E-ISSN: 2962-6110
P-ISSN: 2964-7843
JSRET
Journal of Scientific Research, Education, and Technology
jsret.knpub.com

The Influence of Teachers' Digital Literacy and Media Literacy on The Quality of Learning at Raudhatul Athfal

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ABSTRACT

This study aims to analyze the influence of digital literacy and media literacy of teachers on the quality of learning in Raudhatul Atfhal, Bogor Regency. This research uses a quantitative approach with survey methods. The independent variables or independent variables in the study are digital literacy and media literacy. The variable tied to this study is the quality of learning. The population in this study of all Raudhatul athfal teachers in Bogor Regency amounted to 1,905 teachers. The probability method used in this study is stratified random sampling. From 5 sub-districts, 20 respondents were represented, so the total sample was 100 respondents. In this research, the data collection instrument is in the form of questionnaires. The data analysis technique used in this study is multiple linear regression using SPSS software. The results showed a value of R2 = 0.748, meaning that the independent variables of media literacy and digital literacy were able to increase variables related to learning quality by 74.8%. The remaining 25.2% was influenced by factors other than regression. Based on the calculation results with the SPSS program above, it appears that the r value is smaller than the level of a used, which is 0.000 or 0.000< 0.05 so that Ho is rejected and Ha is accepted. This means that there is a significant influence of digital literacy and media literacy on the quality of learning.

Keywords: *Teacher Digital Literacy, Teacher Media Literacy, Learning Quality*

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INTRODUCTION

In order to support the use of ICT in learning, a number of studies have been carried out on how to formulate standards for the use of ICT in teachers' professional abilities. UNESCO formulated three levels of ICT use for teachers, namely knowledge acquisition, namely the stage of acquiring knowledge about information technology at an early stage; teachers acquire the knowledge to use information technology at an initial level. At this point, teachers are required to realize the potential for using information technology in the classroom and determine priority policies nationally and regionally in regulating and managing investments in the use of information technology in schools and classrooms to optimize the use of information technology. information technology in the learning process. Several teachers at this stage are able to articulate how their learning practices in the

classroom support the use of information technology in learning, starting from analyzing the information technology integration curriculum, identifying the pedagogical use of ICT in the learning process in the classroom to achieving national standards for the use of information technology, and being able to make decisions. regarding identifying the functions of hardware and software components that can be used in learning.

Furthermore, at the international level, teachers' ability to integrate technology is called technological literacy; how teachers develop inclusive learning methodologies that support their professional abilities, organize both physical and non-physical learning environments regarding technology integration and ensure the potential of information technology capabilities is used in optimizing teachers' professional abilities in learning. Digital literacy is the ability to read and write complexly with in-depth interpretation. Digital literacy is not just a person's ability to read and write. The new meaning of literacy is more complex, namely a person's ability to understand information through the way it is presented (Nwosu et al. 2018).

The second stage regarding the integration of ICT in learning is the deepening of knowledge, where teachers acquire information technology competencies that enable them to facilitate a student-centered learning environment by implementing collaborative and cooperative learning. Teachers in this case can combine information technology policy direction with real action in the classroom and have the capacity to build a design for information technology needs in the classroom to develop information technology assets and estimate future ICT needs (Otterborn, Schönborn, and Hultén 2020).

The target at the advanced level is that teachers can interact and connect with national and international networks, teachers who already have advanced knowledge about the use of information technology can design, modify and implement learning practices in the classroom that support national policies regarding the integration of ICT in learning, starting from designing learning content, learning processes, assessment and mastery of an ICT-based curriculum, designing project-based learning activities that apply information technology starting from designing, implementing, monitoring and solving complex problems related to ICT, and teachers are able to integrate various digital tools and resources to create an integrated learning environment and support students' high-level thinking and skills in solving learning problems (Sudarti et al. 2020).

