the classroom to reduce students' dependence on other people in everyday life in the classroom and outside the classroom.

MATERIALS & METHODS

The research approach used was a quantitative approach while the type of this research was correlation research. The population in this study was 99 students of class XI IPS 1 MAN 1 Nganjuk. A sample of 30 students was based on Roscoe's opinion in Sugiyono, (2012) for research; the appropriate sample size in the study was between 30 and 500. The sampling technique used was purposive sampling. Data were collected using questionnaires and documentation then analyzed using multiple linear regression analysis with the help of SPSS Version 26 program.

RESULT

Before performing multiple linear regression analysis, a prerequisite analysis test was conducted in order to obtain the BLUE (Best Linear Unbiased Estimator) estimator. The test results show that the data tested are normally distributed, each independent variable has a linear relationship to the dependent variable, there is no multicollinearity and no heteroscedasticity. So, the analysis prerequisite test is met. Furthermore, testing with multiple linear regression analysis obtained the following results:

Table 1: Results of Multiple Linear Regression Analysis

Variable	Regression Coefficient	T	Sig.
Use of E-learning (X1)	0,167	3,707	0,001
Motivation to learn (X2)	0,074	2,145	0,041
Independent Learning (X3)	0,161	4,521	0,000
constant	59,860		
R ² = 0,854	F _{counted} = 50,860		
Adjusted R ² = 0,837	Sig. = 0,000		

Source: primary data processed, 2021

From Table 1 above, the regression line equation formed was $Y = 59.860 + 0.167X_1 + 0.074X_2 + 0.161X_3 +$. The constant of 59,860 meant that if X1, X2 and X3 had no effect on Y then the value of Y is 59,860. The X1 regression coefficient was (+) 0.167, meant that the effect of using e-learning on learning outcomes was positive. Every 1% increase in the use of e-learning would contribute to an increase in learning outcomes of 0.167%. The regression coefficient of X2 was (+) 0.074, meant that the influence of learning motivation on learning outcomes was positive. Every time there was an increase in learning motivation of 1%, it would contribute to an increase in learning outcomes by 0.074%. The X3 regression coefficient was (+) 0.161, meant that the influence of learning independence on learning outcomes was positive. Every time there was an increase in learning independence by 1%, it would contribute to an increase in learning outcomes by 0.161%. The coefficient of determination (adjusted R square) was 0.837, indicating that the variance in economic learning outcomes could be explained by the use of e-learning, learning motivation and learning independence by 83.7% through the regression model while the remaining 16.3% was explained by other variables that were not taken into account in the model.

Based on the hypothesis test, in Table 1 above for the variable using e-learning (X1), it is obtained that $t_{counted}$ is (3,707) > t_{table} (2,052) and the value of Sig. 0.001 < 0.05 then hypothesis alternative 1 (H1) was accepted, meant that the partial use of e-learning had a significant effect on economic learning outcomes. The variable of learning motivation (X2) obtained $t_{counted}$ of (2,145) > t_{table} (2,052) and the value of Sig. 0.041 < 0.05 then Alternative

Hypothesis 2 (H2) was accepted, meant that learning motivation partially had a significant effect on economic learning outcomes. Learning independence variable (X3) obtained $t_{counted}$ of (4,521) > t_{table} (2,052) and the value of Sig. 0.000 > 0.05 then Alternative Hypothesis 3 (H3) was accepted, meant that learning independence partially had a significant effect on economic learning outcomes. Furthermore, the calculated $F_{counted}$ was 50.860 > F_{table} 3.35 and the Sig value. 0.000 < 0.05 then Alternative Hypothesis 4 (H4) was accepted, meant that the use of e-learning, learning motivation, and learning independence simultaneously had a significant effect on economic learning outcomes.

