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## **The Influence of Kahoot and Conventional Technology-Based Learning Media on Learning Outcomes in Accounting Practicum**

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**Abstract:** Technology is very important to support learning process. This study aims to reveal Kahoot Technology-Based Learning Media (X) on student learning outcomes at SMK NEGERI 8 Bekasi City (Y). This study uses a type of quantitative research with an experimental approach. The sample of this research used random sampling technique. The number of research samples was 69 students. Data collection uses valid and reliable instruments. Data analysis using simple regression. The results of the study revealed: (1) Linear Regression Equation  $Y = 82.341 + 0.049 X$  (2) Kahoot Technology-Based Learning Media has an effect on Student Learning Outcomes. (3) The significance test obtained by the equation of the F hit regression line is smaller than 0.05 thus, Y or X regression is significant Kahoot Technology-Based Learning Media has an effect on Student Learning Outcomes. (4) The correlation coefficient ( $r_{xy}$ ) = 0.621 and Fhit ( $F_{change}$ ) = 8.145, with a pvalue less than 0.05. Thus, the correlation coefficient X and Y is meaningful or significant. The coefficient of determination is 0.385, which means that 38.5% of the variation in the student's emotional intelligence variable.

**Keywords:** Accounting Practicum; Conventional Technology; Kahoot Media; Learning Media; Learning Outcome

## **INTRODUCTION**

Technology has affected society and its surroundings in many ways, one of which is in the field of education (Bicen & Kocakoyun, 2018). Education as part of culture is a means of transmitting values and ideas for everyone to be able to participate in the transformation of values for the progress of the nation and state. Along with the times, the world of education is also experiencing rapid development, thus demanding changes that can adapt to the dynamic demands that are developing.

Media is a means or tool used by a person to convey his thoughts which in terms of communication science are referred to as messages from the communicator to the recipient of the message (communicant) in the hope that there will be changes in thoughts, attitudes and behavior in the communicant according to the message conveyed by the communicator, by using certain tools (Sudarsana et al., 2020). In the context of the world of education the use of media as a tool in learning is very important, using aids or learning media will certainly make it easier for teachers to teach and accelerate absorption and memory of the subject matter presented by the teacher.

Conventional learning or also called the lecture method, because it has long been used as a means of oral communication between teachers and students in the learning process tends to be more active teachers and passive students, Gulo (Muzkan et al., 2016). The development of science and technology is increasingly encouraging renewal efforts in the utilization of technological results in the learning process. The role of the teacher is required to be able to bring their students to adapt to the development of the IT-paced era, therefore in the teaching and learning process the teacher is also required to familiarize students with being familiar with IT while at the same time making IT a medium to help facilitate the absorption of material taught to students. Learning technology is technology as an idea and design of how a learning process can be quality through measuring effectiveness and efficiency, as well as accelerating the achievement of changes in the behavior of students, or learning citizens (Serdyukov, 2017).

There are various types of technology-based learning media, each of which has advantages and disadvantages. In this study, the learning media chosen was technology-based media, namely kahoot. The kahoot application is a game that contains four features, namely,

quizzes, jumble, surveys, and discussions. This kahoot application was designed by students to think fast, because there is a time limit to answer the questions that have been made (Ayoup & others, 2021; Esther Ortiz-Martínez et al., 2023; Sercemeli & Baydas Onlu, 2023; Wang & Tahir, 2020). Kahoot can be accessed and used free of charge, the Kahoot platform can be used for several forms of assessment including online quizzes, surveys and discussions where all three have different ways of playing. This is the same as Ryan Dellos who stated that game-based learning is an effective tool for students to solve problems, foster critical thinking and try to make learning more conducive, moreover we can apply learning using the media we have to students.

In this study the subjects used were accounting Practicum subjects for Government Agencies or Institutions. The subject of Accounting for Government Institutions or Agencies learns about managing regional finances, local governments use the Regional Financial Accounting System (SAKD) in accordance with Government Regulation Number 24 of 2005 concerning Financial Accounting Standards and Government Regulation Number 58 of 2005 concerning Financial Management which aims to provide information on accountability for the use of funds. According to Aulia (2020), regional financial accounting is the process of identifying, measuring, recording, and reporting economic (financial) transactions from local government entities (districts, cities or provinces) that require. The statement states that regional financial accounting is a way or method used to record the results of transactions that occur in one period in a government agency, both central and regional.

