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The Effect of 3T School Digitalization in the Era of the COVID-19 Pandemic

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Abstract: This study aims to determine whether digitizing 3T schools in the era of the covid 19 virus pandemic. The type of research used is survey research using quantitative descriptive analysis. The research design is Ex-Post Facto. The subjects in this study are schools included in the 3T region (frontier, outermost, and underdeveloped) in Indonesia, especially in the East Nusa Tenggara region. The object of this study was 40 3T school teachers in four districts on the island of Flores (Nagakeo Regency, East Manggarai Regency, Manggarai Regency, and West Manggarai). The results showed that the number of respondents who answered in the agree category got the highest number, namely 19 people with a percentage of 47%. In the strongly agree category, there were 16 people with a percentage of 40%, the category did not agree. Five people with a percentage of 13%, and none. Who chose the category strongly disagree (percentage 0%). From this, it can be concluded that school digitization has a positive effect during the COVID-19 pandemic; this can be seen from the number of teachers in the 3T region who chose the agreed category, namely 19 people (47%).

Keywords: Digitization; COVID-19; Teacher; Flores; 3T region.

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Introduction

In December 2019, pneumonia of unknown origin was reported in Wuhan, Hubei Province, China. Analysis of its genome showed the virus as a new coronavirus related to SARS-CoV, hence the name severe acute respiratory syndrome coronavirus (Ciotti, et al., 2020; Fathurrahim, et al., 2021). This virus quickly spread to other countries and, in a short time, became a world pandemic. This virus is known as the covid 19 virus or coronavirus disease. Indonesia is no exception. Indonesia is also part of one of the countries affected by the COVID-19 pandemic. This virus has also affected the world of education, where the teaching and learning process, which is usually carried out face to face in classrooms, must be carried out through distance learning (PJJ) with the use of technology. Information (Damopolii, Lumembang, & İlhan, 2021; Pakpahan & Fitriani, 2020; Raiman, et al., 2021; Yurida, et al., 2021)

Technological developments are happening very fast and have become part of human life (Hakim, et al., 2021). The technology developed can provide great benefits and influence on human life (Sari, 2019). (Ammah, 2018) states that in the world of education, learning must adapt and update itself to be compatible with the global world so that it can compete with modern society in today's digital world. In Indonesia, the use of digital media has grown rapidly (Affifatusholihah, et al., 2021).

Information and Communication Technology (ICT) is also beneficial for students to become active learners by creating content for viewers throughout the archipelago or the world. As we know, in the era of the industrial revolution 4.0, technological advances greatly affect the quality of people's lives. In line with government policies, 3T schools also implement these policies. 3T schools are schools that are in the front, outermost, and underdeveloped zones in Indonesia. The policy of distance learning (PJJ) and online learning

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(Daring) greatly affects students in the 3T area. On the other hand, students must learn contextually and inquiry-based (Aco, et al., 2021; Bhure, et al., 2021; Lelasari, et al., 2021; Mandasari, et al. 2021; Ruto, et al., 2021).

The Ministry of Education and Culture emphasized expanding access to education for 3T schools through the school digitization program. The digitalization of schools is the answer to the challenges of the industrial revolution. School digitization is the implementation of new learning prepared to face the industrial revolution 4.0 (Ansari, 2020). However, the 3T school digitization program has not been in line with the Human Resources (HR) level in the 3T area, especially for the students.

Digitization of learning is one of the current challenges schools face in Indonesia, including for schools in remote areas (Damopolii & Kurniadi, 2019a; Damopolii & Kurniadi, 2019b; Dirckinck-Holmfeld et al., 2019; Nugraha & Anggraini, 2019). Students who do not have or cannot even use gadgets (laptops and cellphones) are the main problem. In addition, the condition of the area that still lacks infrastructure is also an obstacle, for example, the absence of electricity in schools, the absence of an internet network, or areas that have not been able to capture cellphone signals. This study aims to determine whether there is an effect of digitizing 3T schools in the era of the covid 19 virus pandemic.

Method

The type of research used is survey research using quantitative descriptive analysis. The research design is Ex-Post Facto. The research design can be described in figure 2.

Figure 2. Design ex-post-facto

Description:
X: Digitalization 3T School
Y: Covid 19 Pandemic

Result and Discussion

This study was conducted to determine whether there is an effect of digitizing 3T schools in the era of the covid 19 pandemic. The study analyzed data from 40 respondents who filled out questionnaires or questionnaires distributed by researchers to teachers who served in 3T areas. The questionnaire consists of 30 questions and statements. Data from filling out the questionnaire, then analyzed by tabulating. The scores and scores are calculated, then the categories are searched. The categories in this study consisted of four categories that were adjusted to the scores in the research questionnaire, namely strongly agree, agree, disagree, and strongly disagree. From the calculation of the questionnaire, obtained the total score and value for each respondent, which is then from the total score and average value, minimum value, maximum value, standard deviation, and variance (can be seen in Table 1).

