

Competencies of Teaching Personnel in the Use of Information Technology (IT) At State Middle School 8 Satu Atap (Satap) Telaga Biru

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Abstract

This study aims to determine the level of competency of educators in the use of information technology (IT) at SMP Negeri 8 Satu Atap (SATAP) Telaga Biru. Competence in IT mastery is an important indicator in supporting the effectiveness of the learning process in the digital era. This study used a descriptive approach with qualitative methods. Data were collected through interviews, observations, and documentation with teachers and other educational staff at the school. The results indicate that most educators have a basic understanding of information technology use, such as computer operation, office applications, and utilizing the internet as a learning resource. However, there are still limitations in optimally using IT for learning activities, particularly in integrating technology with teaching methods. Factors influencing IT competency include education level, age, training received, and the availability of technology facilities at the school. Therefore, improving competency through ongoing training and providing supporting resources is essential to foster digital transformation in the educational environment.

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1. INTRODUCTION

Educational format is a conscious effort to prepare students through guidance, teaching, or training activities so they can fulfill their roles in the future. Educational efforts are programs designed by the government to increase the intelligence and progress of the nation. A country can be considered advanced if education is a priority, because without education, a nation will not be able to manage its natural resources. In fact, if Indonesia's young generation lacks sufficient skills, this is feared to hinder the progress of national development. Facts show that many developed countries develop rapidly not only because they have abundant natural resources, but also because they are supported by the intellect, discipline, and work ethic of their citizens.

Education can be understood as a learning activity undertaken by individuals to acquire new knowledge and skills. Fundamentally, education is a legacy passed down from previous generations, continuing to this day, and will continue. For humans, education is a basic need that must be met throughout life. Without education, individuals will struggle to live up to their expectations and grow toward a better life.

In this era of globalization and rapid advances in information technology, the skills of teaching staff and educational staff are crucial. They are expected not only to possess a

sound academic understanding but also to be able to adapt to various devices and technologies that support teaching and learning activities. Mastery of information technology is a key factor in improving the quality of education, requiring educational staff to utilize digital resources to enhance the effectiveness of the learning process.

Developments in information and communication technology (ICT) have had a significant impact on many aspects of life, particularly in the education sector. Efficient use of technology in education can improve the quality of learning, streamline administrative processes, and support better communication between educators, staff, and students. Therefore, the skills of educators and staff in using information technology are crucial for achieving optimal educational goals.

The importance of developing these skills aligns with government policies that encourage the application of technology in education, such as through the implementation of technology-oriented curricula and the use of e-learning platforms. Therefore, this study aims to analyze the extent of teaching staff's competence in using information technology at SMP Negeri 8 SATAP Telaga Biru and to uncover the factors that influence their skills in utilizing technology for teaching and learning processes and educational administration.

My initial observations aimed to determine the extent to which staff, particularly teachers, possess the information technology (IT) competencies required for education and school management. These observations indicated that staff's educational capabilities are still suboptimal. This is evident in the lack of training and development programs they receive. The limited opportunities to participate in relevant training and update their knowledge and skills prevent teachers from maximizing their teaching potential. Therefore, designing a structured and sustainable development program is crucial to improving teacher competency.

The next issue that must be addressed is the lack of support from schools for developing teacher competencies. This support is crucial, as without commitment and attention from school management, efforts to improve the quality of education will be hampered. For example, schools should allocate sufficient funds for training and workshops, and create a supportive environment for teachers to share knowledge and experiences. Therefore, schools need to be more proactive in providing support, whether in the form of resources, facilities, or policies that support teacher professionalism.

