



Development of Teachers as Human Resources in The Digital Era

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ABSTRAK

In the era of digital technology advancement, the rapid development of digital technology has brought significant changes to life, including the world of education. The impact and challenges brought about by digital transformation drive education to undergo significant changes. Amid the rapid advancement of digital technology, teachers are not only required to master the subject matter but also to be able to utilize technology to enhance the learning process and adapt to the changes that occur. The research method used is a literature review on human resource development in the digital era, with various references taken from journal articles on Google Lens and Google Scholar. The findings of this study indicate that the development of teachers as human resources in the digital era is very important to support teachers in enhancing their skills, competencies, and professionalism in teaching. With proper development, teachers can make significant contributions to the improvement of education quality, which will eventually produce high-quality graduates capable of competing in the digital world.

1. INTRODUCTION

In this era of rapid technological advancement, the presence of digital technology undoubtedly plays a vital role in the development of human life. The rapid advancement of technology has brought significant changes to human life. (Sati et al., 2023). The rapid growth of digital technology has permeated various aspects of life, including education. However, the impact and challenges of digital transformation drive education to undergo significant changes as it becomes a key point in shaping future generations. (Taufik & Rindaningsih, 2024). The shift from the conventional to the digital information era presents new challenges for all professions. This includes the teaching profession, which continues to evolve in line with the progress of the times. (Saerang et al., 2023). However, the presence of digital technology today greatly assists teachers in delivering lessons efficiently and quickly so that students can understand them.

Human Resource Development (HRD) is an effort to improve individuals' quality and quantity or abilities through educational planning, training, and workforce management to achieve optimal results. (Mukhlison Effendi, 2021). Amid the rapid advancement of digital technology, teachers are not only required to master the subject matter but also to utilize technology to enhance the learning process and adapt to the changes that occur. Improving the quality of human resources (HR) for teachers will be successful if supported by quality education and the application and utilization of knowledge and technology (Rohman & Hidayah, 2022). Developing human resources (HR) for teachers becomes very important in this context. In the education system in Indonesia, the role of teachers is one of the most critical factors influencing students' success in achieving the predetermined learning objectives. Therefore, there is a demand for teachers to deliver material effectively and keep up with the times. (Saerang et al., 2023). However, in reality, there are still teachers who choose to use conventional teaching methods to provide learning materials. Technology development is considered to make things more difficult for them. Problems like this become a challenge for teachers facing technological advancements in the digital era. In this digital era, teachers must master the ability to understand and utilize technology to enhance the learning process and produce quality students. Therefore, teachers must possess four essential competencies: pedagogical, personal, social, and professional. (Zahara Salma et al., 2024). Improving skills has become very important in education in the digital era. Not only technological skills but social skills also need to be developed to meet the emotional needs of students. Therefore, teachers must conduct training or workshops on communication and technology skills to manage learning in the digital era. Thus, continuous training is essential to encourage the development of teachers into professional human resources.

This research shows that the development of teachers as human resources in the digital era is significant in supporting teachers in improving their skills, competencies, and professionalism in teaching. Enhancing teachers' skills will be successful if supported by quality education and applying and utilizing knowledge and technology that meet the needs. Thus, the potential of teachers who use conventional methods diminishes and adapts by utilizing the advancements in digital technology. This research aims to present a literature review related to the development of teachers as human resources in the digital era. The results of this research are expected to enable teachers to develop technological skills and identify competencies for teachers in the digital era. Thus, improving teachers' skills can maintain the quality of schools. All cited scientific articles are sourced from Google Lens and Google Scholar.

2. RESEARCH METHOD

The writing of this scientific article uses the literature review method related to the development of teachers as human resources in the digital era. The literature review required for this research needs reference sources from scientific articles cited from Google Lens and Google Scholar. Based on this literature method, an analysis will be conducted to produce a conclusion. It is hoped that the conclusions drawn will enhance the effectiveness of teacher development as human resources in the digital era.

3. RESULTS AND DISCUSSION

Education faces new challenges and opportunities in the current digital era marked by advancements in information and communication technology. The rapid development of digital technology has permeated various aspects of life, including education. However, the impact and challenges of digital transformation drive education to undergo significant changes as it becomes a key point in shaping future generations. (Taufik & Rindaningsih, 2024). This shows that teachers are one of the main elements in the world of education, and they must always

upgrade their skills and competencies to be ready to face the existing challenges. (Andi Sadriani et al., 2023).

