

## Evaluation of PAI Teachers in Online Learning During The Covid-19 Pandemic at SMA Negeri Palu

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**Abstrak:** The sudden online learning policy resulted in teachers experiencing inequality. Therefore, the purpose of this study is to examine the results of teacher evaluation in implementing online learning after the enactment of government policies during the COVID-19 pandemic with the aim of analyzing teacher performance during online learning, then mapping the obstacles faced as consideration in finding solutions for the next implementation of online learning. The method used in this study is qualitative descriptive by collecting observation data, student and teacher survey data through google form and teacher monitoring and evaluation results from school LMS. From the results of the study, it was found that teacher evaluation in online learning was less effective. The reason is the gap in teachers' digital literacy due to unpreparedness with online learning and the age of teachers so they cannot operate IT or digital applications for online learning.

**Kata Kunci:** Evaluation; Teacher PAI; Covid-19.

### I. INTRODUCTION

The government's policy to implement online learning during COVID-19 has resulted in chaos and confusion in the world of education, especially in schools due to their unpreparedness for distance learning. Teachers as prime movers in the learning process are overwhelmed because they are required to immediately adapt from a face-to-face curriculum to an online learning curriculum which is relatively difficult<sup>1</sup>. The lack of digital literacy, low ability to use IT, lack of understanding in operating online applications, and teacher age are obstacles for teachers in conducting online learning. According to Konrad Grabinski et al. that some lecturers are reluctant to introduce this form of education due to lack of experience in using information technology and lack of adequate support from the IT department<sup>2</sup>, in addition to instability of network access and inadequate school infrastructure, causing the teaching and learning process to be hampered and less effective. A survey conducted in one school showed that around 44% of PAI teachers use Whatsapp Group in the teaching and learning process, 22% use Google Classroom, 9% use Zoom, 8% use school E-Learning, 3% use Goggle Meet, and

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<sup>1</sup> Rahmawati; Evita Muslima Isnanda Putri; "Learning From Home in the Perspective of Student Perceptions in the Covid-19 Pandemic Era," *National National Education Seminar*, 2020, 17–24.

<sup>2</sup> Konrad Grabinski, Marcin Kedzior, and Joanna Krasodomska, "The Science of Education Embedding E-Learning in Accounting Modules: Educators' Perspectives," 2020.



14% use another (online monitoring and evaluation SMAN 3, 2021). This data proves that most PAI teachers only use the WAG application in online learning.

Research related to the evaluation of online learning during the COVID-19 pandemic tends to focus on three aspects. First: The implementation of online learning in schools <sup>3</sup>. Second: evaluation of online learning in schools <sup>4</sup>. *Third: analysis of online learning during WFH* <sup>5</sup>. None of these studies explain the evaluation of PAI teachers specifically in implementing online learning during the COVID-19 pandemic.

This study seeks to fill the gap by analyzing the results of teacher evaluations in online learning during the COVID-19 pandemic by answering three questions. First, what are the results of PAI teachers' evaluations in online learning during the COVID-19 pandemic? This question focuses on the results achieved by PAI teachers during online learning. Second, what factors led to the evaluation results? This question aims to map the obstacles experienced by PAI teachers during the online learning process. Third, what is the solution for better future learning? This question is to provide effective and interesting online learning solutions in the future.

This paper is based on the results of research that the results of PAI teacher evaluations in online learning during the COVID-19 pandemic are classified into two types; effective and less effective results. Effective results mean a fun and efficient online learning environment that inspires and excites PAI students and teachers to master technology. The less effective result is in the form of curriculum targets that are not achieved properly due to inactive learning interactions. The evaluation results were caused by the unpreparedness of PAI teachers to face the digital learning environment, low ability and competence in using IT and elderly teachers who could not operate several online learning applications.

## II. THEORETICAL REVIEW

### a. Online Learning Concepts in Schools

Online learning, also called distance education, is a teaching and learning process that is carried out remotely through the use of several communication media. Distance education aims to provide higher education services to groups of people who are unable to attend face-to-face or regular education and to expand access and

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<sup>3</sup> Fuadi Marjan Tuti, Musriandi Riki, and Suryani Linda, "Covid-19: Application of Online Learning in Higher Education," *Educational Dedication* 4, No. 2 (2020): 193–200.

<sup>4</sup> Afif Rahman Riyanda, Kartini Herlina, and B Anggit Wicaksono, "Evaluation of the Implementation of the Online Learning System of the Faculty of Teacher Training and Education, University of Lampung," *Journal of IKRA-ITH Humanities* 4, no. 1 (2020): 66–71; Agus Yudiawan, "LEARNING WITH COVID 19: Evaluation of Pandemic-Era Online Learning at State Islamic Religious Universities, West Papua" 6, no. 1 (2020): 10–16; Iskandar Tsani, Rofik Efendi, and Sufirmansyah Sufirmansyah, "Evaluation of the Readiness of Islamic Higher Education Institutions in Facing the Digital Era," *Ta'dibuna: Journal of Islamic Education* 9, No. 1 (2020): 019, <https://doi.org/10.32832/tadibuna.v9i1.2604>.

