Developing Teacher Adaptation Ability in Using Digital Technology in the Era 5.0 Collaborative at Ash-Shidiqiyah Islamic Boarding School Lawang Wetan

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ABSTRACT

This study aims to determine the development of teachers' adaptability in the use of digital technology in the 5.0 era at the Ash-Shidiqiyah Lawang Wetan Islamic Boarding School. This study uses a descriptive qualitative research type. Data collection techniques in this study are observation, interviews and documentation. Based on the results of this study, it can be concluded that the participants including leaders, educators and education personnel benefited from the training delivered by resource persons who are experts in their fields, quite high enthusiasm, which can broaden their horizons and provide a positive impact so that they can develop teachers' abilities towards the application of the use of digital technology in the 5.0 era at the Ash-Shidiqiyah Lawang Wetan Islamic Boarding School.

Keywords: Teacher; Digital Technology; Era 5.0

INTRODUCTION

School is a formal educational institution that organizes teaching and learning activities as an effort to achieve educational goals. The person responsible for the teaching and learning process in the classroom is the teacher, because the teacher is the one who directly provides guidance and training to students. In an effort to achieve these goals, teachers certainly have a set of abilities that are prepared through educational programs so that they are able to become professional teachers.

Therefore, the professionalism of teachers as educators needs to be improved so that they are able to manage the class well and are able to provide guidance and training to students in order to achieve these educational goals.(Ismunandar & Kurnia, 2023). A teacher is someone who usually teaches and educates at school. According to Law Number 14 of 2005 concerning teachers and lecturers, where in article 1 paragraph 1 it states that "Teachers are professional educators with the main task of educating, teaching, guiding, directing, training, assessing, and evaluating students in early childhood education through formal education, basic education, and secondary education"(Untari Ningsih et al., 2023)

Teachers have a very important role in determining the quality of teaching that is carried out. Therefore, an educator must be able to think and plan carefully in increasing the learning opportunities of his students and improving the quality of his teaching. Teachers must be able to act as managers of the teaching and learning process in the classroom, acting as facilitators who are able to create conducive and effective teaching and learning conditions and environments. In addition, teachers are also required to be able to organize classes, use various learning methods, namely developing their competence to face challenges in the era of society where teachers are required to be able to adapt to technology.(Ahmadin et al., 2023).

The Technology Era 5.0 is a technology era that integrates technology with various aspects of human life, including in the field of education. Education in the Technology Era 5.0 emphasizes learning that is oriented towards developing 21st century competencies and skills, such as problem-solving skills, creativity, collaboration, critical thinking, and systemic thinking.(Fricticarani et al., 2023). Learning in the era of technology 5.0 refers to changes in the learning approach that are carried out by utilizing advanced technologies such as artificial intelligence, virtual reality, augmented reality, internet of things, and others. The use of this technology allows teachers to design a curriculum that suits the individual needs of students and offers a more interactive and effective learning experience.(Indarta et al., 2022)

Similar research was conducted at MAN 1 Muba, the researcher stated that as educators in the era of society 5.0, teachers must have skills in the digital field and think creatively, therefore there are three things that educators must utilize in the era of society 5.0 including the internet of things in the world of education, virtual/augmented reality in the world of education, the use of artificial intelligence in the world of education to find out and identify the learning needs needed by students. Based on the results of observations and interviews at the Ash-Shidiqiyah Lawang Wetan Boarding School, it was stated that in delivering materials, teachers felt that they were not yet optimal in delivering up-to-date learning. Teachers more often provide old learning methods that have not utilized sophisticated technology such as artificial intelligence, virtual reality, augmented reality, internet of things, and others, because teachers do not yet understand technology-based learning models.

However, despite the many benefits of using technology in everyday life, technological developments also bring new challenges, such as dependence on technology and lack of direct social interaction and irresponsible use of technology and violation of privacy. Therefore, it is necessary to have a good understanding of technology and its impact on society and the environment. Technology must be developed responsibly and pay attention to its impact on human life and the environment.

Lack of knowledge about current learning inspires devotees to carry out community service activities in the form of developing the ability to adapt to the use of society 5.0 technology at the Ash-Shidiqiyah Lawang Wetan Islamic Boarding School. Based on research that has been conducted, it has been proven to be able to train students' abilities in technology-based learning. It is hoped that after participating in training to develop the ability to adapt to the use of society 5.0 technology at the Ash-Shidiqiyah Lawang Wetan Islamic Boarding School, teachers will have the ability to apply technology-based learning so that the quality of student learning can be improved and learning objectives can be easily achieved by students.

