ArsipKita to Improve Teacher Competence in Facing the New Paradigm of Education in the Era of Society 5.0

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Abstract. Technology has a fast civilization which is marked by the era of society 5.0 by turning manual machines into systems that connect tools, humans, and technological outputs. Teachers as educational facilitators with a certain concentration have a big role in providing quality teaching. Increasing teacher competence will be in line with the success of student learning outcomes. Teachers of Vocational High Schools (SMK) in Probolinggo do not yet have an understanding of the new paradigm of education in the era of society 5.0 which can be seen from the lack of use of learning technology. Learning multimedia tools can encourage other unique skills and creativity. The purpose of research and community service is to train and assist SMK teachers in utilizing educational technology with a concentration on office management. Teachers gain understanding and skills in managing digital platforms in the field of office management. The results of the analysis show that teachers can apply the use of multimedia learning to accommodate the competence and learning power of students. Training and assistance to the community can support the achievement of student competencies based on the planning of the Center for Excellence in Vocational Schools.

Keywords: ArsipKita · Era Society 5.0 · Educational Technology · Teacher Competence · Student Skills

1 Introduction

The rapid development of technology in all aspects of life, makes everyone must understand changes in increasingly modern technological flows. The development of this technology makes it easier for humans to complete any work in a short and precise time. Technology has also turned simple tools into digital-based automatic machines. [1] Technology also facilitates information distribution systems only with the internet, all forms of information can be obtained easily. Various tools in the form of machines and applications began to be created in the digitalization era [2]. Technology began to evolve rapidly and was able to provide solutions for all aspects of life.

Technology is also rapidly affecting the social life of people who are accustomed to modern machines and tools. This technology made by humans is growing and encouraging people to quickly adapt to the life of society 5.0 [3]. The era of society 5.0 is more

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focused on the role of machines in helping humans work and being part of the human need for technology [4]. The internet, which is used by humans to find information, has now turned into a part of human needs. The era of society 5.0 changes modern devices or tools as part of human life through technology and information networks.

Era Society 5.0 connects people, objects, tools, and systems into a single unit in the digital space [4]. If in the past the system or tool was created only as a tool, in the era of society 5.0 this tool can bring together several people in a system that has automatic work. The technology used in the era of society 5.0 includes the use of artificial intelligence, IoT and robots [5]. The use of developed technology has expanded to various aspects of life. Humans have lived side by side with technology and indirectly always need technology.

Problems in human social life can be resolved with the technology developed, especially in the era of society 5.0. Technological developments in the era of society 5.0 have penetrated all aspects of life, including education, there is a need for readiness and planning for updating educational equipment [3]. If the device and the role of educators are not able to keep up with technological developments, then this role can be replaced and facilitated by technology which is always needed at all times. Teachers are a measure of educational success. Teaching tools that are by educational needs will help teachers to create an educational climate that supports the competence of students [6].

Implementation of education needs learning media that can provide convenience for teachers and students to achieve learning objectives. The use of this learning media also requires the right strategy for learning needs. Therefore, the teacher is a very important element of educational success. The ease of developing technology can be used by teachers to create digital-based education in learning known as the cyber system [7]. The use of this system can carry out learning that is not limited by space and time.

The use of this technology requires teacher competence in understanding technology and its use in the field of education. Teachers no longer face students who do not have any knowledge, but students who respond quickly and are very close to technology [8]. Students in the era of society 5.0 are students who are accustomed to using technology and smartphones. Educators must be able to provide real learning and be able to provide examples of the application of each of the concepts described [9]. Students in the current era, have a high curiosity so teachers must be able to provide real understanding based on the environment that is often encountered.

The success of education is determined by the quality of teachers as the main element in the implementation of learning. The quality of teachers can be seen from the performance of teachers in presenting learning materials for students. Indicators for assessing teacher performance can be seen from the success of guiding students, teaching with appropriate methods, and directing students based on learning achievements [10] (Fig. 1).

Teacher competencies include pedagogic, personality, professional, and social competencies. One of the pedagogic abilities that teachers must have is planning the use of teaching media and learning resources. The demand for pedagogic abilities is always increasing along with the development of technology that changes teaching media to be digital-based [1]. This makes teachers have to understand the development of educational technology that can be used in learning, especially for Vocational High School

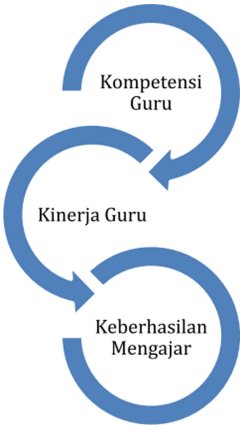

Fig. 1. The Relationship between Teacher Competence, Teacher Performance, and Teaching Success

(SMK) teachers [11]. Vocational teachers must not only provide lessons but also real practice on applied material (Prasetya, 2020).