<sup>5</sup> Wahyudin Darmalaksana et al., "Analysis of Online Learning during the WFH Pandemic Covid-19 as a Challenge for 21st Century Digital Leaders," *Scientific Papers (KTI) Work From Home (WFH) Covid-19 UIN Sunan Gunung Djati Bandung in 2020* 1, no. 1 (2020): 1–12; Jatisunda M.G. Nahdi, D.S., "Cakrawala Pendas Journal DIGITAL LITERACY ANALYSIS OF PROSPECTIVE ELEMENTARY SCHOOL TEACHERS IN VIRTUAL CLASSROOM-BASED LEARNING DURING THE COVID-19 PANDEMIC" 6, no. 2 (2020): 116–23.

facilitate higher education services. The special purpose of distance education during the covid-19 pandemic is to provide higher education services remotely in order to implement the government's Work From Home (WFH) policy as an effort to prevent the transmission of the covid-19 virus. Distance education in schools is carried out in various forms, modules, and scopes supported by facilities and services as well as an assessment system that ensures the quality of graduates in accordance with the National Higher Education Standards (SMAN Education Guidelines 3, 2019).

The concept of online learning in schools according to Tian Betawati <sup>6</sup> that teachers must know the character of students to adjust the application to be used. Teachers must be innovative and creative in designing online teaching materials. In addition, the interaction between teachers and students must be active and there must be feedback. The online learning system, according to <sup>7</sup> was developed by the Ministry of Education and Culture of the Republic of Indonesia through the Open and Integrated Indonesian Online Lecture Program (KDITT). KDITT is a government program to reach students on a national scale.

#### b. The Concept of Online Learning Effectiveness

According to Tian Betawati, there are several principles to implement effective online learning, namely the right curriculum, good interaction between learners, using innovative approaches, effective methods, inclusive evaluation, formative and summative, coherent, consistent, transparent, easy-to-operate, and cost-effective<sup>8</sup>. <sup>9</sup> It is explained that a good online learning flow is the presentation of learning that is designed in such a way as part of the material that includes learning guides, descriptions, series of digital materials and learning activities that are assembled deductively-inductively into interactive and interesting learning objects and can achieve optimal learning quality. The most pressing of these principles is interaction with students (teachers and students). Therefore, teachers as the main movers must prepare a syllabus that is in accordance with online learning and adapt to online applications used as an effort to minimize problems and difficulties in learning.

#### c. Teacher Evaluation Improves Education Quality

The performance of education personnel, especially teachers as the vanguard in providing educational services, is a very important issue to be studied in order to maintain and improve the quality of education services. Good teacher performance is one of the keys to improving and maintaining the quality of educational services to the community <sup>10</sup>. To measure teacher performance results, it is necessary to conduct evaluations to detect

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<sup>6</sup> DGB UGM Webinar, "Optimizing Online Learning During a Pandemic \_ Universitas Gadjah Mada," 2020.

<sup>7</sup> Mokhamad Iklil Mustofa et al., "Formulation of Online Lecture Model as an Effort to Reduce Disparity in Higher Education Quality," *Walisono Journal of Information Technology* 1, No. 2 (2019): 151, <https://doi.org/10.21580/wjit.2019.1.2.4067>.

<sup>8</sup> UGM, "Optimizing Online Learning During the Pandemic \_ Universitas Gadjah Mada."

<sup>9</sup> Uwes Anis Chaeruman, "Learning Path: Improving Online Learning Interactivity," *Online learning seminars & workshops in college*No. September (2017): 1–10, <https://doi.org/>.

<sup>10</sup> Evy Febri Artanti and Alwi Suddin, "The Influence of Competence, Communication, and Emotional Intelligence on the Performance of Lecturers at the Sahid Surakarta Tourism College," *Journal of Human Resource Management* 13 (2019): 261–69.

or predict draft procedures or implementation designs during the implementation stage, provide information to overcome obstacles and as a consideration for overcoming obstacles by offering solutions.<sup>11</sup>

Thus, to get quality processes and student learning outcomes, maximum teacher performance is needed. In order for teachers to show high performance, at least teachers must have mastery of what material will be taught and how to teach it so that learning can take place effectively and efficiently and commitment to carry out these tasks.

Teacher performance evaluation is an effort to see the implementation of teacher performance, especially in providing quality learning services and their efforts to support them. The results of teacher performance evaluations become material for guidance, direction, administrative needs, promotion, and further management of teachers. The substance analyzed in the evaluation of teacher performance refers to the duties and roles of a teacher. Based on Law No. 14 of 2005 concerning Teachers and Lecturers, especially article 20 letter a and letter b which reads: a. Planning learning, implementing quality learning processes, and assessing and evaluating learning outcomes; b. Improve and develop academic qualifications and competencies continuously in line with the development of science, technology, and art; Based on Law No. 14 of 2005 mentioned above, a teacher performance framework that is oriented towards the fulfillment of quality learning services can be developed. This performance can be seen in the following four ways: (1) personal development, (2) learning, (3) professional development skills, and (4) social interaction with stakeholders.<sup>12</sup>

Teacher self-development performance refers to the extent to which teachers develop themselves into steady, stable, mature, wise, and authoritative individuals, role models for students, and have noble character. Learning achievement indicates the extent to which a teacher can provide quality service in learning to students, both inside and outside the classroom. This performance leads to teacher efforts in planning, implementing, and evaluating learning services. The professional development skills of the teacher refer to the extent to which he performs self-development, related to the ability to carry out his duties and role as a professional educator. The performance of teachers' social interaction with stakeholders refers to the extent to which teachers are able to communicate and get along with all school stakeholders, especially students, parents, the surrounding community, etc.<sup>13</sup>

Seeing the importance of these four components to achieve school as expected, principals are required to develop performance as it should, so that school achievement is no longer a dream, but realistic expectations from all parties, one of which can be achieved through teacher performance. In this case, the principal needs information about the actual performance of the teacher in carrying out his various duties in the school in order to decide what and how it relates to the teacher. In this context, where schools are

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<sup>11</sup> Riyanda, Herlina, and Wicaksono, "Evaluation of the Implementation of the Online Learning System of the Faculty of Teacher Training and Education, University of Lampung."