Another issue that needs attention is the difficulty in integrating technology into the curriculum. In today's digital era, the use of information and communication technology in teaching is crucial for increasing the effectiveness and attractiveness of learning. However, many teachers still experience difficulties in adopting and using the various technological tools and platforms available. This may be due to a lack of appropriate training, a limited understanding of how to use technology effectively, or even a lack of confidence in implementing technology-based learning methods. Therefore, educational institutions must provide comprehensive and ongoing training for teachers and provide the necessary resources to support technology integration into the curriculum. In this way, it is hoped that the learning process can be more innovative and effective, and can prepare students to face the challenges of the digital era. The results of this initial observation will provide important insights regarding the need for further training or development so that IT use at SMP Negeri 8 SATAP Telaga Biru can optimally support the educational process.

By recognizing this issue, it is hoped that there will be ways to support the improvement of digital skills of educators and education staff at SMP Negeri 8 SATAP Telaga Biru, so that quality education can be realized.

2. RESEARCH METHODS

This research was conducted at SMP Negeri 8 Satap Telaga Biru. The location was chosen based on the consideration that the school is a relevant educational institution for studying the use of information technology (IT) by educators. This relevance is evident from the school's characteristics, which reflect the general conditions of IT use in junior high schools, particularly in areas with limited technological infrastructure.

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This study employed direct observation, interviews with relevant informants, and document review as data triangulation techniques. Direct observation was conducted to obtain an empirical picture of the phenomena studied in the natural environment. Interviews with informants were selected to gather in-depth information based on the perspectives of subjects with relevant knowledge and experience. Meanwhile, relevant documents were analyzed to strengthen the findings and provide a broader context. The use of this combination of techniques was intended to increase the validity and reliability of the data and facilitate researchers in comprehensively understanding the issues being studied.

To ensure data validity and reliability, this study employed triangulation, a combination of several data collection techniques (interviews, observation, and documentation). Furthermore, member checking was conducted to confirm the accuracy of the interview results with the participants' understanding and perspectives, ensuring the reliability of the data obtained.

3. RESEARCH RESULTS AND DISCUSSION

The results of this study are sourced from interviews conducted by researchers with informants at SMP Negeri 8 Satu Atap (SATAP) Telaga Biru. The purpose of this study is to dig into in-depth information regarding various aspects related to the learning process, support provided by the school, and challenges faced by teachers in integrating technology in teaching. The data obtained from this interview will be analyzed further to identify relevant patterns and themes, as well as to provide recommendations that can improve the quality of education at SMP Negeri 8 Satu Atap (SATAP) Telaga Biru. In this study, using the theory according to Robbins & Judge (2013), Gibson et al (1997).

3.1. Research result

3.1.1. Personal Competence

Lack of training or competency development for educators can negatively impact the quality of education. Guskey (2000) stated that good training not only improves teachers' knowledge and skills but also helps boost their motivation and confidence in teaching. Research shows that well-designed training programs can bring about significant changes in teaching methods and student learning outcomes.

Despite the clear benefits of this training, many educators still struggle to participate in the program. This can be due to various factors, such as lack of time, lack of support from the institution, or difficulty accessing the training program itself. According to Darling-Hammond et al. (2017), to achieve the best results, educational institutions need to provide adequate support and create a supportive environment for teachers' professional development.

Therefore, greater attention from relevant parties, including the government and educational institutions, is needed to design and implement more inclusive and accessible training programs. This is expected to improve the overall quality of

education and ensure educators are better prepared to face challenges in the learning process.

3.1.2. Organizational Support

School support for teacher competency development, technology integration in learning, and encouragement of innovation from the principal has been carried out, although in its implementation, there are still differences in perception and technical obstacles in the field.

Regarding competency development, the school, through the principal and vice principal, acknowledged allocating regular budgets and providing incentives for teachers who participate in training or professional development programs. However, several teachers reported that this support was not fully distributed and depended on the type of training and funding availability. Teachers also noted that training outside of official programs was often not fully facilitated by the school.

In terms of technology integration and learning innovation, the school has provided facilities such as projectors, computers, and internet access, and conducted training. However, some teachers felt the training hadn't reached all stakeholders and was still general in nature. The principal was considered quite open to innovation, but teachers hoped for direct guidance and an evaluation forum to ensure more focused and sustainable innovations.

