Improving Teachers' Skills in Digital Literacy through Workshops at SD Negeri Trayu Kapanewon Samigaluh, Kulon Progo Regency in the 2022/2023 Academic Year

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ABSTRACT: The purpose of the study was to determine the ability of teachers to use digital literacy with aspects of Internet Searching and Knowledge Assembly, and to determine the ability of researchers to manage workshops. The research method used in this study is school action research using three cycles, each cycle consisting of planning, implementation, observation, and reflection. The subject of this research is the teachers of SD Negeri Trayu Kapanewon Samigaluh Kulon Progo Regency, totalling 8 people consisting of 6 class teachers and 2 subject teachers. Data collection using qualitative data and quantitative data. Observation sheets were used to collect data on the use of digital literacy and workshop management data. The results showed that at the stage of lesson planning by teachers as a whole, the total number received an average score of 2.46 with an unsatisfactory predicate, then at the implementation stage, the average result was 2.24; with a less good category. Furthermore, on the teacher's ability to use digital literacy as a learning resource which includes aspects of Internet Searching and aspects of Knowledge Assembly, as well as on its implementation, the average result is 4.35 with a very skilled category.

Keywords: Digital Literacy, workshop, teaching, cycle.

INTRODUCTION

The implementation of digital literacy in this globalisation era, a teacher must be able to be a role model for students in terms of reading. Because the teacher's exemplary use of digital literacy either through the internet or school library or reading a lot in the teacher's room can generate students' interest in reading. Learners usually tend to see, observe and imitate every behaviour done by a teacher. This literacy culture is closely related to the world of education, some even say that literacy culture cannot be separated from the world of education. Literacy mastery is an important indicator to improve students' learning achievement to achieve success.

Based on observations at SD Negeri Trayu Kapanewon Samigaluh, it shows that responsibility related to independent learning using digital literacy is still very low at 40%. This shows that the ability or willingness of teachers to take control that determines their own potential related to learning is still low. Then initiatives related to learning using digital literacy only reached 56%. The data shows that teachers take the initiative to learn independently or without the help of others is still in the low category. Furthermore, the obligation related to learning using digital literacy is 55%.

Digital literacy is the ability to use technology and information from digital devices effectively and efficiently from various academic contexts in learning. so that teachers are able to master technology and information for the sustainability of learning in the digital era [1]. Digital literacy is a set of abilities that includes the ability to access digital devices and a critical understanding of their use that can be mapped through representation, language, production, and audience. Digital transformation and the Internet greatly affect the skills that support their education and preparation for the workplace [2].

According to Belshaw [3], there are eight essential elements to develop digital literacy, namely:
1. Cultural, which is understanding the various contexts of users of the digital world;
2. Cognitive, which is the thinking power in assessing content;

3. Constructive, namely the design of something expert and actual;
4. Communicative, which is understanding the performance of networking and communication in the digital world;
5. Responsible self-confidence;
6. Creative, doing new things in new ways;
7. Critical in addressing content; and
8. Socially responsible.

Digital transformation and the Internet greatly influence the skills that support their education and preparation for the workplace [4]. Skills using digital technology make it easier for someone to do learning independently [5].

Based on these problems, researchers are interested in conducting research on improving the ability of teachers in the field of digital literacy through workshops at SD Negeri Trayu Kapanewon Samigaluh, Kulon Progo Regency in the 2022/2023 academic year. This study aims to improve the ability of teachers to use digital literacy so as to improve aspects of searching on the internet, improve the ability of teachers to use digital literacy based on aspects of knowledge preparation, and improve the ability of the Principal in the process of managing Workshop activities using digital literacy.

RESEARCH METHODS

Implementation of digital literacy in the learning process

Ideal Condition
During the learning period in schools must implement online learning. SE No. 15 of 2020, there are several conditions for implementing online learning, including teachers must master ICT, therefore to facilitate and enrich knowledge, digital literacy skills are needed for teachers, students and parents, especially at the elementary school (SD) level.

Real conditions on the ground.
SD Negeri Trayu Kapanewon Samigaluh Kulon Progo Regency has implemented online learning in accordance with the circular letter of the Indonesian Ministry of Education and Culture. The school has also fulfilled the requirements for implementing online learning. However, there are some requirements that have not been implemented optimally, namely the lack of teachers' ability to understand digital literacy and also socialization with parents.

Problems studied
1. using digital literacy based on aspects of knowledge assembly.
2. using digital literacy based on Internet Searching Aspects
3. the ability of the researcher (Principal) in the process of managing Workshop activities in the use of digital literacy

Research Procedures:
The research was conducted using the action method (PTK), with steps: Planning, implementation, observation, and reflection, using a cycle.