<sup>12</sup> "Law 14-2005 Teachers and Lecturers.pdf - Google Drive," accessed August 24, 2022, <https://drive.google.com/file/d/10DFIxdJDHKEvPXMVE9Va7-U6gM3MD3AW/view>.

<sup>13</sup> C Triatna - Journal of Education Administration and undefined 2007, "Teacher Performance Evaluation and School Quality Assurance Efforts," *Ejournal.Upi.Edu*, accessed August 20, 2022, <https://ejournal.upi.edu/index.php/JAPSPs/article/view/6182>.

faced with various demands, including: implementation of the School-Based Curriculum (KTSP), achievement of quality learning outcomes, professional certification of teachers/principals/supervisors, etc. These various conditions have led school personnel to master and be able to respond to various demands by developing themselves and their environment.

### **III. RESEARCH METHODS**

This study used qualitative descriptive method with data collection through surveys and observations. The survey was conducted to PAI students and teachers regarding the implementation of online learning which lasted approximately 3 months with research instruments using questionnaires distributed through the Google Form application, also reinforced by data from schools regarding the results of monitoring teacher evaluations in online learning. The data was completed with independent observations of PAI teachers to find out the online learning system carried out during the COVID-19 pandemic.

Information for this paper was obtained from 3 public high schools, namely SMA 3 Kota Palu, SMA 1 Kota Palu, and SMA 2 Kota Palu. The survey respondents were 211 students and 12 PAI teachers, three PAI teachers for independent observation, and supporting data from the results of online monitoring and evaluation of the three schools. The requested data is related to the focus of the research, namely: 1) analyzing teacher performance during online learning, 2) then mapping the obstacles faced as consideration in finding solutions for the implementation of further online learning

The collected data were analyzed using the Milles, Huberman and Saldana analysis models<sup>14</sup>. There are three concurrent activity streams: 1) data condensation, 2) data display, and 3) inference/verification. The researchers collect and select data from the field, then combine and classify the data obtained. At the data display stage, researchers describe the data that has been collected and then retrieve the data needed. After that, the disaggregated data is interpreted as the results or findings of the study.

### **IV. RESULTS AND DISCUSSION**

In accordance with the research orientation, this article will interpret the results of teacher evaluations in implementing online learning during the COVID-19 pandemic, then analyze the obstacles faced during the online learning process that cause the learning process to be less effective, and find solutions to optimize further online learning.

The results of teacher evaluation in online learning during the covid-19 pandemic Based on data obtained from the PAI teacher evaluation research of SMA Negeri Palu in online learning due to covid-19 are presented in the following diagram.

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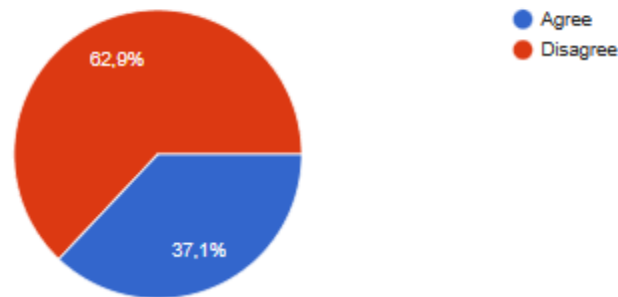
<sup>14</sup> Johnny Miles, Matius B., Huberman, A. Michael., Saldana, *No TitleQualitative Data Analysis is; Meth*

*od Source Book*, 2017.

**Figure 1 Results of the Palu State Student Response Survey**

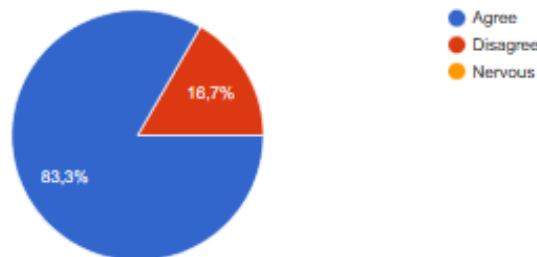
1. Do you agree with online learning? \*

89 answers

**Figure 2 Survey Results of Palu State High School Teachers**

1. Do you agree with online learning?

6 answers



The results of an online learning survey that has been conducted on 89 respondents from public high school students in Palu, there are 62.9% of students who disagree with online learning and 37.1% who agree. Some students expressed disapproval because it was difficult to understand the subject matter given by the teacher, especially religious subjects. Meanwhile, some students agreed because for the sake of mutual safety and health to avoid and prevent the spread of Covid 19 so that online learning is better done.

Furthermore, based on the results of a survey of 6 PAI teachers of SMA Negeri Palu, it was found that 83.3% agreed with online learning because there was an outbreak that endangered humans so that online learning

Needed. There were 16.7% who answered that they did not agree with online learning because learning activities were not optimally carried out because they had many obstacles including poor internet connection and limited internet data packages. However, some respondents stated that online learning must be carried out, due to coercive conditions, to maintain the continuity of the teaching and learning process.

