Research Article

MANAGERIAL STRATEGIES IN OVERCOMING THE LOW COMPETENCY OF TANJUNG LAMA STATE ELEMENTARY SCHOOL TEACHERS IN THE USE OF DIGITAL LEARNING MEDIA

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Abstract

This study examines the managerial strategies implemented at Tanjung Lama State Elementary School to address low teacher competency in using digital media as teaching materials. The research method used descriptive qualitative methods through in-depth interviews with the principal, teachers, and school supervisors, as well as observation and documentation. Findings indicate that training alone does not guarantee digital competency; the principal's strategies, such as ongoing internal training, a cascade mentoring model, active supervision, and incentive policies, have proven effective. This research provides a unique contribution to the management of digital-based education at the school's operational level.

Keywords: Digital Media, Learning, Managerial Strategy, Teacher Competence

INTRODUCTION

The development of information and communication technology has transformed the face of global education, including at the elementary school level. Digital media is now a crucial learning tool because it can increase student participation, enrich teaching materials, and adapt the learning process to the characteristics of the digital generation. In line with the demands of the Independent Curriculum and the transformation of national education, digital media

integration is no longer an option but an urgent necessity to create an interactive and relevant learning process (Kemdikbudristek, 2022).

In the global digital transformation, technology integration in education is key to improving teaching quality. The now internationally recognized World Digital Competence Framework for Educators (DigCompEdu) emphasizes the importance of teacher digital literacy to ensure the effectiveness of digital learning. Through the TPACK (Technological Pedagogical Content Knowledge) framework, understanding the interaction between content knowledge, pedagogy, and technology is essential for teachers to effectively adapt digital media in learning (Misra & Kohler, 2019).

However, the reality in many elementary schools in the regions, including in Southeast Aceh Regency, shows that the implementation of digital media in learning still faces various challenges. One of these factors is the low level of teacher competency in utilizing technology effectively and sustainably. This is evident in the minimal use of digital-based learning media in teaching and learning activities, despite previous training. Several previous studies (Hariyanto et al., 2020; Nugraeni & Suyatno, 2022) revealed that teachers' limited digital skills, low self-confidence, and a lack of post-training support are the main factors contributing to the stagnation of digital learning in elementary schools.

This situation was also found at Tanjung Lama Public Elementary School, Southeast Aceh Regency. Based on the results of an initial survey conducted by researchers in June 2025 of 10 classroom teachers, 80% of teachers admitted to still having difficulty using digital media in daily lessons, despite having received training from the education office. Furthermore, only two out of ten teachers actively used projectors, learning videos, or educational applications in the teaching process. The dominant factors reported were a lack of follow-up guidance, the absence of a mentoring system between teachers, and low support from school leaders.

This situation indicates that technical training alone is insufficient to sustainably improve teacher competency. A more systematic approach is needed through the principal's managerial strategy as an educational leader at the unit level. Principals play a strategic role in designing policies, developing teacher competency development programs, and creating a technology-adaptive school culture. Robbins & Coulter (2019) state that effective management in educational organizations involves planning, organizing, directing, and supervising, all of which are capable of addressing both internal and external challenges.

Several previous studies have highlighted the importance of the principal's role in improving digital-based teacher competencies (Mauladiah et al., 2024; El-Hamamsy et al., 2023). However, these studies have not focused much on local contexts, such as elementary schools in 3T (frontier, outermost, and disadvantaged) areas like Southeast Aceh. This is what differentiates this study, which focuses on "How Principals at Tanjung Lama Public Elementary School Design and Implement Managerial Strategies to Address Low Teacher Competence in Using Digital Learning Media," amidst limited resources and infrastructure.

Therefore, this study aims to describe and analyze the managerial strategies employed by principals in improving teacher digital competency at Tanjung Lama Public Elementary School. This research is also expected to provide policy recommendations based on real-world practices for strengthening teacher competency through a contextual and sustainable managerial approach.

RESEARCH METHOD

This study used a descriptive qualitative approach, aiming to describe and analyze the phenomenon of low teacher competency in the use of digital learning media and the principal's managerial strategies in addressing it in depth and context. This approach was chosen because it allows for exploring social realities through the perspective of direct actors (Miles, Huberman, & Saldana, 2014). The study was conducted at Tanjung Lama Public Elementary

School, Southeast Aceh Regency, Aceh Province. The research subjects included: the principal of Tanjung Lama Public Elementary School, teachers in grades I–VI, and the school supervisor as triangulation informants.

Data collection was conducted through in-depth (semi-structured) interviews with the principal, six teachers, and the school supervisor. Participatory observation was conducted by directly observing the learning process and managerial activities at the school, particularly those related to digital technology. Documentation study included reviewing documents such as the principal's work program, teacher training reports, learning materials, and teacher evaluation records.

The primary instrument in this study was the researcher herself. To support objectivity, the researcher used interview guidelines, observation sheets, and documentation formats. Data analysis was conducted using the interactive model of Miles and Huberman (2014), which includes data reduction, which involves filtering and selecting data relevant to the research focus. Data presentation, which involves organizing data in the form of a thematic matrix, narrative, and key quotations. Conclusions and verification were conducted to compile findings and verify them through triangulation between sources.

