THE PRINCIPAL'S ROLE IN IMPLEMENTING DIGITAL LITERACY IN SCHOOL

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Abstract:

The principal as the leader of the education unit has an important role in realizing a school atmosphere that is in accordance with the needs of the times where digital literacy is an inseparable thing. This research reveals how the role of principals in creating a culture of digital literacy in schools. The method used in this study is a descriptive method with a qualitative approach, where data collection is carried out through a process of interviews, observations and documentation studies. Interviews were conducted with the principal, teachers and parents of the students. The data obtained are then grouped and analyzed until the final conclusion of the study is drawn. Interviews were conducted with the principal, teachers and parents of the students. The data obtained are then grouped and analyzed until the final conclusion of the study is drawn. This research reveals how 3 indicators of digital literacy in schools, namely: class-based indicators, school culture-based indicators, and community-based indicators are met in ALIES and how the role of the principal in supporting the digital literacy movement. The results of the study revealed that the principal's digital literacy is quite good which is described through the ability to use technology and digital information implemented in carrying out their duties. The role of the principal in building an atmosphere of digital literacy is illustrated through his function as an educator, manager, administrator, supervisor, leader, innovator and motivator. Digital literacy is a skill that must be possessed by all education stakeholders in order to achieve educational goals, therefore the principal needs to maximize his leadership role in realizing a digital literacy culture in schools by making various innovations that are adapted to the conditions of each school.

Keywords: *Leadership, Principal Leadership Role, Digital Literacy Culture*

INTRODUCTION

The covid pandemic has pushed people to use technology in their daily lives. This change has a good impact while creating a big challenge for the world of education. Students in particular and teachers must adapt quickly to the use of technology in learning. Digital transformation in the world of education encourages the presence of various learning innovations that involve all education stakeholders (Ali, 2021). A study illustrates that the presence of the Covid 19 pandemic has encouraged teachers to be able to carry out distance learning and use other supporting technologies in the process. (Sulasmi, 2022). A study illustrates that the presence of the Covid 19 pandemic has encouraged teachers to be able to carry out distance learning and use other supporting technologies in the process. (Ozdamar-Keskin et al., 2020). Implementation of digital literacy in schools helps students become part of the process of getting education, social and culture actively (Ozdamar-Keskin et al., 2020). Digital literacy allows students, teachers and parents to interact anywhere and anytime, for example using digital

libraries makes students more able to access more reading material, using Google Classroom which allows both students and teachers to be easier because the collection of assignments is more organized and the provision of teaching materials that are more varied.

The increased interaction between students and technological devices not only has a good impact in the form of faster acquisition of knowledge, but also creates new problems, where students become addicted to using gadgets, often the time for using gadgets exceeds the limit of needs because it is accompanied by their desire to explore the internet world and try various social media applications and games. In reality, education is also faced with the problem of equal access and various financial conditions, where not all students have gadgets for their distance learning, or even constraints in areas that are not covered by signals. Distance learning is also considered to increase family expenses because students are required to have an adequate internet network in the learning process. Even though it has many implementation challenges, digital transformation in the world of education cannot be avoided. Current technological developments ideally have a positive impact on learning for both students and teachers (Diputra et al., 2020).

On the one hand, the acceleration of access to information has driven the advancement of knowledge, but on the other hand the rapid flow of information also requires information users to be wiser in processing useful information according to their needs. With the challenges of this change, a new skill is needed to deal with it, namely digital literacy skills. Digital literacy skills are skills that must be possessed in dealing with the current wave of change, better known as society in the 4.0 era. The digital literacy level of the Indonesian people based on the results of the measurement of the Indonesian Digital Literacy Index which was held by the Ministry of Communication and Informatics in collaboration with the Katadata Insight Center (KIC) in 2021 reached 3.49 from a scale of 1-5, or an increase from the previous year's achievement of 3.46 (Husna, 2022) . The results of this study refer to the framework listed in the 2020-2024 Digital Literacy Road Map, where there are 4 pillars of the digital literacy program consisting of digital skills, digital ethics, digital safety and digital culture (Ameliah et al., 2021).