Meanwhile, the responses of PAI students and teachers in Palu to the effectiveness of online learning outcomes are presented in the following diagram:

Figure 3 Source: Google Form Guru Survey



Figure 4 Google Forms Student Survey

From the results of the study, it was found that online learning during the COVID-19 pandemic was less effective. Based on data obtained from a google form survey, among 89 respondents from public high school students in Palu, 74.2% answered ineffective. Some students give ineffective responses because students feel



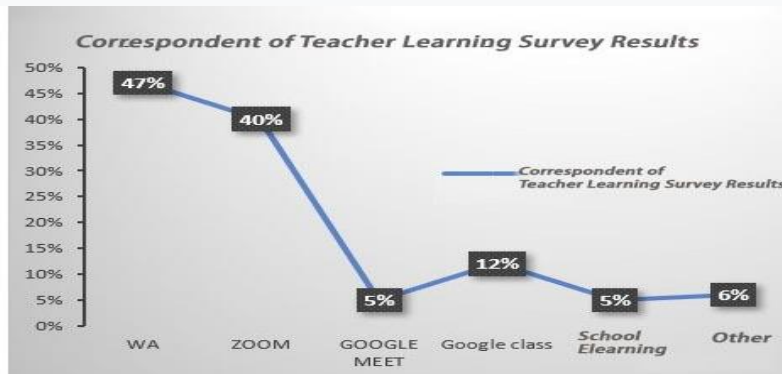
less enthusiastic in learning and have difficulty understanding the material given by teacher. Some students also gave reasons that this was not effective because online learning has many obstacles including poor internet connection, teachers only give assignments without any explanation through meetings (student Google Form data survey, 2022).

While the survey of 6 teachers, 83.3% answered less effectively and 16.7% answered ineffectively and 0% answered effectively. Some teachers write that online learning is less effective because the material that can be given to students is very limited and students cannot understand it fully, teachers cannot monitor and supervise student activities during learning, and are constrained by networks that are sometimes slow and disconnected. (Google Form data survey of teachers, 2022).

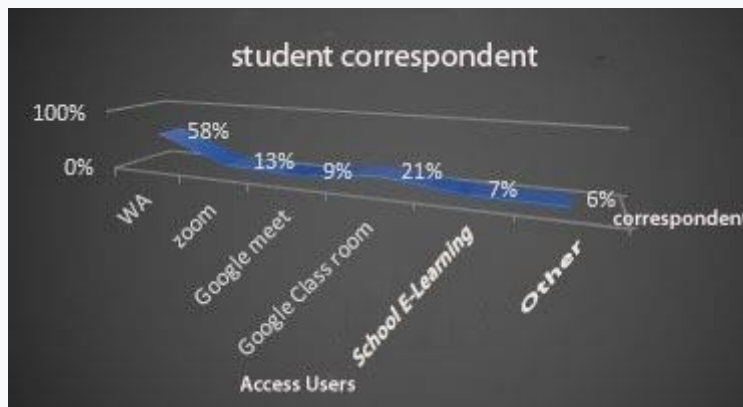
The above results are in line with the results of observations, that during the Covid-19 pandemic learning took place less than optimally. The main reason is because of the sudden learning policy without prior preparation so that the learning model used is in accordance with the level of digital literacy ability possessed. Low digital

competence results in less effective learning interactions. Delivery of learning schedules through WhatsApp Group (WAG), then start learning by filling in attendance in the goggle classroom and presenting material and conducting discussions through Google Meet for approximately 30 minutes. Limitations in implementing some features present on the platform make the learning environment rigid, stuck on some familiar features. The following responses from students and teachers to online learning are presented in the following diagram.

**Figure 5 Online teacher response graph**



**Figure 6 Online student response graph**



**Figure 7 Online student response graph**

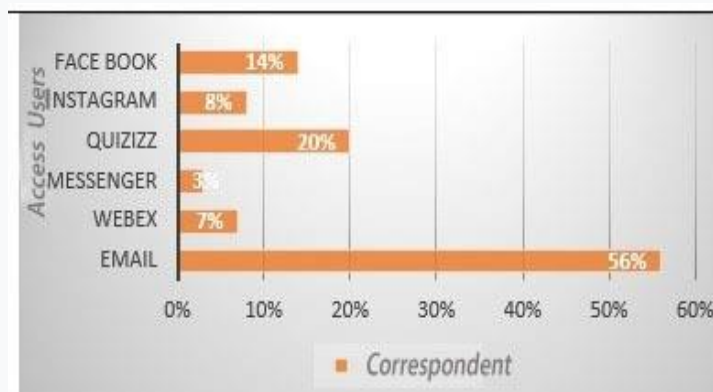
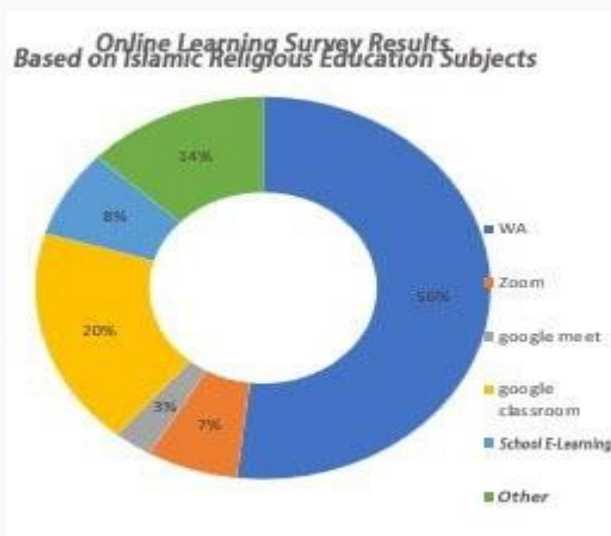




Figure 8 Online teacher response graph



Data shows that the results of student and teacher surveys in online learning are more dominant in using WA and in online learning for PAI subjects.

a. The dominant factors affecting the results of teacher evaluations

1. Teachers' digital literacy gap

The application of digital literacy is an interesting learning alternative using digital sources. This is used as a real reference to support the process of creative, innovative, and independent learning activities by utilizing information technology.

