E-ISSN: 2581-8868

Volume-06, Issue-04, pp-20-24

www.theajhssr.com Crossref DOI: https://doi.org/10.56805/ajhssr

Research Paper

Open Access

Digital Leadership Practices for School Principals in Indonesia: An Early Review of the Literature

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ABSTRACT

This study aims to analyze digital leadership practices of schooling in Indonesia. The research method used is a literature study from journals and proceedings. The results of the article search obtained 236 articles, then the articles were re-selected and 15 articles were produced which were analyzed further. The research show that the digital leadership practice of schooling in Indonesia has not been widely implemented. The research methods that are widely used are qualitative and quantitative methods. Subject that have been widely studied are school principals and teachers at the primary and secondary education levels. There are three main topics in digital leadership practices in schools so far which include the initiation of digital leadership in schools, the benefits of implementing digital leadership, and digital leadership during the Covid-19 pandemic. This research limited to journal sources and proceedings so that further research is expected to use more diverse data sources to gain broad and deep understanding and insight as well as develop knowledge to face challenges in the digital era.

KEYWORDS - Digital leadership, school principal, school.

1. INTRODUCTION

The era of disruption causes more complex challenges in the world of education. Change is becoming faster and full of uncertainty, especially in the digital. The scope of schooling requires the right leadership to face the era of disruption and digitalization. Therefore, digital leadership is needed for school principals who can adapt quickly to changing situations so that the organization can run on the track (Marshall & Taylor, 2015; Mirzajani et al., 2016; Wang, 2010).

The rapid development of information and communication technology (ICT) has led to educational transformation (Schleicher, 2017), so the use of ICT is inevitable in the digital era (Lourdes Merono, Antonio Calderón, 2021). Principals are also required to have an open mind regarding the changes and progress brought about by rapid developments in technology (Intxausti et al., 2016; Mulkeen, 2011).

According to Sheninger (2019), digital leadership practices cannot be separated from the seven pillars which include (1) engagement between students, learning, and school graduates; (2) creating an innovative learning environment and space; (3) professional learner network; (4) communication; (5) relations with the public (public relations); (6) branding or promotion; and (7) exploiting opportunities. In line with this description, there are five constructs in digital leadership including visionary leadership, digital age learning culture, excellent professional practices, systemic improvement, and digital citizenship (ISTE, 2009). These five constructs have also been tested in Indonesia and the results strongly influence teacher performance achievement and can improve student competence (Timan, Mustiningsih, & Imron, 2022).

The application of digital leadership will bring moral support and fulfill various facility needs to support the integration of technology in teacher instructional activities (Aldawood et al., 2019; Cunningham et al., 2022). On the other hand, if digital leadership is not implemented and the facilities are not fulfilled, it will cause teachers to feel reluctant to apply technology in activities at school (Corbett & Spinello, 2020; Ilomäki & Lakkala, 2019).

Given the unequal condition of infrastructure related to technology and information in Indonesia, school principals face another challenge, namely preparing themselves with information and communication technology skills (Dubey, 2016). This condition will greatly affect the practice of digital leadership in schools. Therefore, it is important to conduct a study to see how far the development of research related to digital leadership has been carried out.

So far, there has not been much research related to the practice of digital leadership for school principals in Indonesia. Some research related to digital leadership also uses a lot of literature review but is still limited to understanding the concept and has not yet touched on studies or research in the field. However, in recent years, especially since 2020, research related to digital leadership in Indonesia has developed (Kusumawati, 2023).

Based on the explanation above, this study seeks to discuss digital leadership practices carried out by school principals in Indonesia. The literature review was chosen as a research method to look at research results related to digital leadership practices by school principals. The results of this study are expected to be able to see the practice of digital leadership of school principals.

2. METHODS

The literature review in this study is a written product that uses secondary analysis whose format is adapted to the research objectives (Jesson, Matheson & Lacey, 2011). This study aims to explore the digital leadership research of school principals in Indonesia from various journal articles and proceedings. This study analyzes articles compiled by authors from Indonesia and published in Indonesia.

Search for articles using Google Scholar by entering the keywords "digital leadership", "education", "schools", and "Indonesia". The author did an article search from May 17, 2023, to May 19, 2023. The article search did not apply a time range to the search tool because not too many articles were obtained. Based on the search results, 236 articles were obtained, then sorted based on authors from Indonesia and publishers of journals and proceedings from Indonesia. The selected articles are open access that is easy to read again because they can be accessed freely. Furthermore, the researcher read the contents of the journal obtained and recorded key points that would be analyzed further to be compiled in the discussion.

3. FINDINGS AND DISCUSSION

Based on the results of an in-depth selection of articles, 15 articles were obtained that discussed digital leadership for school principals in Indonesia. The results show that the practice of digital leadership for school principals in Indonesia has not been widely studied. According to Kusumawati (2023), research related to digital leadership has increased from year to year, especially since 2020, but the research related to digital leadership practices in Indonesia has not been carried out much.

Types of research methods that are widely used are qualitative methods, quantitative methods, and mix methods. The following are presented in the table below.

Methods	Count
Qualitative	8
Quantitative	6
Mix	1

Many research subjects related to digital leadership in Indonesia are dominated by school principals and teachers at the primary and secondary education levels. Principals as school leaders amid the current era of disruption are required to have skills in the field of technology so digital leadership is one of the leadership that needs to be mastered (Gursoy, 2021; Budnyk et al., 2021). The results of the literature review are grouped into the following three topics.

