CHALLENGES AND SOLUTIONS TO IMPROVING TEACHER COMPETENCE IN DISTANCE LEARNING VIA ZOOM, VIDEO, AND GOOGLE MEETING

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Keywords:	ABSTRACTS
Online Education, Technology in Education, Teacher Training, E-learning Tools, Pandemic Education	**Background:** The COVID-19 pandemic significantly impacted education in Indonesia, leading to a shift to distance learning to prevent the virus's spread in schools and madrasahs. **Purpose:** This study aims to improve teachers' competence in distance learning by utilizing Zoom, video, and Google Meeting. The research is based on a two-day workshop for teachers with more than two years of experience at Madrasah Tsanawiyah (MTs) Insan Saleh. **Method:** Using a qualitative approach with a phenomenological method, data was collected through observation, interviews, and documentation. **Result:** The workshop findings show that teachers and staff who attended gained a strong understanding of using modern technology for distance learning. Initially, there were technical challenges, but these were promptly addressed with training and hands-on support from the instructors. As a result, teachers were able to effectively use Zoom, Google Meeting, and video for teaching, improving both their confidence and their students' engagement. **Conclusion:** The study concludes that such workshops are an effective strategy to enhance teachers' digital competencies, helping them adapt to distance learning and ensure high-quality education despite technological challenges.

A. INTRODUCTION

In the last years, the process of teaching and learning only should be carried out through face to face which teachers used some text books in the classroom, in the building, and it should be carried out formally and systematically in the condusive situation in the classroom to achieve learning goal. With pandemic of corona virus desease (COVID 19) occured in the world, involved in Indonesia of our love country (Huriyah, 2023). Indonesian government at that time instructed to the society that all of activities should be carried out at home or work from home (Huriyah,2022), including teaching and learning activity at Madrasah Tsanawiyah (MTs) Insan Saleh Cirebon with a distance learning. This case is very crucial of teaching and learning activity carried out at Madrasah, then if any of one student was sick of COVID 19 will spread the desease to other students. So, teaching and learning should be carried out with a distance learning at home or work from home (Putra & Kasmiarno,2020). COVID 19 has spread worldwide and affected daily human activities (Gumiandari et al, 2022, Rosmalina et.al, 2023). COVID 19 has disrupted many systems, ranging from health, business and education to religious services , which were severaly restricted to prevent the spread of COVID 19 (Putra & Kasmiarno, 2020). Implementing the social distancing system from the government has had significant influence on learning from school or madrasah (Wajdi, et.al, 2020).

Learning at school or madrasah must continue to fulfil the students need. The solusion offered by the government at that time is to do on line learning or a distance learning. With a distance learning, teachers at Madrasah Tsanawiyah (MTs) Insan Saleh should be able to use modern technology. For example: zoom, video and google meeting, . But at Madrasah Tsanawiyah (MTs) Insan Saleh Cirebon, not all of teachers can not use the modern technology well, because they have no good smartphone, have no laptop and sometimes they have no quota internet for conducting material in a distance learning. So, these problems become teachers are not able to use the modern technology well and also there are a lot of students who have no good smartphone and quota internet for following teaching and learning with their teachers in a distance learning.

The problems become challenges for the teachers and students when teaching and learning should use modern technology, for example: zoom, video and google meeting in a distance learning. The challenges when teacher use modern technology, for example: zoom, video and google meeting will meet what it is called as social isolation, lack of student engagement, technology dependent teaching quality, data security, teacher skills, and internet connection quality need to be adressed. This modern technology can help students to understand the material from teachers (Nurkhamidah, 2021).

In a distance learning, a teacher should be able to design learning material as creative as possible to maintain students motivation in learning. A distance learning should be designed by the teacher for all of students to be able to engage in the teaching and learning process from home online and leverage information technology.

Technology may be accelerative to enhance the teaching and learning process to help students cognitive abilities (Ismana et.al.,2023). Satisfaction is a significant problem in the implementing the online in a distance learning with modern technology, for example: zoom, video and google meeting, in learning process which measures the quantity and effectiveness of learning (Elshani, et.al.,2021). Effectiveness measures the

extent to which a goal is achieved (quantity, quality and time), the higher the percentage of goal achieve, more effective (S. Supriatin, et.al.,2022).