3.1.3. Ability to Adapt to Change

The implementation of technology in the curriculum still faces various technical and pedagogical obstacles. English teachers experience challenges with internet access and limited devices, as well as low student digital literacy. Indonesian teachers highlight the lack of training in the use of digital media and the difficulty of delivering material effectively online. Civics teachers face limited digital materials relevant to national values and low student interaction in online learning. Islamic Religious Education teachers emphasize the challenge of maintaining the sanctity of material and the lack of appropriate digital learning resources. Meanwhile, Mathematics teachers experience difficulties in conveying abstract concepts through technology due to limited interactive media and a lack of mastery of supporting applications. These obstacles indicate the need for further support in the form of infrastructure, training, and the development of contextualized digital learning resources appropriate to the characteristics of each subject.

3.2. Discussion

3.2.1. Personal Competence

Teachers' personal competencies remain a key factor significantly influencing classroom teaching performance. Although most teachers have participated in various training programs related to innovative learning strategies and the use of digital technology in the learning process, several obstacles remain that hinder the optimal development of their competencies.

One of the main obstacles identified is teachers' limited time due to their extremely heavy workloads. Piling administrative tasks, demanding teaching responsibilities, and other additional demands make it difficult for teachers to find time for advanced training. This reality reflects a mismatch between the desire to improve competency and working conditions that do not optimally support such efforts.

The second crucial obstacle is the lack of information about available training. Many teachers lack access to adequate information about professional development programs they can participate in, whether offered by government agencies or private institutions. As a result, opportunities to improve their capacity are often missed, and the potential for competency development is not optimally utilized.

Furthermore, the relevance of the training materials was also highlighted. Many teachers felt that the training material lacked practical application and did not align with the real-world challenges they faced in the classroom. This made it difficult to apply new knowledge and skills to everyday teaching practices. This mismatch between theory and practice created a gap that ultimately hindered the training's positive impact on teaching performance.

3.2.2. Organizational Support

Organizational support plays a crucial role in enhancing teacher performance. School management generally believes they provide adequate support, such as budget allocation for training and the provision of technology to support learning. However, findings from interviews with teachers indicate a significant gap in perceptions between management and teachers regarding the extent to which this support is perceived as effective and relevant to on-the-ground needs.

According to Eisenberger et al. (1986), in their theory, Perceived Organizational Support (POS) emphasizes that employees (including teachers as professional staff) will show higher commitment and better performance if they feel that the organization values their contribution and cares about their welfare, both in terms of facilities, attention, training, and ongoing professional development.

Teachers believe that the support provided so far has tended to be formal and hasn't addressed the technical aspects they truly need in their learning practices. One key concern is the lack of hands-on training that can be directly applied in the classroom, as well as the lack of ongoing support in using learning technology. Teachers often feel "abandoned" after training, with no follow-up technical guidance or discussion forums that allow them to address challenges concretely.

Furthermore, teachers also revealed that the lack of policies explicitly supporting time for self-development is a barrier. Busy teaching schedules, coupled with administrative duties and other school activities, make it difficult for teachers to allocate time for professional competency development. This situation indicates that although structural organizational support is available, its implementation is still not optimally integrated into the school's work system and culture.

These findings emphasize the importance of evaluating existing organizational support policies and practices. School management needs to foster more open dialogue with teachers to understand their real needs and adapt support programs to be more responsive and contextual. One concrete step that can be taken is to allocate dedicated time in the academic calendar for teacher professional development activities, such as internal workshops, problem-based workshops, or structured learning reflection sessions.

Furthermore, establishing learning communities among teachers can be an effective strategy for strengthening organizational support. These communities can serve as collaborative spaces for teachers to share experiences, best practices, and teaching strategies relevant to their individual circumstances. With support that is not only material but also cultural and structural, teachers will feel more valued, supported, and encouraged to continuously improve their performance.