DISCUSSION

The Influence of the Use of E-learning on Student Learning Outcomes

Based on the results of research on the effect of using e-learning on student learning outcomes, it shows that the use of e-learning has a significant positive effect on student learning outcomes. In the variable of using e-learning, students tend to respond well in answering the statements given, this can be seen from the results of the questionnaire, with the average score of each statement indicator in the medium category, it can be concluded that the opinion given by respondents in answering the questionnaire in the statement of indicators of the use of e-learning, it can be concluded that students of class XI IPS 1 MAN 1 Nganjuk had used e-learning well.

The results of this study also support empirical studies from previous researchers, from the results of research (Aurora & Effendi, 2019) showing there was a connection between the use of E-Learning

and student learning motivation. (Sri Tomo, 2015) The use of the E-Learning Web Site as a learning medium had a significant effect on learning motivation and the application of the E-Learning Web Site as a learning medium had a significant effect on student learning outcomes.

The Effect of Learning Motivation on Student Learning Outcomes

Based on the results of research on the effect of learning motivation on student learning outcomes, it shown that learning motivation had a significant positive effect on student learning outcomes. In the learning motivation variable, students tent to respond well in answering the statements given, this could be seen from the results of the questionnaire, with the average score of each statement indicator in the medium category, it could be concluded that the opinion given by respondents in answering the questionnaire on the statement indicators of learning motivation shown that students of class XI IPS 1 MAN 1 Nganjuk could be concluded to have good learning motivation.

The results of this study support the theory of (Djamarah, 2002) that high learning motivation tends to produce high learning outcomes; on the other hand, low learning motivation will produce low learning outcomes. The results of this study also support the empirical studies of previous researcher by Saputra & Ismet (2018), in their research showing that learning motivation had a positive and significant relationship with student learning outcomes. Nurmala et al. (2014) the results of this research shown that (1) learning motivation affected student learning activities, (2) learning motivation affected learning outcomes, (3) learning activities affected learning outcomes, (4) learning motivation affected learning outcomes indirectly through accounting learning activities

The Effect of Independent Learning on Student Learning Outcomes

Based on the results of research on the effect of learning independence on student learning outcomes, it shows that learning independence had a significant positive effect on student learning outcomes. In the independent learning variable, students tend to respond well in answering the statements given, this can be seen from the results of the questionnaire, with the average score of each statement indicator in the medium category, it could be concluded that the opinion given by respondents in answering the questionnaire on the statement indicators of learning independence show that students of class XI IPS 1 MAN 1 Nganjuk could be concluded to have had good learning independence.

The results of this study support the theory of (Tirtarahardja & Sulo, 2005) that "Independent learning is a learning activity more driven by their own will, their own choices and their own responsibilities". The results of this study also supports empirical studies from previous researchers, from (Mujisuciningtyas, 2017) in this research there was an influence of learning independence and learning infrastructure on students' practical learning outcomes in class XII of State Vocational School of Tuban 2. (Gustini, 2011) the results of his research shown that high learning independence meant that student learning achievement was also high. (Putriningrum et al., 2012) in his research it was found that between the use of learning resources and learning independence, learning independence was more dominant in influencing learning achievement. Kosnin, (2007) from the study found that learning independence has shown a very significant influence on student academic achievement. This study does not support the results of research from Othman & Leng, (2011) which stated that there was a weak relationship between learning independence and academic achievement.

CONCLUSION

Based on the results of data analysis and discussion conducted in this study, it could be concluded that the use of e-learning had a significant effect on learning outcomes for students in students of class XI IPS 1 MAN 1 Nganjuk. Learning motivation has a significant effect on the learning outcomes of economic subjects in class students of class XI IPS 1 MAN 1 Nganjuk. Learning independence has a significant effect on learning outcomes in economics subjects in students of class XI IPS 1 MAN 1 Nganjuk. The results of the joint hypothesis test showed that the use of e-learning, learning motivation and learning independence had a significant effect on the learning outcomes of economic subjects in class students of class XI IPS 1 MAN 1 Nganjuk.

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