Data validity was tested through: Source and method triangulation, which combined interview results, observations, and documentation. Member checking, which involved reconfirming interview results with informants to ensure data accuracy. Peer debriefing, which involved colleagues reviewing data interpretation.

Teacher digital competence is a crucial dimension of educator professionalism in the 21st century. This term refers to a teacher's ability to effectively access, manage, evaluate, and integrate digital technology into the learning process (European Commission, 2017). At the elementary school level, digital competence relates not only to technical skills but also to pedagogical readiness to utilize technology as part of an active, creative, and enjoyable learning strategy for elementary-aged children.

According to Prasojo & Habibi (2020), teacher digital competence encompasses three main aspects: (1) basic knowledge of information and communication technology (ICT), (2) the ability to apply ICT in learning contexts, and (3) awareness of digital ethics and security. In elementary schools, the greatest challenge often lies in the implementation and courage to try new technologies, given that some teachers still feel technologically illiterate.

Research by Wijaya, Sudaryanto, & Nugroho (2022) indicates that many elementary school teachers in non-urban areas have not fully mastered the use of digital learning applications such as Google Classroom, Canva, or Quizziz, and even their use of audiovisual media remains passive. This low digital competency is linked to the lack of ongoing post-training mentoring programs and the lack of coaching based on teachers' real-world needs.

Teacher digital competency is also closely linked to policies and managerial support at the school level. According to Sudrajat (2021), principals who implement digital innovation-based managerial strategies have been shown to improve teachers' ICT skills through strengthening internal training and collaboration between teachers. Therefore, teacher competency is not only an individual responsibility but also the result of a school management system that is responsive to technological developments.

In the context of the Independent Curriculum and the Pancasila Student profile, teacher mastery of digital media is increasingly crucial. Teachers are not only required to be facilitators but also able to create meaningful learning experiences with the help of technology (Kemendikbudristek, 2022). Digital competence is not merely a supplementary tool, but has become an integral part of the professional competencies teachers must possess in this century.

Several international standard frameworks have been developed to measure and foster teachers' digital competence, such as the UNESCO ICT Competency Framework for Teachers (CFT) and the European DigCompEdu Framework. In Indonesia, the Ministry of Education, Culture, Research, and Technology, through the Merdeka Mengajar Platform, has begun

designing digital training and assessments based on teacher teaching practices in the field, but implementation has not been evenly distributed across all levels and regions.

Managerial strategy in education refers to a series of plans and actions undertaken by leaders or managers in educational institutions to achieve learning objectives effectively and efficiently. According to Robbins and Coulter (2019), educational management involves planning, organizing, directing, and controlling educational resources, including human, material, and technological resources, to create a conducive learning environment.

In the educational context, managerial strategy relates not only to school administration and governance but also encompasses efforts to develop teacher quality, innovate learning, and adapt to technological developments (Robbins & Coulter, 2019; Mauladiah, Harun, & Rohana, 2024). School principals and educational administrators are required to possess strategic skills in managing change, including implementing digital learning media as part of educational transformation.

According to Mauladiah et al. (2024), effective managerial strategy must prioritize transformational leadership that motivates teachers and staff, and facilitates continuous learning and collaboration among teachers. This type of leadership plays a crucial role in improving teacher competency and the quality of the learning process in elementary schools and other levels.

In research conducted by Hasanah and Supriyadi (2021), managerial strategies that integrate internal training, ongoing supervision, and teacher empowerment have been shown to improve student learning outcomes. This approach also helps teachers overcome barriers to the use of learning technology, thereby increasing the effectiveness of the teaching and learning process.

Furthermore, research by Dewi (2020) confirms that strategic human resource management, including teacher competency development and the provision of adequate learning facilities, is a key factor in the successful implementation of digital media in schools. Managerial strategies that are responsive to teacher needs and characteristics can encourage a shift in school culture toward digitalized learning.

Managerial strategies in education must also be able to adapt to evolving national education policies. For example, the implementation of the Independent Curriculum requires adaptive and innovative management so that teachers can implement flexible, technology-based learning models (Kemendikbudristek, 2022).

Overall, this literature review confirms that managerial strategies in education are not merely administrative management, but rather leadership and resource management processes that can encourage improved teacher competency and learning quality. Thus, the study of managerial strategies is very important as a basis for improving teacher professionalism in facing the challenges of digital education.

Principal leadership is a crucial factor in improving the quality of education in schools. One leadership model that has received considerable attention in the educational context is transformational leadership. Transformational leadership is a leadership style that inspires, motivates, and empowers staff to achieve shared goals and encourages positive change (Bass & Riggio, 2006).

In the educational context, the principal, as a transformational leader, plays a strategic role in creating a clear vision, building a positive school culture, and encouraging innovation in the learning process (Leithwood & Jantzi, 2006). Principals who implement transformational leadership not only focus on administrative management but also actively develop teacher capacity and improve the quality of learning through various managerial strategies.

According to Burns (1978), transformational leaders are able to change the attitudes and values of their subordinates through four main dimensions: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. These dimensions are

particularly relevant in the school context, where principals must be able to motivate teachers to adapt to the latest technological developments and learning methodologies.