Overall, the success of efforts to improve teacher performance depends heavily on the extent to which school organizations are able to provide support aligned with real needs on the ground. Therefore, a more participatory, adaptive, and long-term solution-oriented approach needs to be developed to create a work environment conducive to teacher professional growth.

3.2.3. Ability to Adapt to Change

Barriers to integrating technology into the learning process. While they recognize the importance of utilizing technology, limited technical skills, lack of training, and inadequate facility support are the main obstacles they face.

According to Mishra and Koehler (2006), Technological Pedagogical Content Knowledge (TPACK) is a framework that describes the types of knowledge teachers need to effectively integrate technology into learning. They emphasize that teachers must be able to combine content knowledge, pedagogy, and technology to create meaningful and contextual learning experiences. An English teacher revealed that she struggles to optimally utilize digital platforms, especially for materials requiring interactive media, such as listening and speaking. She also cited limited internet access and supporting devices, both at school and at students' homes, as major barriers to technology adoption.

The Indonesian language teacher also stated that he was not yet accustomed to using digital media such as projectors or presentation apps. He preferred lectures and discussions without the aid of technology. Limited training and a lack of time were the main reasons for his reluctance to try digital approaches in teaching.

Similarly, the Civics teacher admitted to having never used a projector himself and not understanding how to operate digital aids. The material was primarily delivered verbally, without the support of media like videos or interactive presentations that could actually enrich students' understanding.

An Islamic Religious Education teacher stated that he faces challenges in maintaining the sanctity of the material when delivered through digital media. Furthermore, the limited availability of digital content that aligns with religious values has led him to prefer conventional methods such as lectures and reading books with students.

The math teacher stated that she was not yet accustomed to using technology such as graphic applications, interactive simulations, or digital platforms in her teaching. She still preferred manual methods like writing on a whiteboard because she was not yet proficient in digital devices or available learning applications.

According to Niess (2005), teacher professional development in terms of technology should be directed at improving their ability to integrate the three aspects of TPACK comprehensively, because mastery of technology without understanding pedagogy and content is not enough to create effective learning.

Based on the overall interviews, it was clear that most teachers did not feel sufficiently skilled in using technology for learning. They also reported that the training they received was limited, discontinuous, and lacking in practical application. Many teachers expressed a willingness to learn but felt they needed direct guidance and training tailored to the needs of each subject.

Furthermore, another obstacle faced is the lack of adequate facilities, such as a stable internet connection, projectors, and laptops, both at school and at students' homes. These factors exacerbate the gap in technology utilization and slow down the digitalization process in education.

Therefore, more systematic and structured interventions are needed, such as providing regular training, technical assistance, and supporting facilities and infrastructure. Furthermore, teachers also need to increase their motivation and willingness to learn technology to create innovative, interactive, and relevant learning that meets the demands of 21st-century education.

4. CONCLUSION

The competence of educators in the use of information technology still faces several major challenges. One prominent issue is the lack of ongoing training or competency development programs for teachers. Although some teachers have participated in training provided by the education office, these activities have not been evenly distributed across all teachers, and the material presented is not always relevant to real-world needs. Furthermore, constraints such as limited time, personal costs, and a lack of information about training programs also hamper efforts to improve teacher competence, particularly in the field of technology.

School support for teacher professional development is also perceived as less than optimal. School management claims to provide facilities and financial support, but in practice, some teachers feel that access to training and incentives is unequal and lacks strategic direction. Existing policies do not fully encourage the creation of a sustainable and comprehensive development system for all educators. This indicates a gap between managerial planning and operational implementation.

Furthermore, teachers' ability to integrate information technology into the learning process remains relatively low. Some teachers have used basic devices such as laptops and projectors, but their use is limited to simple functions and has not yet reached the stage of effective integration into the curriculum. Lack of technical training, inadequate mentoring, and limited infrastructure, such as internet connections and supporting devices, are major obstacles. Therefore, a joint effort between schools and teachers is needed to improve digital skills through relevant training, facility support, and strengthening managerial systems oriented towards continuous competency development.

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