In a distance learning, students can move quickly and manage information with greater capacity, thereby enhancing discipline and coordinating skills. A distance learning was implemented to anticipate and have to the spread of covid 19 virus in Indonesia. The solution available at time are online or a distance learning (Efriana,2021). Considering the increasing number of cases every day. Almost all of Schools and Madrasah in Indonesia conducted teaching and learning through on-line system in a distance learning (Huriyah: 2022)..This is done instead of direct teaching and learning at school or in Madrasah (Huriyah,2023). Nearly all sectors in Indonesia were significantly affected by covid 19, including tourism, education, economy, manufacturing, social, food, transformation and so forth (Wajdi,et.al.,2020).

A Distance learning has been familiar in Indonesia since 1984 (Munir: 2020). The existence of a distance learning in Indonesia was reinforced by the government regulation of the Minister of Education and Culture of the Republic of Indonesia number 109 of 2013 about the implementation of a distance learning in higher education. The regulation of distance learning is as a means of teaching and learning process that is conducted in a long distance through the use of various communication.

A distance learning is an educational process and system of which all or significant proportion of the teaching and learning is carried out by someone or something remove in space and time from the learner (Burns, M,2015). A distance learning is also called a distance education. In law no.12/2012 education article, 31 (1). A distance education is as the teaching and learning process conducted remotely through the use of relation. A distance learning is a learning on the basis of interactive interaction between a student, teacher and in an interactive source of information resource, website, webpage, application etc (Munir, 2020). Further more, the main concept of a distance learning is a learning process that separates learners and teachers in different time and place by using various media for learning interaction (Anora: 2017). So, a distance learning is a learning system which is conducted the materials through teacher and students are separated time and place. In the system, that students are required to learn independently and efficiently.

A distance learning refers to an educational method conducted through communication media and information technology (Munir: 2009). Enabling students to learn without being psysically present with the instructor. It has become crucial in the COVID 19 if teaching and learning must be conducted face to face learning. The pandemic of COVID 19 crisis has further emphasized its significance in ensuring continuous learning with using modern technology, for example: google meeting, zoom and video in ditance learning. A distance learning with the use of zoom, video and google meeting have positive, significance impacts and also effective to the teachers and students communication (Huriyah: 2023).

Based on the problems that have been outlined, this study aims to improve teachers' competence in distance learning by utilizing Zoom, video, and Google Meeting through a two-day workshop for teachers with more than two years of experience at Madrasah Tsanawiyah (MTs) Insan Saleh. The research involved a workshop that was analyzed qualitatively phenomenologically to examine how teachers' competence improved. This training is designed as a solution to overcome teachers' limitations in using online learning technology, which include lack of technical skills, constraints in

accessing devices, and limitations in designing interactive and effective learning. With this training, it is expected that teachers can be better prepared in managing distance learning, increasing student engagement, and optimizing the use of technology as a learning medium. In addition, this research also seeks to evaluate the effectiveness of the training in improving teachers' competencies, so that it can provide recommendations for the development of similar training programs in the future.

B. METHOD

This study applies a qualitative approach with phenomenological method. Qualitative approach is a research methodology as procedure of reseach that produces of descriptive data in the form of written or spoken words from persons and behavior that can be observed (Bogdan & Tylor in Moleong: 2019). Qualitative research also means that the data collected is not in the form of numbers, but the data is in the form of information from participants with essay that should be suitable with research questions in the form of WQ questions, for example: "what" and "how" (Miles and Huberman: 1997, in Moleong: 2019). The data of qualitative research comes from observation, depth interview with participants and from study of document that consists of personal documents, field notes, official record, scrits and so forth. The qualitative approach is meant to examine the condition of natural objects (Nahuda: 2024). The condition of natural objects is taken by the researcher from the beginning of data collection, data reduction, data display until data verification or conclusion are as the data analysis techniques. The instrument of this research is the researcher herself or himself as a key instrumant.

The participants in this study consisted of 15 teachers who have been teaching for more than two years at Madrasah Tsanawiyah (MTs) Insan Saleh. The participants were selected by purposive sampling to ensure that they had experience in teaching before and during the implementation of distance learning. The participants served as the main subjects in this study, where their experiences in attending the workshop as well as in implementing technology in learning became the main focus of the study.

Data in this study was collected through in-depth interviews, observations, and documentation studies. The interviews were semi-structured and involved 15 teachers. This interview aims to explore teachers' experiences in implementing distance learning using technology such as Zoom, video, and Google Meeting. Observation was conducted during the workshop to record participants' engagement, difficulties encountered, and strategies used in overcoming technological barriers. The documentation study involved activity reports, as well as materials used in the workshop.