III. 1 Initiate Digital Leadership

Realizing digital transformation in schools can be started by forming a work team and conducting a needs analysis (Sholeh, Kholis, & Mufidah, 2022). Principals are also expected to be able to apply a transformational leadership style to direct changes in the mindset of teachers and education staff so that they can adapt to changing times and organizational needs, especially in digital transformation efforts in schools (Jumaidah, Giatman, & Maksum, 2022).

Digital transformation can be integrated with existing school management. To strengthen digital-based school

management, the principals need to implement several strategies such as gathering support and collaborating with stakeholders, conducting participatory communication and involvement, implementing change management and time management, delegating authority and decision-making, empowering and optimizing resources, and conducting regular oversight strictly (Manadin, Nurdin, & Prihatin, 2022). Principals should prepare technologically literate human resources (HR), provide opportunities for all school members to attend IT training, and provide supporting infrastructure and facilities. Schools can also equip students with skills and characterbuilding with developments in the era of disruption through an integrated curriculum (Damanik et al., 2022).

To face competition and developments in the digital era, schools need to digitize. Therefore, school principals need to implement digital transformation strategies in schools. According to Manadin, Nurdin, and Prihatin (2022), four factors support the success of school principals in realizing digital-based schools. First, there is support and involvement of all education stakeholders. Second, the collaboration of all elements of education such as teachers, students, supervisors, and academics. Third, there is strong commitment and leadership. Fourth, there is a mindset that is open to change and strict supervision.

III. 2 Benefits of Digital Leadership

According to Kurniady, Mahardika, and Koswara (2022), the skills in using digital technology help school principals to be more effective and efficient in formulating and conveying the school's vision and mission. The technology is applied by school principals to supervise and direct their subordinates so that managing school assignments becomes easier.

Digital leadership now and in the future will be one of the most needed leadership styles. Therefore, the initiation of digital leadership practices in schools is needed to encourage school principals and teachers to integrate leadership in learning with technological facilities. Hartati, Nurdin, and Arisandi (2023) argue that many teachers and principals have understood the importance of digital leadership to improve teachers' abilities in classroom management and learning.

The existence of technology is seen as very useful and makes it easier for school principals to lead effectively and efficiently. Principals can utilize applications such as WA (WhatsApp), Telegram, Facebook, and other social media to implement instructional leadership. The use of social media between school principals and teachers is a communication medium that can be used as a means of supervision or supervision (Prasojo & Yuliana, 2021). In addition, good applicated of technology by school principals also has a positive impact on teacher acceptance and skills in using technology (Sunu, 2022). Digital leadership combines the concept of leadership with technology that school principals need to develop plans for using technology in learning.

Digital leadership and social interaction of school principals have a positive correlation with the managerial competence of school principals (Jumaiyah, Suarman, & Kartikowati, 2021). In other words, the better the application of digital leadership and social interaction, the managerial competence of school principals also increases. According to Rusnati and Gaffar (2021), communication between school principals and teachers, and school members can be established effectively through digital leadership practices. The use of digital technology also encourages the provision of real-time information about schools with stakeholders so that they can build a positive image of the school. Principals who apply digital leadership will also help develop the professionalism of teachers and support them to innovate in learning.

According to Timan, Mustiningsih, and Imron (2022), digital leadership has a direct influence on teacher performance and student competency in the 21st century. The constructions of digital leadership tested include visionary leadership, digital age learning culture, excellent professional practices, systemic improvement, and digital citizenship. In other words, adequate digital leadership practices can support teachers' efforts in achieving the expected performance and can improve student competence in the 21st-century era.

III. 3 Digital Leadership during the Covid-19 Pandemic

During the Covid-19 pandemic, digital leadership practices were widely applied in schools to deal with situations of imposing restrictions on community activities (PPKM). Digital leadership can be realized in the form of school policies such as implementing blended learning, establishing school communication with parents of students using WA (WhatsApp) and SMS (Short Message Service), and implementing school administration services using digital payment methods (Muslim & Zaini, 2021).

In learning, school principals are required to innovate by integrating learning with technology. Implementing

teaching stations in each class for hybrid learning and building a learning management system (NGO) are some examples of digital leadership strategies during the Covid-19 pandemic (Alfikheir, Mustafa, & Daud, 2022).

Digital leadership or e-leadership and the use of technology also have a positive influence on teacher performance in conducting online distance learning (Talibo, Ansar, & Arifin, 2023). In other words, the better the implementation of digital leadership by the principal, the teacher's ability to carry out online learning also increases. The application of digital leadership not only focuses on learning but also covers all services provided by schools. In addition, teachers also need to have the skills of reflection, collaboration, and communication, mastering ICT, and participating in learning communities (Sampaleng et al., 2021). Principals in digital leadership practices also play a role in facilitating training for online class preparation (Rusnati & Gaffar, 2021).

According to Kurniady, Mahardika, and Koswara (2022), during the Covid-19 pandemic principals used digital technology to conduct virtual meetings to convey school programs and policies to school members. The principal allows school members to speak about their aspirations and contributions. The use of technology also makes it easier for schools to monitor the development of the situation during a pandemic. In addition, the use of technology in education shows one of the changes made by favorite schools during the Covid-19 pandemic.

4. CONCLUSION

Research related to digital leadership practices for principals in Indonesia so far can be divided into three main topics, which are the initiation of digital leadership in schools, the benefits of digital leadership, and digital leadership practices during the Covid-19 pandemic. Research on digital leadership in the education field has not been widely carried out, so it has the potential to develop knowledge because the integration of education with technology cannot be prevented in the digital era. This research is still limited to reviewing literature from journals and proceedings, so further research is expected to be able to analyze literature from more diverse sources. Research related to digital leadership in the field of education also needs to be expanded to gain broad and deep understanding and insight as well as knowledge development to face the digital era.

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