In realizing quality education, quality teachers are needed. The teacher must be able to present lessons that are easy to understand, understand and remember and apply, consequently the teacher must always try to be able to teach lessons with a wide variety so that it feels interesting and captivating so that it can stimulate student activity and be enjoyed without feeling it as a lesson that burdens them. In addition, teachers are required to be able to use the media provided by the school. At least being able to use cheap and efficient tools, although simple but is a must in an effort to achieve the expected teaching goals. According to Marsa et al. (2021) "Learning is an activity in which there is a process from not knowing to knowing, not

understanding to understanding, not being able to be able to achieve optimal results".

## METHOD

The method used in this study used the experimental method (Nugroho, 2022), with a population of 70 students in class XI Accounting. The sample technique used is random sampling technique using 2 classes, namely class XI Accounting 1, total 36 students as a control class which is treated using conventional learning media and XI Accounting 3, totaling 34 students as an experimental class which is treated using media-based learning kahoot technology. Data collection in the form of scores was taken using the learning outcomes instrument for 8 meetings.

Research hypothesis: It is suspected that there is an influence of learning media on student learning outcomes. It is suspected that the learning outcomes of students who are given learning media based on kahoot technology are higher than students who are given conventional learning media. Analysis of the research data was carried out by first describing it, then conducting a prerequisite test by testing the normality and homogeneity of the data, after obtaining normal and homogeneous data, it was continued with hypothesis testing with 1-way analysis of variance.

## RESULT AND DISCUSSION

After obtaining the research data, the data is described as follows: For variable 1) Classes that use kahoot technology-based learning media, the number of samples or respondents is 33 students with the lowest score of 78 and the highest score of 95, with an average score (mean) of 87.42, score range 17, standard deviation or standard deviation 5.050, score that occurs frequently (mode) 80, mean value (median) 88.00; 2) Classes that use conventional learning media, the number of samples or respondents is 36 students with the lowest score of 80 and the highest score of 94, with an average score (mean) of 86.86, score range of 14, standard deviation or standard deviation of 4.310, score that occurs frequently (mode) 80, mean value (median) 87.00.

The research data that has been described is then carried out by testing the prerequisites for data analysis using the SPSS version 25 program, namely by testing the normality and homogeneity

of the data. Test the normality of the data using the Kolmogorov-Smirnov Z test for 1) Class variables using kahoot technology-based learning media obtain a probability value (p-value) =  $0.200 > 0.050$  or  $H_0$  is accepted. Thus, class data using kahoot technology-based learning media is normally distributed; 2) Class variables that use conventional learning media obtain a probability value (p-value) =  $0.200 > 0.050$  or  $H_0$  is accepted. Thus, the emotional intelligence data is normally distributed.

To find out whether the data distribution of each variable does not deviate from the characteristics of homogeneous data, homogeneity testing is carried out on the dependent regression variant or independent variables using statistics, a homogeneity test is carried out, namely the Levene test. From the results of the analysis in the Test of Homogeneity of Variances table, Levene Statistics = 0.535;  $df_1 = 1$ ;  $df_2 = 67$ , and p-value =  $0.467 > 0.05$  or  $H_0$  is accepted. Thus, both data groups come from homogeneous groups.