Data analysis was conducted using systematic steps to explore the meaning of the participants' experiences. This process began with a thorough reading of all the data to gain a general understanding. Next, the researcher extracted important statements from the interviews and observation notes. These statements were then formulated into meanings that were categorized into several main themes. These themes emphasized empathy, openness, life as mystery, and presence for others. This translates into an approach to studying the problem that involves entering the field of participants' perceptions by seeing how they experience, live, and perform the phenomenon; and seeking meaning from participants' experiences. Furthermore, the researcher needs to set aside his or her perception to better understand the phenomenon as experienced by the participants (Huriyah: 2023). After the main themes were identified, the data were

then integrated into narrative descriptions describing teachers' experiences in using technology for distance learning. To ensure the validity of the data, the researcher used triangulation techniques by comparing the results of interviews, observations, and documentation studies to obtain more accurate and comprehensive findings.

The workshop held in this study lasted for two days with a systematic structure. The first day focused on providing materials related to the use of Zoom, video, and Google Meeting in distance learning. The materials were delivered by a team of instructors from UIN Cyber Syekh Nurjati Cirebon who provided theoretical explanations as well as practical demonstrations. The second day focused on hands-on practice by the participants, where they were given the opportunity to apply the technology they had learned in simulated teaching activities. In this process, participants faced various challenges such as technical constraints and limited digital skills, but they received intensive guidance from the instructors to overcome these obstacles. The results of the workshop showed an increase in participants' understanding and skills in using modern technology to support distance learning.

C. RESULT AND DISCUSSION

This study aims to analyze the improvement of teachers' competence in distance learning through the use of modern technology such as Zoom, video, and Google Meeting. Based on data obtained through observation, interviews, and documentation, it was found that the workshop had a positive impact on teachers' understanding and skills in utilizing technology for the online learning process with the use of modern technology, such as Google Meeting, Zoom Meeting, and video at Madrasah Tsanawiyah (MTs) Insan Saleh Cirebon Regency, indicating that this activity went well and in accordance with the objectives set. This workshop was held on November 13-14, 2021 for two days. Workshop participants consisted of the head of the madrasah, all teachers who had taught for more than two years, and staff totaling 15 teachers. The material in the workshop was explained by instructors or a team of lecturers from UIN Cyber Sheikh Nurjati Cirebon. The materials that have been delivered in the workshop by instructors from UIN Cyber Sheikh Nurjati Cirebon are in line with the theme of the workshop, namely increasing teacher competence in distance learning with the use of modern technology. The materials taught include how to use the internet to open a laptop, how to use a cell phone to access Google Meeting or Zoom Meeting links to provide instructions to students in the learning process, and how to make videos to save documents after distance learning using a cell phone or laptop.

In general, this workshop succeeded in improving teachers' understanding in using technology for distance learning. After the training and practice, teachers are able to use this technology more effectively. Before the training, most teachers faced obstacles in accessing and operating the application. However, through hands-on practice provided during the workshop, they were able to master key features, such as screen sharing, creating breakout rooms, and recording lessons for documentation purposes. The study also identified some challenges that teachers faced initially, such as limited internet access, inadequate device quality, and low technology literacy among teachers. This challenge was overcome with assistance from the instructors, including the provision of internet quota and technical guidance in the use of available devices. Intensive training in the use of technology features, as well as the development of more

interactive teaching strategies to keep students engaged in online learning. Through this workshop, teachers gained the necessary competencies to integrate technology in distance learning. Teachers become more confident in using Zoom, Google Meeting, and video as learning media. In addition, students are also able to engage more actively in the learning process, which is in line with the goal of improving teacher competence. Teachers are also trained to design interesting and interactive teaching materials so as to increase students' motivation and engagement in online learning.

The shift to online learning requires teachers to have adequate technical and pedagogical skills in managing virtual classrooms. Competence in the use of technologies such as Zoom and Google Meet is a key factor in creating an interactive and effective learning experience for students. Structured training programs have been shown to assist teachers in integrating these technologies into the learning process optimally (Apdoludin & Wiyoko, 2022)(Apdoludin & Wiyoko, 2022). Features such as screen sharing, breakout rooms and session recordings provide opportunities for teachers to increase student engagement, but their effectiveness depends on their understanding of using them strategically. Research shows that the combination of cognitive learning theory with technical practices can increase the effectiveness of virtual sessions (Ohnigian et al., 2021). However, challenges such as limited internet access, low digital literacy, and lack of adequate devices are still obstacles in the implementation of online learning. Previous studies identified unstable connectivity and lack of technical skills among teachers as major obstacles to the utilization of Zoom and Google Meet (Wiyono et al., 2021). Therefore, solutions include improving internet network capacity and organizing intensive digital literacy training for educators to ensure the success of distance learning.