The third stage is the flexible use of digital tools to facilitate collaborative learning and manage information technology-based learning partners. In the next stage, teachers are expected to be able to utilize technology to interact with professional networks and support teacher professional abilities. This stage is knowledge creation, where teachers have acquired competencies that encourage them to be creative in determining learning models and organizing a harmonious learning environment to create new knowledge in society regarding the use of information technology. Indicators of teachers mastering the level of information technology at this stage are; 1) criticize institutions or policies related to changes in information technology, 2) determine the best way to implement collaborative and open learning for students to ensure mastery of management and standard curriculum, 4) design a broader learning community using digital tools to support

learning, 5) play a leadership role in developing technology-based strategies that are useful in transforming school systems into learning organizations, 6) develop and experiment, practice and innovate more widely so that schools can serve society technologically. In Indonesia, the digital literacy level of PAUD teachers is still at the first stage, namely mastery of information technology in learning (Hidayati 2018). This capability is still in the early stages of utilizing information technology. This phenomenon is based on observations of PAUD teachers who have a tendency to use information technology simply to search for data or information on the internet. This is also supported by several studies regarding the mastery of information technology among PAUD teachers which states that teachers' abilities revolve around the use of computer technology as a learning medium in front of the class (Nikolopoulou and Gialamas 2015).

This phenomenon is of course weak considering the many benefits that teachers can obtain in integrating technology in learning activities in front of the class. Digital literacy refers to a teacher's ability to obtain all sources of information that are useful in supporting their activities in guiding their students. Meanwhile, for PAUD teachers, the use of information technology needs to be optimized, because PAUD students are an indigenous generation where technology has been inseparable since they were born. Technology integration can be included in all early childhood education learning activities, such as games, lessons, stories and information.

Data was obtained from observation studies and interviews during the learning process in several Raudhatul Athfal Bogor Regency. Raudhatul Athfal Bogor Regency has teachers who are aware of the need for skills in mastering digital literacy. All existing teachers must always learn how to use technology as a medium for learning purposes. Apart from that, it is also proven by efforts to improve the quality of education in Raudhatul Athfal, Bogor Regency by carrying out various activities that increase ability or mastery of various activities such as workshops and training. If all teachers lack the necessary mastery of digital literacy, in the educational process this can certainly have a negative impact on the quality of effective learning.

Individuals need to understand that media and digital literacy are important factors necessary to participate in the modern world. Currently, digital literacy is as important as reading, writing, studying and revising other knowledge. The generation that grows and develops in this era has different thinking and understanding than before, and becomes more critical and creative. Nowadays we have access to all kinds of information through digital media, so we can easily access all kinds of things we want to know. Access and delivery have become easier and more visible thanks to technology, including in the education sector. The learning process becomes easier by using digital media. Unfortunately, the internet has recently been flooded with hoax news and dirty content. Competitive awareness requires, among other things, information literacy skills, so that someone is able to capture and filter available information. Individuals in this era need the ability to recognize when information is needed as well as the ability to search, analyze and communicate it effectively.

The use of digital media and information in early childhood education learning in this century first requires teachers to be "literate" of all information and digital developments. Teachers who develop lesson plans for online educational information by obtaining relevant material from journals and articles need to know which sources can be trusted. Utilizing media to help convey the learning process, animate abstractions and create creative learning so that it is no longer boring. These three skills are also needed in using applications to enter learning outcomes data. The reality above is a picture of learning in the 21st century which requires us to have basic literacy skills that can improve teachers' abilities, especially teaching abilities. Apart from that, it is able to integrate literacy skills with PAUD learning.

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The use of digital media and information in early childhood education learning in this first century requires teachers to be "literate" of all information and digital developments. Teachers who develop lesson plans for online educational information by obtaining relevant material from journals and articles need to know which sources can be trusted. Utilizing media to help convey the learning process, animate abstractions and create creative learning so that it is no longer boring. These three skills are also needed in using applications to enter learning outcomes data. The reality above is a picture of learning in the 21st century which requires us to have basic literacy skills that can improve teachers' abilities, especially teaching abilities. Apart from that, it is able to integrate literacy skills with PAUD learning.

METHOD

This research uses a quantitative approach with a survey method. Survey method research focuses on revealing relationships between variables, that is, it is directed at investigating causal relationships in a variable. The survey results using a causal approach will be analyzed using linear regression. This analysis is used to facilitate the influence or causality of the independent variable on the dependent variable. This research was carried out without any special treatment of certain data by the researcher. This research aims to test theories by examining the influence between variables, namely analyzing the influence of the independent variable on the dependent variable, including analyzing the influence of digital literacy on the quality of RA learning in Bogor Regency (Sugiyono, 2018).