Digital literacy is defined as an individual's interest, attitude and ability to use digital communication technology to access, manage, integrate, analyze and evaluate information, construct new knowledge, create and communicate with others in order to participate effectively in society. (Yusuf et al., 2022). As a life skill, digital literacy requires digital competence that must be possessed by humans today, because digital literacy is not only about the ability to use information and communication technology devices, but also skills in reading, writing and mathematics which are closely related to education. This digital competence is related to social skills, learning abilities, and having attitudes, thinking critically, creatively, and inspiringly (Nasrullah et al., 2017).

Paradigm changes, mental readiness and supporting infrastructure in the era of digital literacy must be carried out together with their use (Siswanto, 2022). Digital literacy must actually be supported by all education stakeholders, readiness must not only be owned by educators, but also parents, students, education staff, and all parties involved in the education process in schools. Because achieving school goals is something that is achieved with the involvement of all stakeholders in it (Desi, 2020).

At the school level education unit, the principal is the leader who has the power and authority to determine a policy. The leader is a role that is owned by someone, but even though this role exists because of the structural position of a leader, it does not necessarily have what is called leadership. The term leadership refers to a skill possessed by someone to influence other people in order to achieve a goal (Duryat, 2015).

A study explained that the impact of digital literacy has negative potential, including cyberbullying. To overcome this problem principals need to guide students, teachers and staff in recognizing their responsibilities and developing their understanding of empathy. Students in the digital era are faced with two combinations of online life and real life, where they can interact with many friends and information that forces them to mature more quickly, especially in their interpersonal skills (Ribble & Miller, 2013). Therefore, the school principal as the leader of the education unit has an important role in building school digital literacy. A study states that there is a

relationship between principal leadership and digital literacy and teacher performance in schools (Johanes et al., 2022). Leaders as central figures in schools have a stake in determining the right steps in dealing with changes or developmental challenges that schools must face, including in terms of increasing digital literacy in schools (Devisa et al., 2022). The leadership role of school principals in creating a digital literacy culture in schools is illustrated through the EMASLIM indicators (educators, managers, administrators, supervisors, leaders, innovators, and motivators). As an educator the principal must have the right strategy to improve the competence of teachers in his school, as a manager the principal has an important role in managing the resources and potential of the school so that it can be optimally utilized in achieving goals based on management principles, as an administrator the principal has a role in managing and record the management process at school so that everything is in order, as a supervisor the principal has the role of supervising, namely the supervisory process in order to ensure that the entire process of achieving goals is in accordance with what has been planned, as a leader the principal plays a role in providing instructions, as an innovator for the principal play a role in setting the right strategy in achieving goals and being able to see opportunities and shape the school organizational climate, the latter as a motivator the principal must be able to provide encouragement to all school members if so that it always moves towards achieving goals, (Muis, 2017)

Digital literacy is a skill that must be possessed by all school stakeholders, in realizing this, an organizational climate is needed that can support digital literacy so that it becomes a school culture. This research discusses the role of school principals in building digital literacy in schools. The method used in this study is a qualitative descriptive method, where data collection is carried out through document studies, as well as interviews with school principals, teachers and parents of students.

RESEARCH METHODS

This research uses a descriptive method with a qualitative approach. According to Creswell (2008), a qualitative approach is carried out by conducting searches or explorations to understand a symptom (Semiawan, 2010). The initial study was carried out by conducting short interviews with several teachers in the author's environment to find out how digital literacy is applied in their schools, from these data conclusions were obtained which research objects would be selected. Data collection was carried out by interviews, observation and documentation studies. The selection of the research sample used a purposive sampling method in which the selection of informants was carried out based on the expected specific objectives (Sugiyono, 2019). Interviews were conducted with school principals, teachers and parents of students at ALIES (Son of the Sky Islamic Elementary School) located in Cileunyi, West Bandung Regency. The selection of interviews was carried out in a semi-structured manner by first making indicators of the role of the school principal as EMASLIM (educator, manager, administrator, supervisor, leader, innovator, and motivator) as well as spontaneous questions to dig up information openly and in depth. The data collected was then analyzed and grouped to sort out important and useful information in this study, then the data went through a source triangulation process where researchers interviewed and combined data from different sources for the same topic (Sugiyono, 2019).