Research by Mauladiah, Harun, and Rohana (2024) revealed that principals with a transformational leadership style successfully improved teachers' digital competencies through continuous training and fostering a collaborative culture. This positively impacted the use of digital media in the learning process in elementary schools.

Furthermore, a study by Sugiyanto and Wibowo (2021) stated that transformational principals were able to build a supportive work environment and increase teachers' commitment, thus better preparing them to face the challenges of implementing digital learning technology.

Furthermore, principals, as transformational leaders, also act as agents of change, facilitating innovation and continuous improvement within the school. This aligns with the findings of Leithwood, Harris, and Hopkins (2020), which emphasized that transformational leadership is a key factor in improving school performance.

Thus, the principal's role as a transformational leader is vital in supporting digital transformation in schools, particularly in improving teacher competency and optimizing the use of digital learning media.

RESULTS AND DISCUSSION

This study revealed several key findings related to teachers' low competency in using digital learning media and the principal's managerial strategies for addressing this. Data was obtained through in-depth interviews, direct classroom observations, and analysis of school documents.

Interviews with six teachers at Tanjung Lama Public Elementary School revealed that most teachers still have limited ability to operate digital devices, such as laptops, projectors, and learning applications. A preliminary survey revealed that only two of the six teachers actively use digital media in their teaching, and even then, they are limited to using PowerPoint and YouTube learning videos. This indicates that teachers' digital literacy remains at a basic level.

One teacher stated: "We've participated in digital training from the school, but after the training ended, there was no follow-up. So, over time, we forgot how to use it." Teachers revealed several common obstacles, including: limited facilities (only one projector for rotational use), unstable internet access, lack of support or mentors at school, and a lack of confidence in using technology in the classroom. Furthermore, some parents expressed resistance to the use of devices or digital platforms due to concerns about their children becoming addicted or exposed to negative content.

The principal of Tanjung Lama Public Elementary School implemented several managerial strategies to improve teacher competency, including: a monthly internal training program led by younger teachers who are more familiar with technology; strengthening mentoring among teachers through a simple rotation system; classroom supervision to assess the extent to which digital media is utilized in learning; and informal incentives, such as appreciation and recognition at teacher meetings for those who successfully implement technology in the classroom. This strategy is considered adaptive to limited resources and has shown positive results, albeit gradually. Teachers who receive regular mentoring demonstrate faster competency improvements.

Evaluations are conducted informally at the end of each month through teacher council meetings. The principal has also begun integrating digital competency aspects into teacher performance assessments (PKG). However, a structured and ongoing written evaluation system is not yet in place.

The above findings support previous research by Hariyanto et al. (2020) and Mauladiah et al. (2024), which stated that training without follow-up is ineffective in improving teacher competency. Furthermore, this study emphasizes the importance of internal empowerment-based managerial strategies, particularly in schools with limited access and infrastructure.

The managerial model used at Tanjung Lama Public Elementary School demonstrates a participatory, transformational approach, in which the principal acts not only as an administrative leader but also as a facilitator, coach, and motivator.

Given the local setting and limited conditions, this approach demonstrates contextual results and can be used as a model for other schools in the 3T (third-third) regions. The key to success lies not in the availability of equipment, but in sustained managerial commitment.

The managerial approach implemented by the Tanjung Lama Public Elementary School principal demonstrates that strengthening teacher capacity can be achieved by utilizing existing internal resources, despite limited facilities and infrastructure. This aligns with transformational leadership theory, which emphasizes empowerment and motivation as keys to successful teacher competency improvement (Bass & Riggio, 2006).

Limited facilities and inadequate internet access are indeed significant obstacles, but they do not completely hinder the learning process if supported by appropriate management strategies. A rotational mentoring approach and internal training can be an efficient and sustainable alternative solution. Furthermore, informal incentives provided by the principal can encourage intrinsic motivation for teachers to continue innovating and trying new technologies.

Parental involvement, which still shows resistance, also requires greater attention, through more intensive outreach regarding the benefits and supervision of digital media use in learning. Previous research by Hasanah and Supriyadi (2022) also underscored the importance of involving all stakeholders in the successful implementation of digital learning.

The still-informal nature of evaluations indicates the need to develop a more structured and sustainable digital competency assessment system to serve as a basis for more effective teacher professional development planning. A sound evaluation system can also help schools identify training needs and ongoing challenges in a timely manner.

CONCLUSION

Based on research at Tanjung Lama Public Elementary School, it can be concluded that teacher competency in using digital media is still relatively low and limited to the use of simple devices and applications. Furthermore, the main obstacles in implementing digital learning include limited facilities, unstable internet access, lack of mentoring, and resistance from some parents. The principal implemented adaptive managerial strategies such as internal training, mentoring between teachers, classroom supervision, and informal incentives that can gradually improve teacher competency. Evaluation of teacher digital competency is still informal and requires a more structured and sustainable system. Transformational and participatory managerial strategies have proven effective in the context of schools with limited resources and can be used as a model for other schools in the 3T (Underdeveloped and Disadvantaged Regions).

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