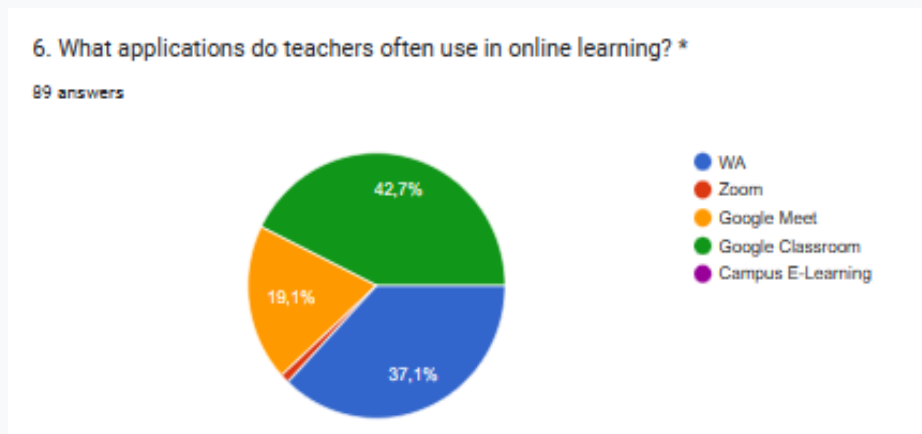
*(Tosepu, Y.A., 2018) "during the covid-19 pandemic. Therefore, teachers must have the competence to operate IT to carry out effective online learning. However, due to urgent regulations, the lack of digital literacy for teachers results in the inability to operate digital technology and limitations in managing various online learning applications. Therefore, learning is only limited to providing material without explaining and giving independent and group tasks without any feedback. This is evidenced from the google form survey data of students and teachers."*

Based on the results of a survey on the use of facilities used by teachers in online learning, presented in the following diagram.

Figure 9 Online User Facility Survey Graph



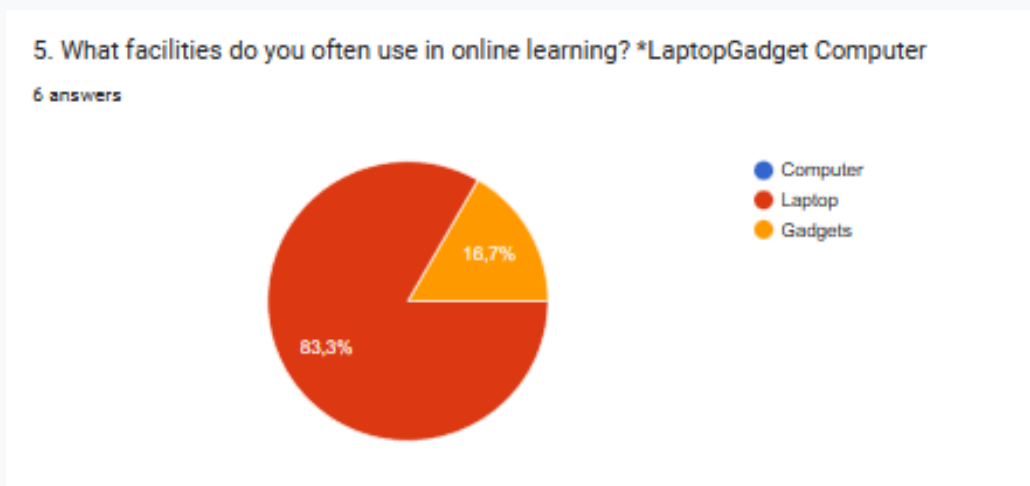
**Figure 10 Teacher Survey Graph Application Usage**



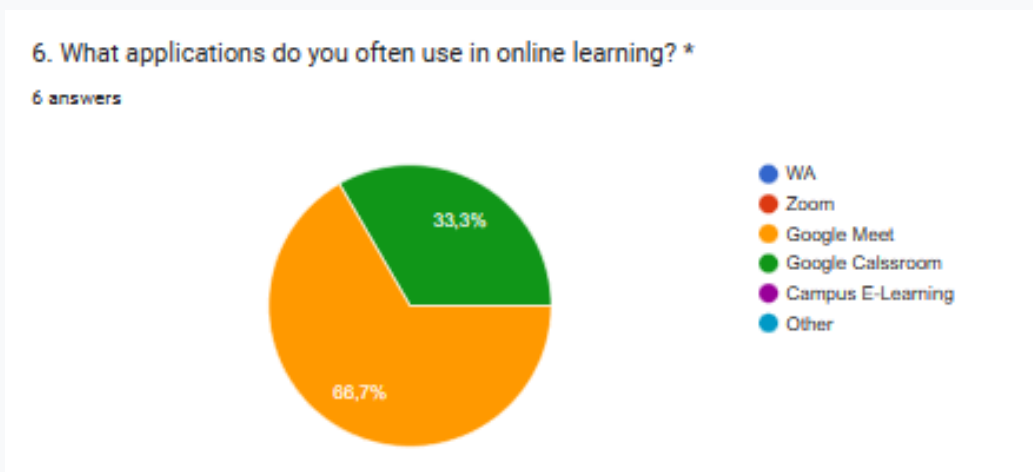
The survey results show that the most widely used facility by teachers in online learning is laptops, which is 83.3%.

