

DIGITAL LITERACY AND TEACHING CREATIVITY OF EDUCATORS IN LEARNING ACTIVITIES: A SURVEY METHOD REVIEW

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ABSTRACT

This study aims to determine the relationship between educators' digital literacy skills and the creativity of teaching educators at state vocational high schools in Gowa Regency. This study applies a survey method that is correlational with a quantitative approach. The population in the study were educators with the status of civil servants in 5 state vocational high schools in Gowa Regency and as many as 70 educators who were sampled through the proportional random sampling technique in each population unit to obtain research data. This research used a Likert scale questionnaire that has been validated and meets the reliability requirements. The data analysis technique to achieve the research objectives uses inferential statistics, namely simple correlation analysis. The results of the study reveal that, based on the Pearson correlation value obtained from a simple correlation analysis of 0.731 with a positive direction and $\text{sig. } p < (0.05)$ which gives an understanding that there is a significant relationship between educators' digital literacy skills and educators' teaching creativity at State Vocational High School in Gowa district, and obtained a coefficient of determination of 53%, which means that 53% of the total variance of the values of educators' teaching creativity can be explained by the values of educators' digital literacy skills.

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1. INTRODUCTION

In designing quality education, it should be in line with advances and technological developments that are currently developing rapidly. In the 21st century, the advancement of digital technology in the field of education is increasingly advanced (Kennedy & Sundberg, 2020). This can be considered by educators as one of the strategies in developing the learning process. The use of digital technology in learning. First, educators are required to be active in all information technology and digital developments (McGarr & McDonagh, 2021).

An educator must be proficient in utilizing the technological innovation in delivering and supporting learning in schools. Educators need to create computerized learning that utilizes technological innovation. Educators and students must use digital technology to facilitate learning (Ally, 2019). Digital literacy is a skill that is expected to be possessed by educators in order to be able to use a variety of digital technologies in learning (Asari et al., 2019). In fact (Falloon, 2020) revealed that in the future education process, digital literacy competence is needed by an educator in order to manage to learn.

The development of digital technology can be utilized in the field of education, especially in the implementation of teaching and learning activities, in order to achieve the success of educational goals (Rizal et al., 2019). Digital literacy skills are defined as the ability to understand the character, features, and influence of digital identity; manage, understand, assess, and communicate information using digital technology; and interact safely in the digital world (Kurniawati et al., 2018).

Another component in carrying out the professional duties of an educator, especially in the learning process, is the creativity of educators in teaching (Juandi & Sontani, 2017). The creative ability of educators in managing the learning process is one manifestation of the demands of professionals as educators (Febriandar, 2018). However, preparation that has been maximized may not necessarily result in optimal learning because this could be influenced by certain factors. Mullet et al. (2016) It is revealed that the creative ability of educators in teaching is important because it will create a more lively atmosphere in learning. The ability of educators to develop materials and subject matter and to create an atmosphere that attracts students' attention in learning is referred to as teaching creativity (Pentury, 2017).

One of the factors that can affect student learning achievement is the creativity of educators in teaching (Rasam & Sari, 2018; Muzaini et al., 2021) and in the learning process. There is room for improvisation and space for developing creativity, which should be done by educators because the teaching process uses an imaginative approach to create interesting learning activities (Cayirdag, 2017). Therefore, educators should increase their creativity in the learning process to be better and more fun so that students can easily be interested in participating in the learning process (Herawati et al., 2019).

The education sector in Indonesia is currently faced with challenges amid the outbreak of the COVID-19 virus (Rahiem, 2020; Muzaini et al., 2021). With the outbreak of the COVID-19 virus, the government made a policy that recommends that the learning process be carried out online without face-to-face contact (Indrawati, 2020). The implementation of online learning makes the learning system in schools change from face-to-face meetings to online or remote meetings, which, of course, rely on technological devices in the implementation process. As is the case with state vocational high schools or vocational high schools in Gowa Regency, the learning process is carried out online. Based on the results of observations made regarding the existence of online or distance learning policies, educators are expected to be more interactive in using digital technology in the learning process. This, of course, requires technological skills, especially digital literacy skills for educators, so that the learning process can run effectively amidst the COVID-19 pandemic and, of course, creativity in teaching educators in learning is needed.