METHOD

This study uses descriptive qualitative field research. Data collection techniques are carried out by direct observation of educators and education personnel at the Ash-Shidiqiyah Lawang Wetan Islamic Boarding School. The implementation of community service activities was carried out at the Ash-Shidiqiyah Lawang Wetan Islamic Boarding School. After the observation was carried out, the design of community service activities was carried out and various supporting devices were prepared such as material modules used during the socialization, presentation materials and other supporting equipment such as laptops. The activity was carried out for two days, namely May 26-27, 2024. The materials presented during the activity were: 1. Introduction to information technology 2. Challenges in developing skills in the 5.0 era 3. Strategies for developing teacher skills in the 5.0 era at the Ash-Shidiqiyah Lawang Wetan Islamic Boarding School.

RESULTS AND DISCUSSION

Based on the results of this study, community service activities were carried out on May 26-27, 2024. The community service team involved in this activity were lecturers from the Islamic education management master's study program. The partners are teachers in the Ash-Shidiqiyah Islamic Boarding School environment. Community service is carried out offline at the Ash-Shidiqiyah Islamic Boarding School. Community service is carried out to develop the ability to adapt to the use of society 5.0 technology. The community service carried out is related to collaborative learning. The teachers who took part in this activity looked very enthusiastic and enthusiastic in gaining knowledge related to the material provided. Figure 1 shows the participating teachers who started the activity and were enthusiastic about taking part in this program.

Figure 1. Teachers' Enthusiasm in Receiving Material from the Presenter

The activity was carried out in two days, accompanied by guided assignments. The provision of material was carried out by way of presentation of material by the speakers manifested in the form of presentations displayed via LCD for teachers. The resource person from the Islamic Education Management Masters Study Program, namely Prof. Dr. Saipul Annur, M.Pd. the resource person explained about the development of adaptation capabilities for the use of society 5.0 technology.

Based on the results of the implementation of this activity, it shows that the role of teachers in developing the ability to adapt to the use of society 5.0 technology has undergone significant changes in response to technological developments and increasingly complex community needs. Teachers as learning facilitators, teachers act as facilitators who facilitate active, collaborative, and student-centered learning processes. They encourage students to actively participate in learning, use technology, digital resources, and various other innovative learning tools.(Alfalah, 2022)

Teachers as learning facilitators, teachers act as facilitators who facilitate active, collaborative, and student-centered learning processes. They encourage students to actively participate in learning, use technology, digital resources, and various other innovative learning tools. Teachers as guides of digital knowledge and skills, teachers have an important role in developing students' digital knowledge and skills. They teach students about the wise use of technology, digital ethics, and cybersecurity. Teachers also help students understand and use relevant digital tools to search for information, communicate, collaborate, and create work.

Teachers must also encourage students' creativity and innovation, teachers play a role in inspiring and encouraging students to think critically, creatively, and innovatively. They provide space for students to explore new ideas, develop creative solutions to problems, and create original work using available technology and resources. Likewise, collaborators and learning networks, teachers play a role in building collaboration and learning networks between fellow teachers, students,

and other education stakeholders. They work together to design relevant curricula, share experiences and knowledge, and develop best practices in the use of technology in learning.

The presentation of the material and questions and answers delivered by Prof. Dr. Saipul Annur, M.Pd. activities carried out during the community service process went smoothly and well. From this activity, it is expected that the insight of teachers as academics and researchers can increase, especially in relation to. This activity was carried out. The presentation of the material by the speaker can be seen in Figure 2.

Figure 2. Presentation of Material

Through these roles, teachers become agents of change in creating a learning environment that is responsive to technological developments and the needs of society in the era of society 5.0. They help students develop relevant skills, prepare them for a complex future, and contribute to the formation of a sustainable and innovative society.

Teachers' Challenges in the Era of Society 5.0

The presentation of the material and questions and answers delivered by Prof. Dr. Saipul Annur, M.Pd. explained the challenges of teachers in facing the era of society 5.0 as in Figure 3. As follows:

Figure 4.0 Explanation of the challenges for teachers in the era of society 5.0

In the era of society 5.0, teachers are faced with several unique challenges that affect their roles and practices. First, changes in roles and skills. The development of technology and changes in educational paradigms affect the traditional role of teachers. Teachers must adapt themselves to become learning facilitators, guides, and collaborators who encourage students to develop critical skills, creativity, collaboration, and communication. Teachers also need to master the use of technology and understand how best to integrate it into learning.(Abidah et al., 2022)

Second, the technology gap and accessibility. Although technology is key in the era of society 5.0, not all schools or regions have equal access to the technology infrastructure and resources needed. This challenge presents a technology gap between students and teachers in various locations. Teachers need to find creative and inclusive solutions to ensure that all students have a fair opportunity to access technology and its benefits. Third, changes in curriculum and learning. The development of technology and the needs of society in the era of society 5.0 require changes in the curriculum and learning approaches. Teachers need to continue to update their knowledge and skills to ensure that they can teach relevantly and effectively. They must pay attention to technological developments and industry trends to prepare students with the skills needed in the real world.