Distance learning demands a good cooperation between teachers and students so that communication can run effectively, considering that feedback in distance learning cannot happen immediately. In this context, there are six characteristics of distance learning that teachers and students need to understand. First, there is a separation between teachers and students. Second, the influence of educational organization. Third, the use of technical media in the learning process. Fourth, there is two-way communication. Fifth, the possibility of holding occasional seminars that allow students to learn independently, such as watching recorded videos, receiving assignments via electronic mail, and so on. Sixth, there is a division of labor in the learning system (Nursalamah, 2020). Distance learning is designed so that all students can engage in the learning process from home online by utilizing information technology (Nursalamah, 2020). In this case, teachers as classroom managers must be able to manage the learning process well. Distance learning aims to achieve optimal results by maximizing all available facilities. One aspect of teacher management that needs to be considered in the learning process is the provision of adequate learning facilities. An ideal distance learning process should ensure that students are in comfortable learning conditions, with available facilities, guidance from professional teachers, as well as a continuous, comprehensive, objective, and democratic evaluation system. Learning is an activity facilitated by teachers to develop students' cognitive aspects, improve their thinking skills, as well as their ability to manage new knowledge. In online learning, the teacher acts as a classroom manager who must be able to design interesting, fun, and quality learning materials, because students will be more motivated to learn if they feel that the learning process is fun and provides intellectual

satisfaction (Hutchinson & Walters in Huriyah, 2022). Distance learning by using modern technology such as Zoom, video, and Google Meeting makes students more confident in communicating with classmates and teachers. In addition, distance learning also encourages active participation from both students and teachers, as well as making the material more interesting, because learning is a series of actions that aim to modify behavior based on the topic and learning media (Huriyah, 2024)[2]. Active learning can be implemented in online classes by using various methods, such as live discussions, interactive polls, and collaborative activities in breakout rooms. These strategies can increase student engagement and strengthen their understanding of the material (Lennon & Rudd, 2022). By providing adequate facilities and a pleasant learning environment, students will be more motivated to learn until they realize the importance of the learning process. An enjoyable learning process makes it easier for students to be motivated to learn, increases their confidence, and supports their success in understanding the material (Huriyah, 2022). From the beginning of education, students should experience the joy of discovering new knowledge, and learning should be relevant to their daily lives.

The use of Zoom and Google Meeting allows teachers to communicate with students in real-time, provide immediate feedback, and manage the class more effectively. Meanwhile, the use of video as learning media helps students to understand the material more deeply through interesting visualizations. In addition to improving teachers' competencies, this study also found that the use of technology in distance learning has a positive impact on student engagement. Students become more active in discussions, more interested in learning, and have more flexible access to teaching materials. This shows that the success of online learning depends not only on teachers' skills, but also on the teaching strategies applied.

This research shows that the main objective, which is to improve teachers' competence in distance learning through the use of technology, has been achieved. Teachers who initially faced technical obstacles are now more confident in using Zoom, Google Meeting and video as learning media. In addition, challenges that arise during the implementation of online learning have also been overcome with various solutions provided in the workshop. Thus, this study confirms that technology-based training is essential to improve teachers' competencies and support the success of distance learning. Improving teachers' digital skills, supporting facilities, and developing interactive learning methods are the main factors in creating an effective and engaging learning environment for students

D. CONCLUSION

Based on the research results described above regarding the workshop that was held on November 13-14, 2021 at Madrasah Tsanawiyah (MTs) Insan Saleh Cirebon, the workshop has run well and successfully. The main findings show that all workshop participants understood the material explained by the instructor or lecturer team from Cyber UIN Sheikh Nurjati Cirebon. The workshop successfully improved teachers' understanding and skills in using digital technology to support distance learning. All participants were able to operate the platforms taught, such as Zoom and Google

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Meeting, and understood how to create videos to save documents after the teaching and learning process. Although there were technical challenges at the beginning of the implementation, such as limited internet access for some participants, these challenges were overcome quickly by the instructors by providing additional internet quota. The results also showed that after attending the workshop, teachers felt more confident in teaching online. The use of modern technology not only improves teachers' competence but also encourages students' active participation in the teaching and learning process. Teachers are able to organize more interesting and interactive materials, so that learning becomes more effective. Overall, the workshop made a positive contribution to improving teachers' competence in distance learning. The findings are in line with the original objective of equipping teachers with the technological skills needed to adapt digital learning. The success of this workshop shows that this kind of training can be an effective strategy in facing the challenges of distance learning and ensuring the quality of education is maintained in the digital era.
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