By implementing online learning as an alternative learning method in the midst of the current COVID-19 pandemic, digital literacy skills and educator creativity in teaching are absolutely needed and must be owned by educators. This is because it is impossible to implement online learning in the midst of the COVID-19 virus outbreak without being supported by digital literacy skills and the creativity of educators in teaching. Therefore, research was conducted that aims to determine the relationship between digital literacy skills of educators and the creativity of teaching educators in vocational high schools.

2. METHOD

This study applies a quantitative approach with a correlation survey method, which was carried out at 5 state vocational high schools in Gowa Regency. The population in this study were all educators with the status of civil servants, totaling 238 educators. determination of the number of samples using the Slovin formula in order to obtain a total sample of 70 educators. To obtain a sample in this study, a proportional random sampling technique was applied to each population unit. The variables in this study are educators' digital literacy skills (X) and educators' teaching creativity (Y). The following is the design of this research in Figure 1.

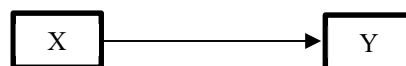


Figure 1. Research design

The data collection technique was obtained using a Likert scale questionnaire, which previously was tested for validity based on theoretical validity, empirical validity, and reliability. In this study, using statistical analysis technique, inferential Pearson's moment correlation. H1 in this study is that there is a positive significant relationship between educators' digital literacy skills and the creativity of teaching educators at public vocational high schools in Gowa Regency with a value of 0.05. This analysis was carried out with the help of the SPSS 24 program.

3. RESULTS AND DISCUSSION

a. Testing Theoretical and Empirical Validity

This theoretical validity test includes the content validity of the instrument developed using the Gregory test model that takes into account the opinions of two experts (Gregory, 2014). The test results obtained an internal consistency coefficient value of 1 for educators' digital literacy instruments and an internal consistency coefficient value of 1 for teaching creativity instruments. The internal consistency coefficient value of each instrument > 0.75 , so that both instruments are valid based on the theoretical validity test.

Furthermore, in testing the validity of the instrument, empirically based on the results of trials on 30 respondents who are considered equivalent, namely by comparing the value of the correlation coefficient between the item scores with the total score (r count) and r table. Each item is said to be valid if r count $>$ r table (Sugiyono, 2015). The following are the test results for each instrument in Table 1 and Table 2.

Table 1. Testing the Validity of Educators' Digital Literacy Instruments

No. Question	r-Count	r-Table (n=30)	Information
1	0,76	0,36	Valid
2	0,80	0,36	Valid
3	0,79	0,36	Valid

4	0,76	0,36	Valid
5	0,76	0,36	Valid
6	0,79	0,36	Valid
7	0,80	0,36	Valid
8	0,79	0,36	Valid
9	0,37	0,36	Valid
10	0,46	0,36	Valid
11	0,79	0,36	Valid
12	0,76	0,36	Valid
13	0,80	0,36	Valid
14	0,80	0,36	Valid
15	0,76	0,36	Valid

Table 2. Testing the Validity of Teaching Creativity Instruments

No. Question	r-Count	r-Table (n=30)	Information
1	0,64	0,36	Valid
2	0,82	0,36	Valid
3	0,82	0,36	Valid
4	0,70	0,36	Valid
5	0,70	0,36	Valid
6	0,82	0,36	Valid
7	0,82	0,36	Valid
8	0,82	0,36	Valid
9	0,38	0,36	Valid
10	0,82	0,36	Valid
11	0,82	0,36	Valid
12	0,82	0,36	Valid
13	0,82	0,36	Valid
14	0,82	0,36	Valid
15	0,64	0,36	Valid

b. Instrument Reliability Testing

The reliability test of this instrument uses the Cronbach alpha formula with the provision that this instrument is said to be reliable if the reliability value is greater than 0.70 (Ghozali, 2011; Hasbi et al., 2019). The following are the calculation results in Table 3.

Table 3. Reliability Calculation Results

Instrument	Value	Description
Educator digital literacy	0,92	Reliabel
Creativity in Teaching Educators	0,91	Reliabel

c. Analysis Prerequisite Test

1) Normality Test Results

In testing the normality of the data obtained by applying the Kolmogorov-Smirnov method with the help of the SPSS 24 program. The following are the results of the normality test in Table 4.