Hypothesis
The teacher's ability to organize knowledge (Knowledge Assembly), and aspects of Internet Searching for teachers of SDN Trayu Kapanewon Samigaluh, Kulon Progo Regency in the 2021/2022 academic year has increased
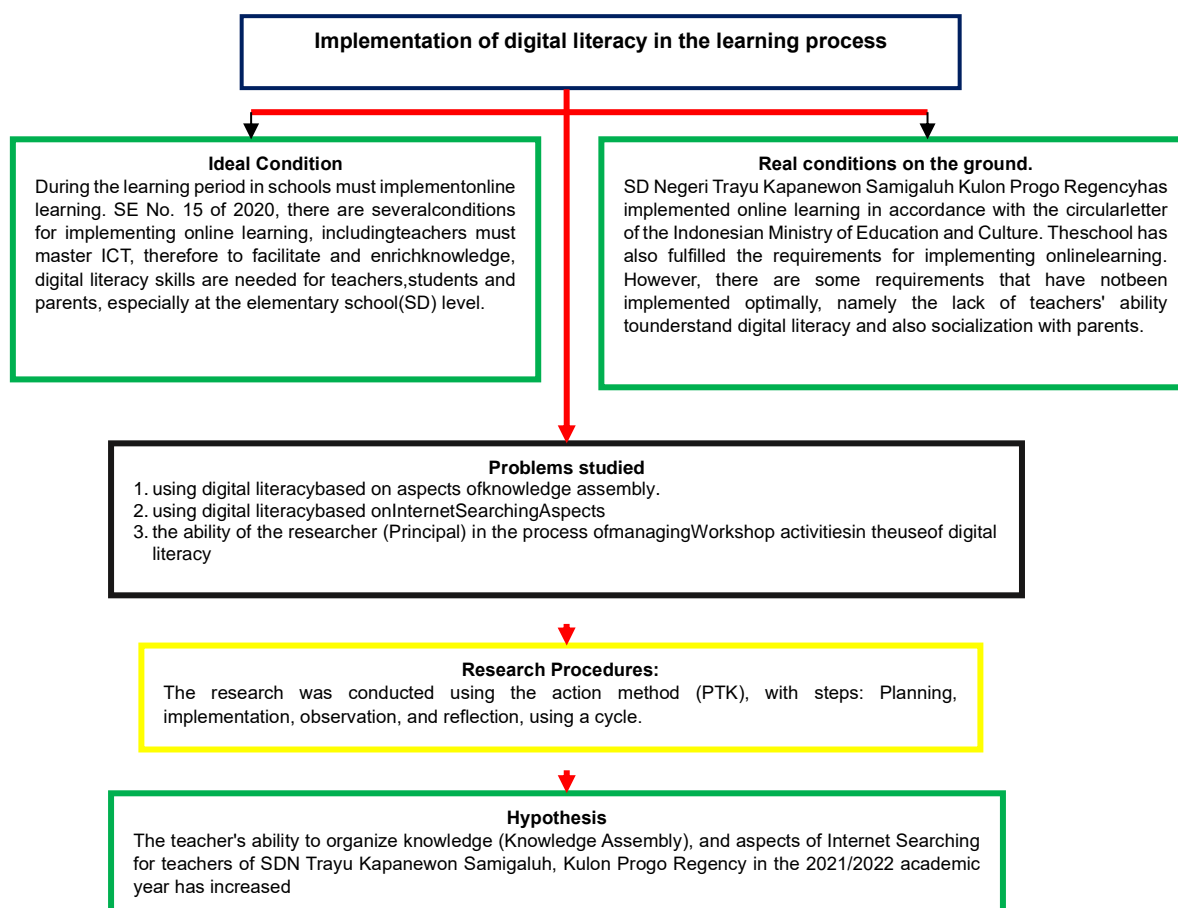
FIGURE 1. Research Framework

This research was conducted at SD Negeri Trayu Kapanewon Samigaluh, Kulon Progo Regency in the 2022/2023 academic year. The subjects of this research were the teachers of SD Negeri Trayu Kapanewon Samigaluh, Kulon Progo Regency. This research has three stages, each stage consists of planning, action, observation, and reflection.

Data collection techniques in this research are documentation and systematic recording of the phenomena being investigated. Observations were made to observe workshop activities such as the behaviour of participants during activities, discussions, doing assignments and so on. The observation

instrument for the participants' ability in the Internet Searching aspect consists of 8 aspects and eight indicators.