Meanwhile, applications that are often used by teachers in online learning are shown in the following diagram.

**Figure 11 graph results suevey guru use of online facilities**



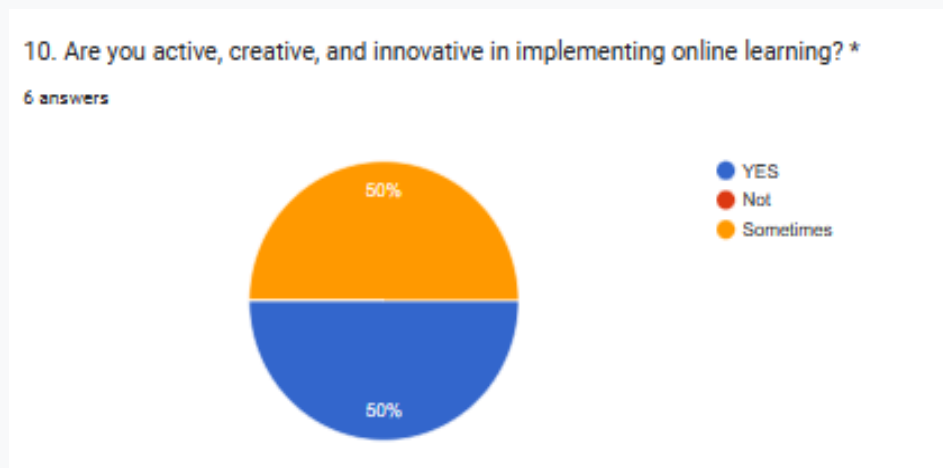
**Figure 12 graph of teachers using online applications**



Student survey data showed that of 89 students, 37.1% answered Whatsapp Group (WAG) as an application that is often used in online learning, 42.7% Google Classroom, and 19.1% used Google Meet, and the rest used Zoom. Similarly, in teacher surveys, 66.7% of 6 respondents chose Google Meet as an application that is often used during the online learning process, and 33.3% use Google Classroom. This data proves that most teachers use the Google Classroom app in online learning.

Furthermore, based on the results of a survey of teacher activities in online learning, it is presented in the following diagram:

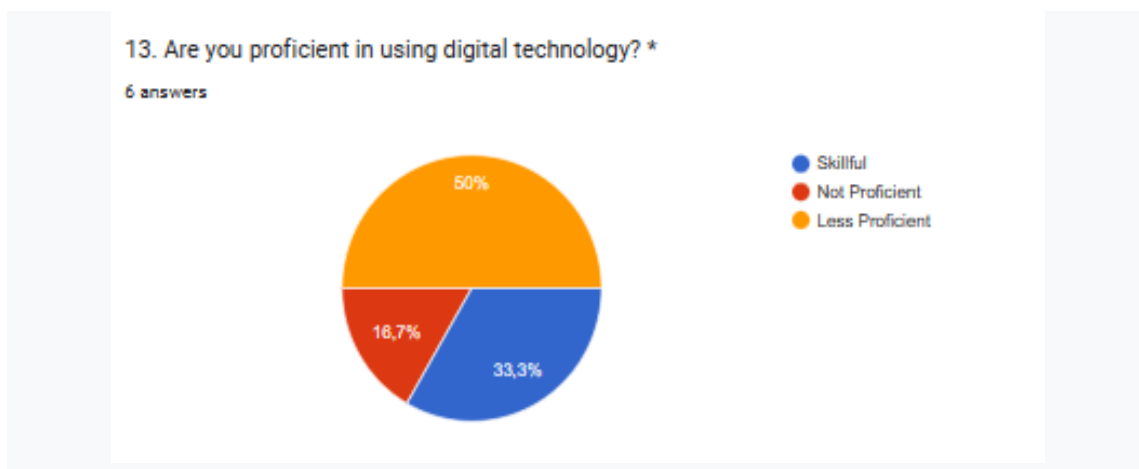
**Figure 13 Graph Of Teacher Activity In Online Learning**



Data shows that 50% of teachers are sometimes active in online learning and 50% are active, creative, and innovative. The data proves that teachers have not been able to carry out online learning optimally because they are not used to using applications in learning as a method in online learning. The following is data on teacher proficiency in using digital technology in online learning

The survey results show that 50% of PAI teachers in Palu are less proficient in using digital technology and only 33.3% are proficient and 16.7% are not proficient in using digital technology in learning.