RESULTS AND DISCUSSION

Based on the digital literacy support material book, there are 3 indicators of implementing digital literacy in schools, including: the first is a class-based indicator that talks about how much digital literacy training is attended by school officials, the intensity of implementing digital literacy in learning activities, the level of understanding of literacy digital school citizens, the second is a school culture-based indicator that talks about the number and variety of digital-based learning materials, the number of activities that utilize technology and information, the presentation of digital information, the number of policies that support digital literacy, the level of utilization of ICT (information and communication technology) in in terms of school services, and the third community-based indicator talks about facilities and infrastructure that support

digital literacy, as well as the level of involvement of school stakeholders in implementing digital literacy (Nasrullah et al., 2017).

Class-Based Digital Literacy

Teacher digital literacy is important in the learning process, with good digital literacy teachers can provide more varied and meaningful learning. The use of technology in the educational process can also increase collaboration between students in schools with digital projects provided by teachers. A study concluded that teachers' digital literacy has a significant influence on students' learning interest (Landa et al., 2021). The teachers at ALIES are dominated by relatively young teachers ranging in age from 23-28 years old, so they are no strangers to using applications and digital devices in learning. ALIES organizes digital literacy workshops by inviting expert speakers from outside the school, apart from that increasing teacher digital literacy is also encouraged by the principal giving directions to learn certain applications to one of the teachers, then the teacher helps his colleagues to both understand how to use it. the application is in the learning process. Digital literacy training has been proven to increase teachers' digital literacy competencies (Alamsyah & Pamungkas, 2022).

Digital learning at ALIES began with the covid-19 pandemic which forced teachers, students and parents to learn using the zoom meeting application, whatsapp group, email, and google classroom. In this adaptation condition the teacher is the first party who needs to understand in advance the use of this application, because parents and students will ask the teacher directly if they don't understand how to use it. In line with the narrative of the teacher informant "no one complains to parents, but rather just ask if you can't, we teachers teach and give directions, also provide video tutorial facilities that we hope can help parents of students".

Teachers' digital literacy can also be seen from ALIES's social media, namely Instagram and Youtube. Teachers at school are accustomed to using social media which allows them to interact directly with students, prospective applicants and parents of students directly. With the use of social media, it can be seen that teachers are used to using learning support applications such as video editors and designs in making short teaching videos, as well as documentation of student activities. The use of social media has proven to be a relevant medium for the current generation (Pujiono, 2021).

Based on interviews conducted with parents, they stated that their children were used to using technological devices in learning, especially Google Classroom and Zoom, this was because their children entered school when the Covid-19 pandemic started. There were difficulties they experienced at the beginning, "yes, at first you had to help, how do you open the zoom, but that's what kids are called, when zooming all the mics turn on the result is really crowded. For Google Classroom, you can do it yourself after a while."

The condition of digital literacy at ALIES is also supported by the digital literacy of the principal. The school principal carries out digital interactions with teachers in schools and supports and initiates digital literacy programs in schools. Based on the narrative of the school principal "digital literacy is very important not only in learning, but also in understanding how it impacts students (digital ethics, and so on). Teachers are used to using and receiving benefits, parents of students are also facilitated with parent coaching activities which are carried out in a hybrid manner.

School Culture-Based Digital Literacy

Based on the narrative of the teacher informant "Yes, we still use Google Classroom for reading lessons, so students are called one by one and asked to read the text through Google Classroom, while the assessment is done manually by the teacher directly." In learning the teacher always integrates technology with learning, even though currently the school is face-to-face, Google classroom is still used for certain lessons, for example for reading activities. This activity is a school innovation that uses K5 Reading Comprehension where students are given special time to learn how to read English texts with the correct pronunciation according to their level of ability. This activity uses the Google Classroom application, although its use is limited when carrying out reading

activities only while the assessment is manual by the teacher.

The existence of a distance learning program at school helps students who are unable to attend in person at school. The informant said that when the pandemic cases had started to fall and school activities were face-to-face, the school gave leeway if students were sick but still wanted to take part in learning, the teacher would do hybrid learning using zoom. ALIES also accepts distance students, currently there are several students from Jakarta, distance learning is facilitated by using zoom. In addition, every week a student project is held which can take the form of reading a text, or watching a video related to student lessons the following week. This project is intended to build students' basic knowledge.