Table 4. Kolmogorov-Smirnov Test

	KLDG	KMG
N	70	70
Kolmogorov-Smirnov Z	1.349	.893
Asymp. Sig. (2-tailed)	.354	.797

Based on the test with a significance level of $\alpha = 0.05$ which is presented in the table above, it is obtained a significance value of $0.354 > \alpha$ for educators' digital literacy data and a significance value of $0.797 > \alpha$ for educators' teaching creativity data so that it can be concluded that the two research data are normally distributed.

2) Linearity Test Results

In table 5 below are the results of the linearity test of SPSS 24 program assistance with a significance level of $\alpha = 0.05$.

Table 5. Linearity Test

<i>Anova Table</i>	Sig.
Deviation From Linearity	0,523

Based on the calculations presented in the table above, the value of Sig $\alpha = 0.69$ is obtained in the deviation from linearity column. The results of these calculations show that the value of sig $> \alpha$ (0.05). This concludes that there is a linear relationship between the variable of digital literacy skills of educators (X) and the variable of teaching creativity of educators (Y) in this study.

d. Pearson Correlation Test Results and Hypothesis Testing

Following are the results of calculations and tests in this study in Table 6.

Table 6. Test Results

		Educator digital literacy	Creativity in Teaching Educators
Educator digital literacy	Pearson	1	.731**
	Correlation		.000
	Sig. (2 tailed)	70	70
	N		
Creativity in Teaching Educators	Pearson	.731**	
	Correlation	.000	
	Sig. (2 tailed)	70	70
	N		

The results of the above calculations using the Pearson moment correlation technique with the help of the SPSS 24 program, obtained a correlation coefficient value of 0.731 in a positive direction and the resulting value of Sig. α (2 tailed) $(0.00) < \alpha (0.05)$. These results indicate that H_0 in this study is rejected and H_1 in this study is accepted, so that the test results reveal that there is a positive and significant relationship between educators' digital literacy skills (X) and the creativity of teaching educators at state vocational high schools in Gowa Regency. Furthermore, to explain how much variance from the variable of teaching creativity of educators (Y) can be explained or explained by the variable of digital literacy skills of educators (X), it can be explained by the acquisition of a determinant coefficient (R^2) of $0.73 \times 0.73 = 0.53$ or 53 %. The results obtained by the coefficient of determination of 53% can be interpreted as meaning that 53% of the variance in the total values of educators' teaching creativity (Y) can be explained by the values of educators' digital literacy skills (X).

e. Discussion

Based on the results of the analysis and testing carried out, it was concluded that there was a positive and significant relationship between educators' digital literacy skills and educators' teaching creativity, and the coefficient of determination was 53%, which explained that 53% of the total variance of educators' teaching creativity values (Y) could be explained by the values of educator digital literacy skills (X). These results reveal that educators' digital literacy skills have an important and very meaningful role in the creativity of teaching educators in the learning process. This role can mean that the better the digital literacy skills of educators, the more they will support and increase the creativity of teaching educators in learning activities. Of course, every educator needs to understand that digital literacy skills are very important in the teaching and learning process because digital literacy skills will create creative and innovative educators ([Kemedikbud, 2017](#)).

The results of this research are relevant to the findings ([Harjono, 2019](#); [Indriyani, 2019](#); [Anisimova, 2020](#); [Blau et al., 2020](#)) in his research which revealed that mastery of digital literacy in learning by educators can strengthen the learning and education process. Then research conducted ([Rahmawati & Yulianti, 2020](#)) revealed that the creativity of teaching educators in the teaching and learning process in the midst of the COVID-19 pandemic cannot be separated from the use of digital technology.

Therefore, based on the findings obtained in this study, educators should learn to develop digital literacy skills and develop creativity in teaching and learning activities (KBM) so that the teaching and learning process in schools can remain effective and educational goals can still be achieved amid the COVID-19 pandemic.

4. CONCLUSION

Based on the results and discussion in this study, it can be concluded that there is a significant and positive relationship between educators' digital literacy skills and the creativity of teaching educators at state vocational high schools in Gowa Regency with a relationship degree of 0.731, meaning that the better the digital literacy of educators, the better their creativity in teaching. teaching in the midst of the COVID-19 pandemic where the learning system is carried out remotely or online. Therefore, it can be implied that in the teaching and learning process carried out by educators amid the current COVID-19 pandemic, educators should improve their digital literacy skills and creativity in teaching.

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