Vocational High School teachers must provide practical material along with the tools because Vocational High School is synonymous with field practice skills rather than just mastering theory. However, what happened to vocational school teachers in Probolinggo shows that teachers, especially those who teach Office Management and Business Services, have not been provided with practical learning tools by technological civilization [12]. Based on the preliminary study stated that teachers have not been able to provide applied technology, especially in the field of office management used in the work environment. The teacher only gives examples of office management procedures and management in the work environment but has not provided real examples of their use.

This is what underlies the purpose of research and service aimed at SMK teachers in Probolinggo, namely to provide an understanding of conducting and developing learning by developments in the industrial environment. Moreover, offices are not only limited to having real space. The era of society 5.0 has provided space for the development of digital offices and the management of offices digitally without face-to-face. This is the ultimate goal to introduce technological developments to the industrial world for teachers to improve the quality of teaching.

2 Literature Review

The significant changes that occurred in the digitalization era which is now leading to the era of society 5.0 have brought a major focus of change to the world community. This change increases the amount of consumption of goods and services commensurate with the increase in production in all industrial sectors. Changes in the industrial flow of the society 5.0 era are marked by an increase in (1) the volume of data and connections; (2) business analysis and capabilities; (3) new interactions between humans and machines;

(4) digital world transfer instructions to the real world [7]. As a result, the industrial revolution also affected the use of educational technology which was proportional to changes in the activities and learning of students in the classroom. Students who have learning difficulties will easily get relevant learning resources from the internet.

Teachers are no longer the only source of learning. Therefore, teachers must be creative, and able to adapt to technology and the characteristics of students. Teachers must also have good teaching qualities. Teaching experience, teacher programs and degrees, and teacher certification are other qualities of teacher readiness to transfer lessons [13]. In addition, teachers must be able to provide interesting, interactive learning, focus on selecting learning methods, and have good relationships with students [14]. The most important thing is that teachers can adjust the application of technology in education.

Moreover, teachers who teach at the Vocational High School (SMK) level are required to be able to prepare students to become graduates who are superior and ready to work [15]. Vocational education is considered part of the education system which places more emphasis on giving industrial tools practicum in the world of professional work. Finally, schools can produce graduates who are competent and proficient in their respective fields [16]. Vocational education also provides the application of attitudes and values in the work environment through habits at school. Therefore, teachers must be able to provide up-to-date practicum facilities.

3 Method

The research and service implementation method is carried out intensively through training and mentoring of SMK teachers in Probolinggo, especially the Office Management and Business Services expertise program by the research and service team. The output of this activity is that teachers are expected to be able to understand, apply, and provide examples of digital office management platforms to students. Researchers also conducted in-depth interviews with several teachers to obtain evaluations and input on the course of research and dedication for subsequent implementation. This information is used as material for evaluating the research team so that they can carry out the service according to the planned achievements. The following is a presentation of research steps and community service:

1) Synchronization and Coordination of Activity Scheduling

This step aims to determine the theme, activity outcomes, materials, implementation schedule, and location of the activity. The need for activity materials is decided together with activity supporters. The availability of activity locations and schedules is determined by both parties.

2) Preparation and Planning of Activities

Preparation for activities begins with planning the agenda, preparing the training platform, materials along with video tutorials, and other preparations. In this case, the tasks of each team are divided in more detail and comprehensively. This step is to ensure the level of achievement of the overall activity.

3) Planning and Creating Platform Tutorials

Tutorials are provided by the research team based on the choice of digital office platforms, namely ArsipKita. The researcher proves that research achievement is also based on the use of video tutorials. Making video tutorials are distributed to participants so they can use them when providing learning.

4) Implementation and Assistance of Activities

The implementation of activities is centred on direct practice on the ArsipKita platform. Participants can produce practical learning projects for digital office management learning media. The methods used include lectures, performances, simulations, and questions and answers. The research and service team also provided virtual assistance via the WhatsApp group for one month.

4 Findings and Discussion

The purpose of research and community service is to provide understanding to vocational school teachers, especially Office Management and Business Services to conduct and develop digital-based learning. The research and service carried out support the achievement of learning outcomes based on the provisions of the Center of Excellence Vocational School. The achievement in question is to utilize educational technology as a whole and comprehensively. This activity was attended by approximately 35 participants, the majority of whom taught the Office Management and Business Services expertise program.

Implementation of research and service in the form of training and mentoring for teachers to introduce digital office management with the ArsipKita platform. The training and mentoring are carried out with the practice of using the platform and managing office documents. The training is carried out using a digital office platform that can be used for practical learning. ArsipKita with an office document management system is considered suitable for digital-based learning for the Center of Excellence Vocational School (Fig. 2).

Technology has changed the constitution and arrangement of more varied workplaces and work systems that are more flexible. Work is not only done in one particular place but can be done separately with virtual coordination [17]. Technological developments have changed the need for a place to work directly into working remotely. The workplace is not only limited to physical meeting rooms but also has unlimited space for virtual meetings. Virtual space that is structurally arranged in a workspace form system through digital technology [18]. The digital office spatial parameters certainly have used an automated control management system and platform.