**Figure 1 Graphs Of The Results Of Using Skills Using Digital Technology**

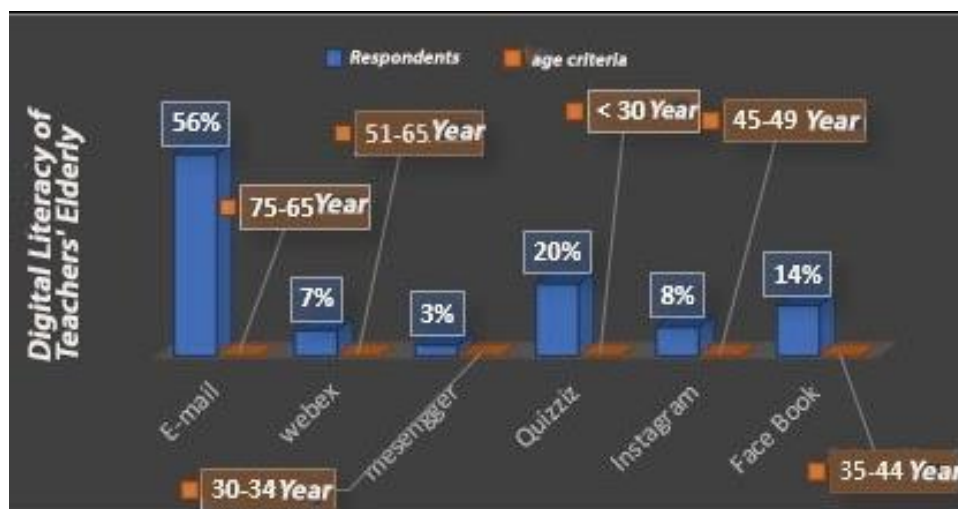


Online learning during the COVID-19 pandemic is less effective because it is predominantly caused by teachers' unpreparedness to face online learning. Online learning requires technical knowledge to use various in-app features. It takes innovation and creativity of teachers to operate these features in delivery learning materials, answering questions, and discussions. However, the reality on the ground is that teacher unpreparedness results in many teachers who are not familiar or accustomed to using digital technology. In fact, many of these teachers are elderly who are not at all literate in using digital platforms.

## 2. Age of teachers

In addition to the low digital literacy ability of teachers, it is also because many teachers are elderly. This can be seen from the data of teacher respondents.

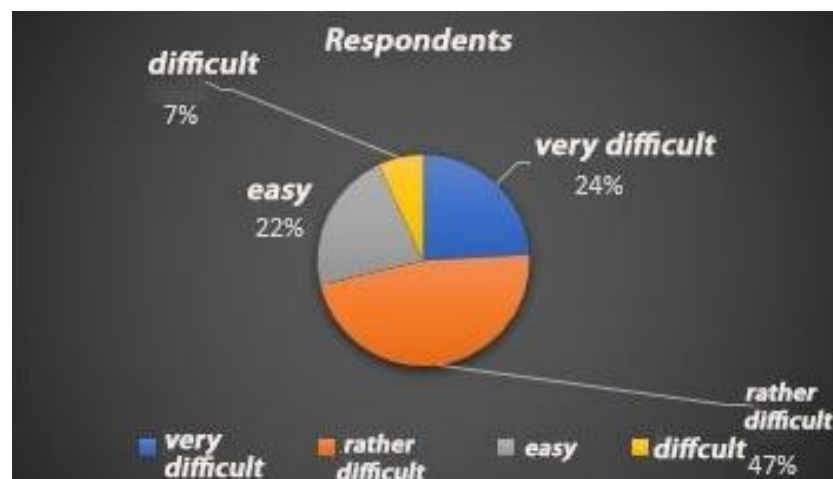
**Figure 2 Source: PAI Teacher Evaluation Monitoring in Palu City**



The age of the teacher has an impact on the level of difficulty in using online learning media. Elderly teachers are not literate in using digital platforms at all, in fact, they are not at all proficient in using electronics.

As an assistant in operating online learning. Some prefer to simply assign assignments to students in every learning process.

**Figure 16 Source: PAI Teacher Evaluation Monitoring in Palu**



### 3. Solutions for online learning in the future.

Based on the two factors that have been described, several solutions are summarized to support online learning that is interesting and effective next:

- a. Providing digital literacy skills training for teachers to develop an understanding of the digital learning system which is the key to the online learning process.
- b. Provide distance learning curriculum training.
- c. Improve school infrastructure so that the applications used are the same and structured.
- d. The need for training in the use of several online learning applications.
- e. Students are also provided with training on the use of several online learning applications to synchronize teachers and students.

The data shows that dominant teachers have difficulty using online learning applications. The difficulty of operating the app requires them to have someone else

## **V. CONCLUSION**

Teacher readiness in facing online learning is less than optimal when viewed from the results of teacher evaluations in online learning during the COVID-19 pandemic. Teacher competence is still low in delivering online learning. Young teachers do have skills in using digital media. However, due to the sudden policy, adjustments by teachers are still at an early stage as there is no readiness to carry out online learning during the COVID-19 pandemic. Senior teachers are more affected by distance learning because their inability to use digital media results in monotonous learning methods. This factor causes the evaluation of teachers' online learning performance results during the COVID-19 pandemic to be less effective.

Distance learning will be a permanent hybrid learning model (blended learning) to meet the needs of learning implementation in the digital era. Therefore, the shortcomings and obstacles found in online learning during the Covid-19 pandemic must be a reference for finding better online learning solutions in the future. This article recommends that public high schools in Palu should take immediate action by conducting digital literacy skills training for teachers, online learning curriculum training, preparing e-learning in schools and training using several applications. With this solution, it is expected to contribute to the effectiveness of online learning in the future.

This research has weaknesses in the results of the PAI teacher data survey which was distributed using Google Form. The dominant respondents are young PAI teachers, so data related to the inability of PAI teachers to use IT is less supportive because on average they are proficient in using IT. Senior teachers did not respond much to the survey so that descriptive results related to the teacher age gap were not optimal. Thus, further research is needed to present the results of PAI teacher performance more broadly and in depth. PAI teachers must immediately adjust and adapt to online learning and be creative and innovative in managing the learning environment to increase student morale. Thus, school principals are expected to support the implementation of online learning. The headmaster always analyzes the evaluations of both PAI teachers and students to find out shortcomings and measure the success rate of learning practices in schools.