The survey research method is research that takes samples from a population and uses a questionnaire as the main data collection tool. This type of research can be used for the purposes of: (1) exploration (exploratory), (2) Descriptive explanatory or confirmatory, namely explaining causal relationships and proposing hypotheses, (3) Evaluation, (4) Prediction, (5) Operational research, and (6) Development of indicators. The steps taken in survey research are: (1) Formulating research problems and determining survey objectives; (2) Determining concepts and hypotheses and exploring literature, (3) Determining samples, (4) Creating questionnaires, (5) Carrying out field work, (6) Processing data, (7) Analysis and reporting.

The population in this study was all Raudhatul athfal teachers in Bogor Regency totaling 1,905 teachers (Badan Pusat Statistik 2022). The sample is part of the population. The sampling method in this research uses a probability method, namely a sample selected in such a way from the population that each member of the population has the same probability or opportunity to be used as a sample. According to Cohen, the larger the sample from the existing population, the better, however there is a minimum number that must be taken by researchers, namely 30 samples. The probability method used in this research is structured random sampling (stratified random sampling), which is done by dividing members of the population into several subgroups called strata, then a sample is selected from each stratum. Strata in research is dividing the population from several sub-district categories. From 5 sub-districts, 20 respondents were represented, so the total sample was 100 respondents

FINDING AND DISCUSSION

According to Ghozali (2013), the data normality test was carried out using the Kolmogrov Smirnov test for each variable. Research data is said to be normally distributed or meets the normality test if the Asymp.Sig (2-tailed) value of the residual variable is above 5% or 0.05, conversely if the Asymp.Sig (2-tailed) variable value is below 5% or 0.05 then the data is not normally distributed or does not meet the normality test. The results of the normality test carried out in this research are presented in this table

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		100
Normal Parameters	Mean	.0000000
	Std. Deviation	7.22829138
Most Extreme Differences	Absolute	.127
	Positive	.127
	Negative	-.169
Test Statistic		.127
Asymp. Sig. (2-tailed)		.200[c,d]

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. This is a lower bound of the true significance.

From the results of the normality test calculations that have been carried out for the experimental class, the Asymp.Sign value was 0.200. Because the Asymp. Sign value is ≥ 0.05, it can be concluded that the population data is normally distributed. The homogeneity test is used to determine whether the data from research results in the sample have the same variance value or not. It is said to have the same/not different (homogeneous) variant value if the significance level is ≥ 0.05 and if the significance level is <0.05 then the data is concluded to not have the same/different variant value (not homogeneous).

Test of Homogeneity of Variances

Literacy Digital, Literacy Media, Quality of Learning

Levene Statistic	df1	df2	Sig.
.185	1	98	.670

Based on the output table "Test of Homogeneity of Variances" above, it is known that the significance value (Sig.) of the teacher digital literacy, teacher media literacy and learning quality variables is 0.670. Because the Sig value. 0.671 > 0.05, then as is the basis for decision making in the homogeneity test above, it can be concluded that the variance of the sample data is the same or homogeneous. To be able to find out a simple linear regression of the influence of Digital Literacy, Media Literacy on Learning Quality, it can be seen in this following Table:

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.722[a]	.504	.595	5.274

a. Predictors: (Constant), Literasi Digital

ANOVA Digital literacy

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	315.461	1	315.461	11.343	.001[b]
	Residual	2725.579	98	27.812		
	Total	3041.040	99			

a. Dependent Variable: Mutu Pembelajaran

b. Predictors: (Constant), Literasi Digital

By looking at the table above it can be interpreted as follows:

From the Summary model table, the R2 value = 0.504, meaning that the digital literacy variable is able to increase the value of the learning quality variable by 50.4%. The remaining 49.6% was increased by other factors outside regression. Based on the output above, an R value of 0.722 is also obtained. So it can be concluded that there is a strong relationship between digital literacy and the quality of learning. From the Anova table, the F value is 11,343 with a test significance of 0.001. Testing is carried out using significance or sig criteria with the following conditions: If the research significance figure is <0.05 Ha it is accepted and Ho is rejected. If the significance figure is > 0.05 Ha is rejected and Ho is accepted. Based on the calculation results with the SPSS program above, it appears that the r value is smaller than the level a used, namely 0.000 or 0.000<0.05 so that Ho is rejected and Ha is accepted. This means that there is a significant influence of digital literacy on the quality of learning.

aCoefficient of Determination of Media Literacy

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.732[a]	.536	.532	3.794

a. Predictors: (Constant), Literasi Media

Media Literacy F Test Results

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1630.729	1	1630.729	113.316	.000[b]
	Residual	1410.311	98	14.391		
	Total	3041.040	99			

a. Dependent Variable: Mutu Pembelajaran

b. Predictors: (Constant), Literasi Media

From the Summary model table, the R2 value = 0.36, meaning that the media literacy variable is able to increase the value of the learning quality variable by 53.6%. The remaining 46.4% was increased by other factors outside regression. Based on the output above, an R value of 0.732 is also obtained. So it can be concluded that there is a strong relationship between media literacy and the quality of learning.