Digital literacy in ALIES in terms of presenting school information is illustrated through the use of the padlet application. This application is used to remind tasks and collect assignments. Through the padlet application the dissemination of information on student activities and projects can also be monitored directly by parents of students. After being confirmed, regarding the impact of online learning in students' daily activities, the informants agreed that the digital literacy program helped their children to understand various applications, and even did a search on Google, "yes, my child now can, for example, want to print 3D patterns to make pictures of cars, So, I searched for it and printed it myself, then I did it myself too."

The ALIES school profile is also presented in various media such as Instagram and YouTube. The use of school social media allows teachers to provide short and easy-to-understand lesson content for students, besides that the use of social media is also a medium of information and communication between schools and parents of students with live facilities that allow teachers to report student activities in real time.

The innovation of the digital literacy program is inseparable from the support of the school principal as the leader of the education unit. A study explained that school principals have an important role in providing motivation, role models, and creating a culture that supports the implementation of digital literacy (Kurniawan & Hasanah, 2021).

Community-Based Digital Literacy

Digital literacy of students' parents is something that must also be pursued to support the implementation of digital literacy in schools, because parents play the role of companions and supervisors in terms of student interaction with the digital world, parents are expected to be able to control the use of digital devices by students so that they do not exceed reasonable limits. , and safety in use. There were differences in the responses delivered by the two informants who were parents of students, the first informant stated that learning activities were easier to use Google Classroom because the teaching materials were stored neatly while the use of padlets was still relatively new. The second informant stated that it was more comfortable to use padlets in accompanying student learning activities, because their features were easier to understand. In his speech the second informant stated "yes the children are still using my cellphone, so I myself am also afraid that the tabs that I previously opened on Google will be lost, so I have difficulty managing Google Classroom because my 2 children are studying at ALIES".

Parents of students are facilitated by teachers at ALIES to ask questions and meet in person if they experience difficulties or obstacles in using learning applications and even the school also provides video tutorials on using the application. Based on the narrative of the teacher informant "yes, parents using this application are actually not complaints, but more importantly, finally we as teachers meet directly with parents to explain". If these problems are not resolved, the children's school project will be sent directly through the personal network to the teacher. The informant said that usually the obstacles they face are signal problems, "yes, sometimes opening the padlet takes a long time, maybe the network has to be strong huh".

Digital learning certainly has obstacles, parents admit that they have free access to convey their suggestions and complaints through the teacher so that schools can take

appropriate follow-up, "yes, usually if something is not appropriate, for example learning during a pandemic, only use Google Classroom, I don't agree because students still need interaction, at least the children are ready to learn if there are face-to-face meetings even though they are virtual, different from a full Google classroom". Parents of students are also used to using e-mail, schools during the pandemic sent reports on student learning outcomes through electronic report cards which were sent to each parent of students via e-mail, while consultation sessions were provided for special time for parents of students. Parents of students must have adequate digital literacy competence as a a form of active participation in efforts to achieve maximum educational outcomes (Munawar et al., 2019).

The student's family plays a role in supporting students' digital literacy through support in the form of guidance and the provision of facilities and infrastructure, meanwhile at the ALIES school it provides wifi facilities that allow limited access by school residents, as well as the availability of computer equipment in each class.

The Role of the Principal in Creating a Digital Literacy Culture in Schools

The Role of the Principal as an Educator

As an educator the principal provides an example in implementing digital literacy. The use of digital applications in completing work, coordinating, communicating and evaluating is always carried out by school principals using digital devices. Digital literacy seminars are held in schools to help teachers and parents understand digital literacy. Based on the narrative of the ALIES school principal, he still maintains the use of digital applications in learning at school, this is in line with the school's vision and mission "the principal's vision is shifting to the digital era, although there are several schools that are still colonial, we try to interact through digital devices".