## REFERENCE

- Artanti, Evy Febri, and Alwi Suddin. "The influence of competence, communication, and emotional intelligence on the performance of lecturers at the Sahid Surakarta College of Tourism." *Journal of Human Resource Management* 13 (2019): 261–69.
- Chaeruman, Uwes Anis. "Learning Path: Increasing Online Learning Interactivity." *Online Learning Seminars & Workshops in Higher Education*, no. September (2017): 1–10. <https://doi.org/>.
- Darmalaksana, Wahyudin, R. Yuli Ahmad Hambali, Ali Masrur, and Muhlas. "Analysis of Online Learning during the WFH Covid-19 Pandemic as a Challenge for 21st Century Digital Leaders." *Scientific Papers (KTI) Work From Home (WFH) Covid-19 Period UIN Sunan Gunung Djati Bandung Year 2020 1*, no. 1 (2020): 1–12.
- Daughter;, Rahmawati; Evita Muslima Isnanda. "Learning From Home in the Perspective of Student Perceptions in the Covid-19 Pandemic Era." *Hardiknas National Seminar*, 2020, 17–24.
- Education, C Triatna - *Journal of Administration*, and undefined 2007. "Teacher Performance Evaluation and School Quality Assurance Efforts." *Ejournal.Upi.Edu*. Accessed August 20, 2022. <https://ejournal.upi.edu/index.php/JAPSPs/article/view/6182>.
- Grabinski, Konrad, Marcin Kedzior, and Joanna Krasodomska. "Education Science Embeds E-Learning in Accounting Modules: Educators' Perspectives," 2020.
- Law 14-2005 Teachers and Lecturers.pdf - Google Drive." Accessed August 24, 2022. <https://drive.google.com/file/d/10DFIxdJDHKEvPXMVE9Va7-U6gM3MD3AW/view>.
- Miles, Matthew B., Huberman, A. Michael., Saldana, Johnny. *No Title Qualitative Data Analysis is; Method Sourcebook*, 2017.
- Mustofa, Mokhammad Iklil, Muhammad Chodzirin, Lina Sayekti, and Roman Fauzan. "The formulation of the online lecture model as an effort to reduce the disparity in the quality of higher education." *Walisongo Journal of Information Technology* 1, no. 2 (2019): 151. <https://doi.org/10.21580/wjit.2019.1.2.4067>.
- Nahdi, D.S., Jatisunda M.G. "Cakrawala Pendas Journal DIGITAL LITERACY ANALYSIS OF PROSPECTIVE ELEMENTARY SCHOOL TEACHERS IN VIRTUAL CLASSROOM-BASED LEARNING DURING THE COVID-19 PANDEMIC" 6, no. 2 (2020): 116–23.
- Riyanda, Afif Rahman, Kartini Herlina, and B Anggit Wicaksono. "Evaluation of the Implementation of the Online Learning System, Faculty of Teacher Training and Education, University of Lampung." *Journal of IKRA-ITH Humanities* 4, no. 1 (2020): 66–71.
- Tsani, Iskandar, Rofik Efendi, and Sufirmansyah Sufirmansyah. "Evaluation of the readiness of Islamic higher education institutions in facing the digital era." *Ta'dibuna: Journal of Islamic Education* 9, no. 1 (2020): 019. <https://doi.org/10.32832/tadibuna.v9i1.2604>.

Tuti, Fuadi Marjan, Musriandi Riki, and Suryani Linda. "Covid-19: Application of Online Learning in Higher Education." *Educational Dedication* 4, no. 2 (2020): 193–200.

UGM, DGB Webinar. "Optimizing Online Learning During a Pandemic \_ Universitas Gadjah Mada," 2020.

Yudiawan, Agus. "LEARNING WITH COVID 19: Evaluation of Pandemic-Era Online Learning at State Islamic Religious Universities, West Papua" 6, no. 1 (2020): 10–16.

<https://docs.google.com/spreadsheets/d/1Q2ze0CuhOaCCMpRgiuoiPVyqnKBvVdlW LmL-C84FA/edit#gid=709838008>

[https://docs.google.com/spreadsheets/u/2/d/16MEsTcRL9pN25mzcXluykMrkd9R\\_5qi-6eA4msde7xg/edit?usp=forms\\_web\\_b#gid=622865205](https://docs.google.com/spreadsheets/u/2/d/16MEsTcRL9pN25mzcXluykMrkd9R_5qi-6eA4msde7xg/edit?usp=forms_web_b#gid=622865205)

<https://yusrintosepu.wixsite.com/yoers/single-post/2018/09/25/Fenomena-Disruptive-dan-Digital-Literasi-Bagaimana-Seharusnya-Perguruan-Tinggi-Menyikapinya>

[https://docs.google.com/spreadsheets/d/e/2PACX-1vRrky22lEWC4eID0qzRb\\_IEX3w4f2Dle0hg7FbR0q683p\\_AP1LaQ7bTyUTqrOzVQlc7WI6Hi4KWpxxr/pubchart?oid=1567553446&format=interactive](https://docs.google.com/spreadsheets/d/e/2PACX-1vRrky22lEWC4eID0qzRb_IEX3w4f2Dle0hg7FbR0q683p_AP1LaQ7bTyUTqrOzVQlc7WI6Hi4KWpxxr/pubchart?oid=1567553446&format=interactive)