From the Anova table, the F value is 113.316 with a test significance of 0.000. Testing is carried out using significance or sig criteria with the following conditions: If the research significance figure is <0.05 Ha it is accepted and Ho is rejected. If the significance figure is > 0.05 Ha is rejected and Ho is accepted. Based on the calculation results with the SPSS program above, it appears that the r value is smaller than the level a used, namely 0.000 or 0.000<0.05 so that Ho is rejected and Ha is accepted. This means that there is a significant influence of media literacy on the quality of learning.

Coefficient of Determination R Square

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.748[a]	.560	.551	3.716

a. Predictors: (Constant), Literasi Digital, Literasi Media

F Test Result

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1701.918	2	850.959	61.640	.000[b]
	Residual	1339.122	97	13.805		
	Total	3041.040	99			

a. Dependent Variable: Mutu Pembelajaran

b. Predictors: (Constant), Literasi Digital, Literasi Media

Multiple Linear Regression

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.327	2.984		2.456	.016
	Literasi Media	.565	.056	.695	10.021	.000
	Literasi Digital	.159	.070	.157	2.271	.025

a. Dependent Variable: Mutu Pembelajaran

From the Summary model table, the R2 value = 0.748, meaning that the independent variables media literacy and digital literacy are able to increase the dependent variable learning quality by 74.8%. The remaining 25.2% is influenced by other factors outside regression. Based on the output above, an R number of 0.865 is also obtained. So it can be concluded that there is a strong relationship between digital literacy and media literacy on the quality of learning.

From the Anova table, the F value is 61,640 with a test significance of 0.000. Testing is carried out using significance or sig criteria with the following conditions: If the research significance figure is <0.05 Ha it is accepted and Ho is rejected. If the significance figure is > 0.05 Ha is rejected and Ho is accepted. Based on the calculation results with the SPSS program above, it appears that the r value is smaller than the level a used, namely 0.000 or 0.000<0.05 so that Ho is rejected and Ha is accepted. This means that there is a significant influence of digital literacy and media literacy on the quality of learning.

The regression equation obtained is as follows:

Y = a + b1x1 + b2x2

Y = 7.327 + 0.565 + 0.159

From this equation it can be concluded that every additional 1 unit of the independent variable digital literacy will increase the value of the dependent variable

quality of learning by 0.565, media literacy will increase the value of the dependent variable quality of learning by 0.159.

Based on the results of testing hypothesis 1, it is known that digital literacy (X1) has a significant influence on the quality of learning (Y) in Raudhatul Athfal throughout Bogor Regency. Where the P value (sig) is 0.000 < 0.05. So it can be concluded that. As Gilster quoted (Restianty 2018) said, digital literacy is the ability to understand and use various information in various formats. The concept of literacy is not only the ability to read, but also the ability to read for meaning and understanding. There is then an emphasis on critical thinking processes when working with digital media rather than technical ability as a core digital literacy skill, and emphasis can be placed on critical evaluation of content discovered through digital media rather than on the technical skills required to access digital media. media. Gilster also explained, "In addition to the art of critical thinking, the skills needed are learning how to organize knowledge and being able to utilize information obtained from various sources. Digitally literate people need to develop search skills and develop strategies for using search engines to find existing information and how to Search for information that suits your needs.

The results of this research are supported by research (Sukardi, Aminah, and Dew 2023) which states that the influence of digital literacy on teaching methods: found that teachers who have good digital literacy tend to use more varied teaching methods, such as integrating technology in delivering material and giving assignments. interactive with students. Another similar research result is research conducted by (Syah, Darmawan, and Purnawan 2019), showing that the influence of online media use on digital literacy skills is significant, academic grades have a significant effect on digital literacy skills, the role of parents on digital literacy skills has a significant effect. significantly and reading intensity has a significant effect on digital literacy skills. There is an indirect influence between active use of online media, academic achievement, the role of parents through reading intensity on digital literacy skills.