As principal educators pay attention to student achievement and teacher teaching competence, "the spearhead of digital literacy is teachers, their involvement is by implementing digital learning, including the use of various applications. The challenge for teachers is how teachers have the awareness that classrooms will not be limited by walls, so teachers are challenged to create educational content through social media. The role of the principal as an educator is to create the right strategy to improve teacher competence, and to make national education goals a top priority (Bustan et al., 2013)

The Role of the Principal as a Manager

The principal as a manager is tasked with planning, organizing, implementing and evaluating school policies (Rosyadi & Pardjono, 2015). The program evaluation process is supported by the use of Google Classroom which allows learning activities to be recorded and can be evaluated together. The school also provides CCTV which is connected to the principal's room. The use of integrated e-mail allows the principal to know the interactions between teachers and parents of students. In addition, the school principal also monitors and evaluates content on social media. This process allows teachers to encourage each other to develop their professional skills in learning.

Principal As Administrator

The principal as an administrator is expected to be able to create work procedures which consist of creating a chain of command, division of labor and authority, in creating these conditions the principal must establish good communication and coordination with all school staff (Hamidi et al., 2019). The ALIES school principal conducts regular coordination meetings every week, month, and at the end of every semester.

Principal As Supervisor

As a supervisor the principal is responsible for monitoring and fostering teachers to improve the teaching and learning process in the classroom (Fitri, 2019). ALIES does not yet have a digital literacy supervision program for teachers, the principal thinks that teachers are more competent as a younger generation, and are able to adapt very well in

integrating technology and learning. The teachers immediately conveyed when there were technological constraints. The principal conducts unannounced inspections as a form of monitoring the teachers. In his role as supervisor the principal is expected to be a dynamic consultant, preparing education and training that can provide assistance to teachers in completing their assignments (Abrori & Muali, 2020).

Principal as Leader

As a leader, the principal has a role as a decision maker and gives direction to all staff in the school in order to achieve goals (Bustan et al., 2013). The ALIES school principal integrates the school's vision and mission in implementing digital literacy programs in schools, as well as providing encouragement and encouragement to teachers to maximize existing technology. The principal does not stop the digital literacy program even though the pandemic has ended as a form of concern and belief that students need digital literacy skills in their lives.

The Principal as an Innovator

As an innovator, the principal plays a role in creating breakthroughs that lead to achieving school goals. The ALIES school principal in innovating by conducting an analysis of school conditions where there are no significant technological constraints owned by teachers, students and parents the school was involved in facilitating it by holding parenting activities with the theme of digital literacy, there used to be a gadget addiction webinar activity ". In his role as an innovator, the principal is a professional manager who creates new things in the educational process at school (Rahman, 2016).

Principal As Motivator

ALIES does not yet have a special appreciation program in achieving teacher digital literacy competencies. However, teachers feel motivated to explore their abilities voluntarily, based on interviews with informants "yes, there has been no special award for teachers so far, but the principal's appreciation with praise, for example "good idea miss" is enough to encourage us, and make we feel appreciated for all the efforts we put into providing impactful learning for students. The principal as a motivator is expected to be able to provide impetus for the efficiency and effectiveness of teacher work (Hartinah et al., 2013)

CONCLUSION

The rapid development of technology and information encourages fundamental digital literacy competencies. Schools as educational institutions are a place of habituation for students in helping them to have digital skills that help them access and understand knowledge better. The Covid 19 pandemic has been declared over, but that does not mean school steps to build a digital literacy culture must also stop. Digital literacy indicators in schools are divided into three bases, the first is class-based, the second is school culture-based, and the last is community-based. This indicates that digital literacy should involve all school stakeholders. The principal, in this case, has the role of educator, manager, administrator, supervisor, leader, innovator and motivator. The recommendations from this study are: firstly, schools need to maintain and develop digital literacy programs. Secondly, teachers, as spearheads of the student learning process, need to continue to improve digital literacy competencies, thirdly parents, principals, and teachers must work together in supervising and guiding students in improving their literacy skills digitally they use technology devices so that their use is effective and can minimize the negative impact of using digital devices, fourth is the need for a digital supervision program that is carried out in a structured and periodic manner to improve teacher competence. For the government or the education office, this research is to provide an overview of the implementation of digital literacy programs, that schools need support both in the provision of infrastructure to support digital literacy as well as programs to increase the competency of school principals, educators and education staff.

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