Table 1. Total Score and Value of Each Respondent

Respondent	Total	
	Score	Value
1	103	86
2	77	64
3	118	98
4	78	65
5	85	71
6	86	72
7	88	73
8	102	85
9	96	80
10	86	72
11	109	91
12	93	78
13	91	76
14	106	88
15	107	89
16	102	85
17	101	84
18	101	84
19	77	64
20	68	57
21	96	80
22	62	52
23	76	63
24	65	54
25	66	55
26	87	73
27	64	53
28	85	71
29	107	89
30	94	78
31	109	91
32	103	86
33	102	85
34	105	88
35	92	77
36	95	79
37	102	85
38	94	78
39	92	77
40	102	85
Average	92	77
Minimum	62	52
Maximal	118	98
Std Deviation	14	12
Variant	200	139

From the total score and value obtained, look for the maximum amount, minimum amount, average mortgage, and mortgage standard deviation (score and value). The results can be seen in Table 2.

Table 2. Maximum, Minimum, Average Mortgage, and Mortgage Standard Deviation for Score and Value

Criteria	Score	Value
Maximum	120	100
Minimum	30	25
Average Mortgage	75	63
Mortgage Standard Deviation	23	19

From Table 2. it can be seen that the maximum number for the score is 120, while for the score is 100; the minimum number for the score is 30, while the score is 25; the average mortgage score for the score is 75, while the score is 63; and the standard deviation for the score is 23, while the value is 19. After getting the results from Table 2, it is continued by looking for the number of respondents per category. As explained earlier, there are four categories in this study, namely strongly agree, agree, disagree, and strongly disagree. The number of respondents per category can be seen in Table 3.

Table 3. Number of Respondents Per Category

Category	Respondents
Strongly agree	16
Agree	19
Disagree	5
Strongly disagree	0
Total	40

From Table 3. it can be seen that the number of respondents who strongly agree is 16 people, agrees 19 people, disagrees five people, and strongly disagrees 0. From this number, we can also look for the percentage of each category. The percentage can be seen in Figure 2.

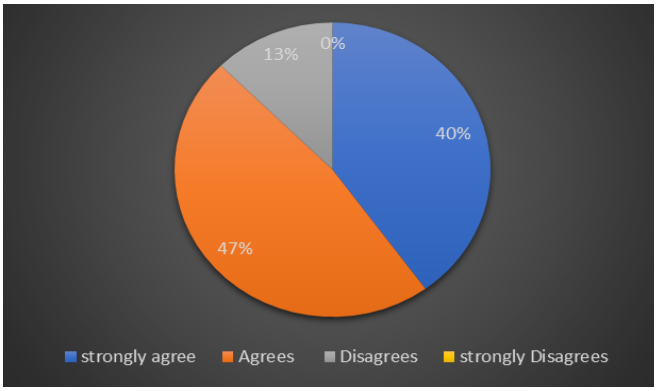

Figure 2. Respondent Category Percentage

From Figure 2, it can be seen, the percentage for the category strongly agree is 40%, the category agrees 47%, the category disagrees 13%, and the category strongly disagrees 0%. The contents of tables and figures are the same thing but in different forms. Table 3 is the sum of the respondents in each category which can be seen in the form of numbers, while Figure 2 is the sum of the respondents which is presented in the form of a pie chart. This is necessary so that we can know the number of each category in the form of numbers and the percentage of each respondent in each category.

Teachers are the determinant of the success of learning in schools (Sadipun & Wangge, 2020). Based on the data from the research results, it can be seen that the agree category ranks at the top of the most, followed by the category strongly agree, disagree and the last one strongly disagrees. This shows that the respondents chose to agree with the implementation of school digitization in the 3T area. Respondents also stated that school digitization had a significant influence during the COVID-19 pandemic in the 3T area, especially in the NTT area (Flores Island). Based on the researchers' findings, it can be said that digitalization in schools in the 3T area had a positive influence during the pandemic. The results obtained are in line with those found by Viberg et al. (Roumbanis Viberg, et al., 2020) who found that teachers have demands to use and teach with digital technology. Digitalization-based learners became an alternative solution for completing teaching and learning activities (Salkiah, 2020). Even though it is a 3T area, the use of technology must also be made. Teachers must be innovative. Our findings reveal that teachers agree that technology and digitization have impacted their learning during COVID-19.

Conclusion

From the results of the research conducted, it can be seen that the number of respondents who answered in the agree category got the most number, namely 19 people with a percentage of 47%, then in the strongly agree category there were 16 people with a percentage of 40%, the category disagreed with five people with a percentage of 13%. No one chose the category strongly disagree (0% percentage). From this, it can be concluded that school digitization had a positive influence during the COVID-19 pandemic; this is seen from a large number of teachers in the 3T area who chose the agree category, namely 19 people (47%).

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