Based on the results of testing hypothesis 2, it is known that there is a significant influence of media literacy on the quality of learning. The F value is 113.316 with a test significance of 0.000. Testing is carried out using significance or sig criteria with the following conditions: If the research significance figure is <0.05 Ha it is accepted and Ho is rejected. If the significance figure is > 0.05 Ha is rejected and Ho is accepted. Based on the calculation results with the SPSS program above, it appears that the r value is smaller than the level a used, namely 0.000 or 0.000<0.05 so that Ho is rejected and Ha is accepted.

The R2 value = 0.36, meaning that the media literacy variable is able to increase the value of the learning quality variable by 53.6%. The remaining 46.4% was increased by other factors outside regression. Based on the output above, an R value of 0.732 is also obtained. So it can be concluded that there is a strong relationship between media literacy and the quality of learning. Media literacy is the ability to access, analyze, evaluate and

communicate messages in various forms of media. In the context of modern education, media literacy plays an important role in improving the quality of learning. Several relevant studies have shown empirical evidence about the positive influence of media literacy on the quality of learning. Research conducted by (Adyawanti, Pendahuluan, and Pusat 2016) revealed that students who have good media literacy tend to have stronger critical thinking skills. They are able to critically analyze information from various media sources and make more objective judgments. This ability is very important in improving the quality of learning, because it allows students to understand the material more deeply and develop more analytical thinking.

A study by (Relmasira 2019) found that teachers who have good media literacy tend to be more effective in integrating media into the learning process. They are able to utilize various types of media, such as video, audio, images and interactive media, to convey material in a more interesting and contextual way. This can increase student interest and involvement in learning, thereby helping to improve retention and understanding of the material. Other research by (Milyane 2020) highlights the importance of media literacy in preparing students to become responsible citizens in the digital era. By having good media literacy, students can be wiser in consuming and producing media content, and understand the impact of media on society. This helps them become more critical and reflective in their thinking, which in turn can improve the quality of their learning and overall self-development. In line with these findings, (Ganggi 2018) developed a learning model that explicitly integrates media literacy. This model involves activities such as analyzing media content, producing your own media, and discussing media-related issues. This research shows that students who follow this learning model experience significant improvements in media literacy skills and understanding of learning material.

Based on these studies, it can be concluded that media literacy has a positive influence on the quality of learning. By increasing media literacy among students and teachers, the learning process can become more critical, interactive and contextual. Therefore, it is important for educational institutions to integrate media literacy into their curriculum and learning methods, as well as provide teachers and students with the necessary training to develop adequate media literacy skills.

CONCLUSION

First, teacher digital literacy is proven to have a positive influence on the quality of learning at RA. Teachers who have good digital literacy skills are able to integrate digital technology into the learning process effectively. They can utilize various digital resources, such as learning videos, interactive applications, and multimedia materials, to deliver material in a more interesting and contextual way. This increases student interest and engagement in learning, and helps improve understanding and retention of material.

Second, teacher media literacy has also been proven to have a positive influence on the quality of learning at RA. Teachers who have good media literacy are able to analyze and evaluate media content critically, and integrate it into learning in a meaningful way. They can teach students how to consume and produce media responsibly, as well as understand the impact of media on society. This helps develop students' critical thinking and analytical skills, which in turn improves the overall quality of learning.

Furthermore, this research found that the combination of digital literacy and teacher media literacy had a stronger influence on the quality of learning in RA. Teachers who have these two skills can create an interactive, contextual and critical learning environment, where students can make optimal use of digital technology and media to support their learning process.

Based on these findings, this research recommends several steps to improve digital literacy and media literacy of teachers in RA, such as continuous professional training and development, provision of adequate technological infrastructure, and collaboration with other stakeholders, such as parents and the community. By increasing teachers' digital literacy and media literacy, it is hoped that the quality of learning at RA can be significantly improved, thereby better preparing students to face the challenges of the current and future digital era.

It is necessary to carry out continuous research and evaluation to monitor the impact of digital literacy and media literacy on the quality of learning at RA. Research can identify best practices, challenges, and strategies to continue improving digital and media literacy in early childhood education. Research findings can be used to improve programs, curricula and policies related to digital and media literacy in RA. RA educational institutions need to hold regular training and professional development programs to increase teachers' digital literacy and media literacy.

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