This is what teachers need to understand in providing an overview of digital office automation. There needs to be an understanding of various digital office platforms that must be mastered by teachers to deal with learning in the digitalization era which is closely related to technology. The machines used to handle office administration have turned into digital systems, for example managing letters with an electronic filing system,

Fig. 2. Process of Implementation of Training and Assistance

Table 1. Archives Training Materials

No.	Material Details
1	Theories about learning the era of society 5.0 towards the digital office
2	Overview of the use of Archives
3	How to register Archives
4	Office document receipt project development
5	Project distribution or delivery of documents
6	Automated letter creation project
7	Automatic compilation of archive retention schedules
8	Letter agenda book development project and business meeting agenda

sending and receiving letters via email, and business meetings via zoom meetings. Office document management platforms such as the Archives Kita System can be used by teachers for learning media that can provide real examples of digital office implementation (Table 1).

The implementation of the training includes the following material.

The use of the ArsipKita platform in supporting the improvement of teacher pedagogic competencies is expected as a form of teaching media and learning resources that are in line with the demands of student competence in the era of society 5.0. Learning outcomes of students who adapt to the development of learning technology with the demands of the ability to analyze and find solutions, think creatively, be able to work together as a team, and have good communication. Overview of the use of Archives (Fig. 3).

ArsipKita has several menus, namely dashboard display, tasks, archive management, agenda book, and meeting agenda book. This office document management platform

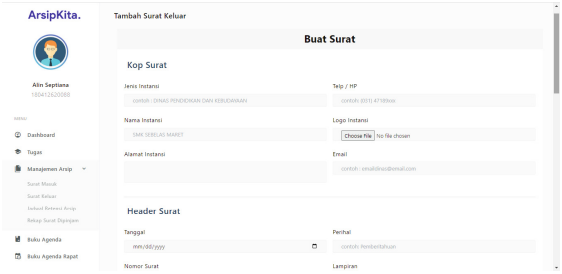

Fig. 3. ArchiveKita Platform View

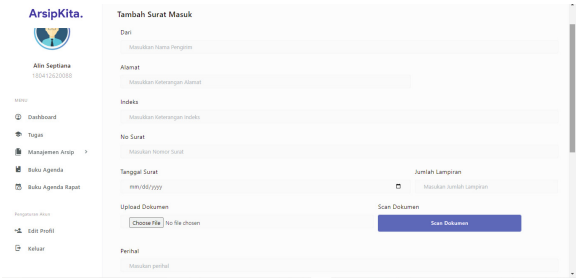

Fig. 4. Office Document Management View

can also upload and classify documents based on their contents automatically. Users can easily create letters in ArchiveKita. Office document management is not limited to receiving and sending documents but destroying documents. The document destruction step has been scheduled on the archive retention schedule menu in ArsipKita. Besides teachers being able to provide examples of digital archive platforms, teachers can also conduct office practicums through this platform (Fig. 4).

The ArsipKita system can be used as a benchmark that office administration has evolved into a digital system that utilizes technology that is more systematic and structured. ArsipKita is a viewing platform for teachers and students. Teachers can assign document management tasks to students in the "Assignments" menu. ArsipKita can be a varied teaching medium to improve the competence of students with predetermined learning outcomes. The use of digitalized learning media improves the quality of teachers' teaching.

The training and mentoring carried out not only present theory and practice but are also equipped with guidelines for using the ArsipKita platform through video tutorials. This video tutorial is expected to be able to provide understanding to teachers and ease of access in the long term. The quality of teachers in the era of society 5.0 is no longer only dealing with students who do not have any knowledge or skills. Students in the digitalization era have better knowledge of technology and skills that support technological civilization. The demand for teaching quality and teacher competence is increasing.

Teachers who are less skilled at using learning technology will find it difficult to provide material and present learning resources that are in line with changes in the world of education globally. Teachers must be able to manage technology-based classes, provide learning resources that are easily accessible independently, and foster students' learning needs in class [15]. The ease of access to technology that provides various kinds of information is a threat to teachers because the internet provides a lot of information from various fields. Teachers who have good teaching competence and quality will perfect the competence of students which is marked by learning achievements [19].

Based on interviews that have been conducted with several training and mentoring participants, information is obtained that the activities carried out have provided understanding and skills in using digital systems in the learning process. Master already has an understanding of the changes in the world cycle as a whole in all aspects. Teachers can provide examples of real digital office implementation for students at the SMK level who are specially prepared with applied knowledge to enter the industry and a professional work environment. Teachers can give assignments based on the understanding that students have. Learners can work on assignments independently and obtain teaching materials extensively in the Archives system.

5 Conclusions

The implementation of community service activities through training and mentoring was carried out well. Teachers can use ArchiveKita to create a digitalization learning climate that encourages understanding of the industrial environment in the era of society 5.0. Teachers can use systems or technology such as ArchiveKita or other office management systems to create varied learning multimedia both face-to-face and remotely. Teachers must improve the competence and quality of teaching to encourage the achievement of learning objectives and student skills. This is intended to provide digitalization-based learning based on the real environment to encourage the improvement of better human resources.

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