The results of hypothesis testing using SPSS 25 are as follows: 1) Linear Regression Equation. The regression equation is obtained:  $Y = 82.341 + 0.049 X$ . From the analysis results obtained  $t_{hit} = 6.028$  and p-value =  $0.000/2 = 0.000 < 0.05$  or  $H_0$  is rejected. Thus, "Kahoot technology-based learning media has a positive effect on student learning outcomes." 2) Test the Linearity and Significance of the Regression Equation. Testing the linearity and significance of the regression equation is determined based on the ANOVA table and ANOVAa, as follows. Statistical hypothesis:  $H_0 : Y = a + Bx$  (linear regression);  $H_0 : Y = a + Bx$  (non-linear regression) Test the linearity of the regression line equation obtained  $F_{hit} (TC) = 0.708$ , with p-value =  $0.707 > 0.05$ . This means that  $H_0$  is accepted or the regression equation Y over X is linear or in the form of a linear line. Statistical hypothesis:  $H_0 : b = 0$  (significant regression);  $H_1 : b \neq 0$  (regression means) Significance test of the regression line equation obtained  $F_{hit} (b/a) = 8.145$ , and p-value =  $0.014 < 0.05$  or  $H_0$  is rejected. Thus, Y or X regression is significant or Kahoot technology-based learning media has an effect on student learning outcomes, this means that the research hypothesis is supported by empirical data. 3) Significance Test of X and Y Correlation Coefficients. Statistical hypothesis:  $H_0 : \rho = 0$ ;  $H_1 : \rho \neq 0$ , Significance test of correlation coefficient correlation coefficient

( $r_{xy}$ ) = 0.621 and F count = 8.145, with p-value =  $0.014 < 0.05$ . This means that  $H_0$  is rejected. Thus, the correlation coefficient X and Y is meaningful or significant. While the coefficient of determination R Square = 0.385, which implies that 38.5% of the variation in learning outcomes can be influenced by the variable kahoot technology-based learning media.

To be able to understand the meaning of the research results as a whole, the results of the research data analysis above can be interpreted as follows: 1) Linear Regression Equations. The linear equation  $Y = 82.341 + 0.049 X$  means that the Y score can be predicted through the linear equation above; 2) From the results of the analysis, it is obtained that Kahoot Technology-Based Learning Media has an effect on Student Learning Outcomes, this can be seen that the p-value is smaller than 0.05. Therefore it can be interpreted that Kahoot Technology-Based Learning Media has a positive effect on Student Learning Outcomes. 3) Test the significance of the equation of the regression line equation obtained by Fcount and the p-value is smaller than 0.05 or  $H_0$  is rejected. Thus, Y or X regression is significant or Kahoot Technology-Based Learning Media has a positive effect on Student Learning Outcomes; 4) The significance test of the correlation coefficient obtained a correlation coefficient ( $r_{xy}$ ) = 0.621 and  $F_{hit} (F_{change}) = 8.145$ , with a p-value less than 0.05. This means that  $H_0$  is rejected. Thus, the correlation coefficient X and Y is significant or significant. While the coefficient of determination from the table above can be seen in the 2nd row, namely R Square = 0.385, which implies that 38.5% of the variation in the Learning Outcome variable can be influenced by the Kahoot Technology-Based Learning Media variable.

Kahoot technology-based learning media has a positive effect on student learning outcomes at SMKN 8 Bekasi City. Thus the working hypothesis in this study is supported by empirical data.

The results of this study support research conducted by Mahfuz (2021)"In the past, teachers only appeared in front of the teaching class using simple methods and media, but now is the time to describe the style and style of teaching to evolve in a more comprehensive direction in accordance with the conditions of scientific development. ever-evolving knowledge and technology. Therefore teachers

must have the knowledge and ability to use learning media both conventional and information technology-based in collaboration so that it makes it easier for students to understand learning material through creative and varied presentations so that it will contribute to student learning achievement.

In addition, research conducted by Fazriyah et al. (2020), suggests using the Kahoot application in learning so that students are interested in being interactive in learning. Media learning and learning resources tend to be full of theory and make it boring, so the need for information technology media to invite students' learning attention. The Kahoot application is a popular application at this time that involves students, teachers to interact with learning materials in the form of games, quizzes, surveys and polls. So it is necessary to involve this application in the learning process if it is said that it is necessary to support learning which tends to be boring.

## CONCLUSION

From the results of the research and discussion it can be concluded: 1) Kahoot Technology-Based Learning Media influences Student Learning Outcomes; 2) Regression Y or X is significant or Kahoot Technology-Based Learning Media has an effect on Student Learning Outcomes; 3) The correlation coefficient of X and Y is significant or significant. While the coefficient of determination from the table above can be seen in the 2nd row, namely R Square = 0.385, variations in the Learning Outcome variable can be influenced by the Kahoot Technology-Based Learning Media variable.

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