Human Resource Development (HRD) is an effort to improve individuals' quality and quantity or abilities through educational planning, training, and workforce management to achieve optimal results. (Mukhlison Effendi, 2021). Teachers as human resources are a determining factor in the success of the learning process in educational institutions. Therefore, teachers need to receive guidance and direction that align with the goals set by the educational institution. (Mubarok, 2021). Improving teacher quality should be a top priority in policy formulation and implementation. (Monalisa et al., 2023). Therefore, developing human resources (HR) for teachers is very important.

In facing the rapidly changing times, especially in the field of education, it is necessary to have human resources (HR) or teachers who can respond to every change. Teachers are required to learn quickly and adapt to the changes that occur. In addition, teachers need to have innovative skills to face various changes and challenges. Therefore, teachers need to possess and continuously develop their competencies. (Radinal, 2021). The rapid development of digital technology demands that teachers utilize and master technology by designing creative and innovative learning materials, such as using learning software, online platforms, and other digital tools to support the learning process. For example, I can utilize learning management systems (LMS) and collaboration applications like Google Classroom. Teachers need to integrate this technology into their curriculum to optimize the benefits of this digital technology. Therefore, teachers need to undergo training to utilize and apply digital technology to the needs of the students. Applying digital technology to learning can make it easier for teachers to deliver learning materials. Thus, teachers can create an innovative learning environment to achieve the established learning objectives. (Taufik & Rindaningsih, 2024). The challenges in education in the current digital era are no longer focused on classic issues such as the equitable distribution and fulfillment of access to educational facilities and infrastructure. Today's problems are more related to the quality of graduates and the competence of teachers who can compete and adapt to the times. Therefore, teachers are required to master digital technology before the students. (Rambe, 2024). However, in reality, some teachers still prefer to use conventional methods rather than utilizing digital technology. The reason is that digital technology is complicated, and people are not proficient in using it. Therefore, teachers less familiar with digital technology will be provided with understanding through training and workshops. Continuous training is essential to ensure that teachers are always up to date with the latest developments in education and technology. Structured training programs can help teachers overcome the challenges arising from the rapid changes in the digital world. The technological competencies that teachers must possess are as follows:

1. Digital literacy: teachers must have a deep understanding of the basic concepts and principles of information technology, including the internet, computers, and data security aspects.
2. Mastery of tools and applications: teachers must master various technological tools and applications related to the learning process, such as online learning platforms, software, and digital collaboration tools.
3. digital content development: teachers must master the skills to produce appropriate and engaging digital content, such as educational videos, presentations, e-books, or other teaching materials. (Zahara Salma et al., 2024).

However, it is not only technological competencies that teachers need to possess; teachers are also required to have four competencies according to the National Education Standards: pedagogical competence, personal competence, social competence, and professional competence. These four competencies are essential competencies that teachers must have. This indicates that these competencies must be continuously developed, enhanced, and adjusted to the changing times. Each era has different human resource needs, so teachers must now be

prepared to face the challenges of this digital era. (Radinal, 2021). Developing teachers' skills and competencies in using digital technology can result in a more effective and efficient learning process. Thus, the improvement of teachers' skills and competencies has the potential to create relevant and quality education.

The teacher development program through training is essential in enhancing teachers' skills. Training attended by teachers can produce quality outputs. Teacher participation in training has a significant impact on job satisfaction levels and the results achieved by educational institutions. Well-planned training programs can support the career development of teachers. Career development efforts undertaken by academic institutions can improve teacher performance, thereby increasing their job satisfaction levels. (Suryani et al., 2023).

Skills or competencies must be developed and adapted to the conditions of the times. Therefore, the competencies needed are those that support teachers' performance so that the development of digital technology does not usurp the roles and tasks of teachers. Thus, teacher development is carried out to develop and enhance teachers' competencies to become more relevant to the needs of the times. In addition, competent teachers are expected to equip students with technology and knowledge by instilling creative and innovative attitudes. The goal is for students to have a foundation in knowledge and skills for the future. Therefore, the development of teachers is significant in creating quality graduates and educational institutions.

4. CONCLUSION AND SUGGESTIONS

The development of teachers as human resources in the digital era plays a vital role. In facing the challenges of technological advancements, teachers must master relevant competencies, such as digital literacy and understanding of technological tools and applications. Therefore, continuous training becomes necessary for teachers to keep up with the latest developments in education and technology. By enhancing their skills and competencies, teachers can adapt to changing times and provide quality education to students, producing graduates ready to face future challenges. Effective teacher development will significantly contribute to improving quality and education.

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