Fourth, digital security and ethics. In the era of society 5.0, teachers are faced with the challenges of digital security and ethics. They must guide students in the responsible and safe use of technology. This involves understanding online privacy, personal data protection, cybercrime, and ethical behavior in the use of technology. Teachers need to provide clear guidelines and help students understand the social and ethical impacts of using technology.(Husniati et al., 2022). Fifth, changes in evaluation and assessment. The development of technology and innovative learning

approaches in the era of society 5.0 also affect the way teachers evaluate and assess student progress. Traditional methods of assessment may no longer be relevant enough. Teachers need to find new ways to measure and evaluate student skills and progress that are appropriate to the context and challenges of the digital society.(Amelia, 2023)

Facing these challenges, teachers need to act as lifelong learners and continue to develop their skills, knowledge, and understanding of technology and changes in education. Collaboration with fellow teachers, ongoing professional development, and increased collaboration with other education stakeholders are also important in addressing these challenges.

Teacher Strategies and Competencies in Facing the Era of Society 5.0

The presentation of the material and questions and answers delivered by Prof. Dr. Saipul Annur, M.Pd. explained the strategies and competencies of teachers in facing the era of society 5.0 as in Figure 4. As follows:

Figure 4. Explanation of teacher strategies and competencies in the 5.0 era

Facing the era of society 5.0, teachers need to develop certain strategies and competencies in order to be effective in meeting educational demands related to technological developments and increasingly complex societal needs.(Fricticarani et al., 2023)Some strategies and competencies that are important for teachers in facing the era of society 5.0:

1. Technology proficiency: teachers need to have a deep understanding of relevant technologies in educational contexts. They should be able to use a variety of digital tools, applications, software, and online learning platforms to enhance students' learning experiences and facilitate interaction, collaboration, and creativity.(Ruwaida & Setiasih, 2022)
2. Project-based learning: teachers need to adopt a project-based learning approach where students engage in real-life activities, collaborate in teams, and apply knowledge and skills in real-world situations. This

will help students develop critical thinking, problem-solving, and creativity skills.(Seminar et al., 2022)

3. Collaboration and communication skills: teachers need to develop strong collaboration and communication skills, both in physical and virtual contexts. They should encourage students to work in teams, share ideas, provide feedback, and communicate effectively using a variety of digital communication tools.(Purnomo & Loka, nd)

4. Digital literacy and ethics: teachers need to guide students in the development of digital literacy, including the ability to search for, evaluate, and use information critically and ethically. They should pay attention to aspects such as online privacy, cybersecurity, and ethics in the use of technology.(Education et al., 2023)

5. Developing 21st century skills: teachers need to develop 21st century skills in students, such as critical thinking, creativity, collaboration, communication, and problem solving. Teachers must provide an environment that supports the development of these skills through relevant and contextual learning activities.(Sukmawati et al., nd)

6. Professional development: teachers must continuously improve themselves and commit to lifelong learning. They need to stay abreast of the latest developments in technology, innovative learning methods, and education-related research. Attending trainings, conferences, and collaborating with colleagues are also important to continue enriching their knowledge and skills.

7. Classroom management skills: teachers need to develop effective classroom management skills in a digital context. They must be able to manage online learning, facilitate student interaction and participation, and monitor student progress and engagement effectively.(Setiawan & Lenawati, 2020)

8. Adaptability and flexibility: teachers need to have high adaptability and flexibility in facing rapid changes in the era of society 5.0. They must be ready to change learning strategies and approaches according to needs and technological advances.

By developing these strategies and competencies, teachers will be ready to face challenges and take advantage of opportunities in the era of society 5.0 to create relevant, innovative, and meaningful learning experiences for students.

CONCLUSION

The conclusion of the Community Service activity is that all teachers who participate in this activity can understand information technology, challenges in developing skills in the 5.0 era and strategies for developing skills in the 5.0 era. With the understanding possessed by teachers, it is hoped that the ability of teachers to manage learning in the classroom is carried out with more varied and innovative learning. The results of the community service activities of the implementation of this activity show that the role of teachers in developing the ability to adapt to the

use of society 5.0 technology has undergone significant changes in response to technological developments and increasingly complex community needs. The suggestion that can be given from this activity is that this community service activity can be scheduled periodically as a medium to improve the competence of teachers at the Ash-Shidiqiyah Lawing Wetan Islamic Boarding School, especially in terms of developing teachers' adaptability in the use of information technology in the 5.0 era. In addition to the introduction of information technology, teachers are also given examples of strategies for developing skills in the 5.0 era.

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