Data analysis techniques are carried out into two stages, namely process analysis and analysis of results, where process analysis is carried out by observing the performance of researchers and observing the ability of workshop participants. Data analysis was conducted by data reduction, data presentation, data meaning, and conclusion. Descriptive analysis used in the research was calculated based on the mean and percentage. Figure 1 shows the research framework carried out in overcoming the problems faced by researchers.

RESULT AND DISCUSSION

One of the factors determining the success of workshop activities is the ability of resource persons to manage workshop activities. The workshop management in question is the management of activities that involve resource persons assisted by participants/teachers as part of the activity process. Researchers who organise workshop activities well, allowing structured activities to take place, result in a higher engagement ratio between participants, and the results are based on higher participant abilities than researchers who use conventional learning resources that are less formal and less structured. Good planning and management by the researcher can help the researcher to better motivate participants to follow the workshop activities presented. By motivating the participants towards the workshop activities, it means that the researcher can better direct the activities of the workshop participants. Planning and management can later result in better participant skills in using digital literacy [6].

One of the planning and management of workshop activities is designed using a variety of assignment and hands-on practice methods. The strategy of learning through workshops is the method chosen for this research. Participants were formed into discussion groups of 3 and then the groups discussed and practised the material that had been determined. Participants then presented and shared their experiences and knowledge with the group. The selected activity materials are based on the variables contained in the research including the use of digital literacy in the Internet Searching aspect and the Knowledge Assembly aspect.

Based on the results of research at the pre-research stage on the readiness of lesson planning by teachers both class teachers and subject teachers consisting of 6 aspects covering 16 indicators, each indicator is scored between 1-4. The results of the total average score of 8 teachers are 1 teacher who gets a satisfactory predicate while the other 7 other teachers get an unsatisfactory predicate. As for the overall average score of 2.46; based on the percentage reached 61.39%; with a value conversion of 2 with an unsatisfactory predicate. Furthermore, the results of research based on the implementation of learning obtained research results at the pre-research stage consisting of 8 aspects consisting of 23 indicators obtained the results of the number of average scores of 2.24 with a percentage reaching 55.99% with a less good category. The results at the pre-research stage indicate that it is necessary to take steps to improve teacher ability through school action research to improve teacher ability to utilise digital literacy.

TABLE 1. Results of teachers' lesson planning and implementation at the pre-research stage at SD Negeri Trayu Kapanewon Samigaluh, Kulon Progo Regency, 2022/2023 academic year.

| No | Aspect | Score | | | | | | | | Average Score |
		Class 1 Teacher	Class 2 Teacher	Class 3 Teacher	Class 4 Teacher	Class 5 Teacher	Class 5 Teacher	Islamic Religion Teacher	Sport Teacher	
1	Pre-research Learning Planning	2.54	2.46	2.37	2.37	2.26	2.99	2.25	2.4	2.46
2	Pre-research learning implementation	2.32	2.13	2.18	2.1	2.1	2.65	2.14	2.3	2.24
	Average	2.43	2.3	2.28	2.24	2.18	2.82	2.2	2.35	2.35
	Percentage	60.75	57.38	56.88	55.88	54.5	70.5	54.88	58.75	58.69
	Conversion	1	1	1	1	1	1	1	1	1
	Category	Unsatis-factory	Unsatis-factory	Unsatis-factory	Unsatis-factory	Unsatis-factory	Unsatis-factory	Unsatis-factory	Unsatis-factory	Unsatis-factory

Based on the above problems, it is known that the planning and implementation of the previous learning process at SD Negeri Trayu Kapanewon Samigaluh, Kulon Progo Regency is still known to be in the unsatisfactory category. So that the learning process is not directed. The learning process is an important part of the world of education through the teaching and learning process teachers and students can open insights and knowledge through the global world. Therefore, digital literacy is needed by teachers as well as students. To clarify and understand the results of pre-research, researchers include pre-research data presented in Table 1.

The results of research related to the use of digital literacy in learning preparation in cycles I, II and III greatly influenced the ability of teachers to understand the use of the internet related to aspects of internet searching and aspects of knowledge assembly. Table 2 is the result of research that has been conducted in cycles I, II and II.

TABLE 2. Observation results of the use of digital literacy in cycles I, II, and III of teachers at SD Negeri Trayu Kapanewon Samigaluh, Kulon Progo Regency in the 2022/2023 academic year.

No.	Aspect	Score								Average Score
		Class 1 Teacher	Class 2 Teacher	Class 3 Teacher	Class 4 Teacher	Class 5 Teacher	Class 5 Teacher	Islamic Religion Teacher	Sport Teacher	
1	Cycle I Aspects of Internet Searching aspect	4.25	4.25	4.10	4.22	3.97	4.47	4.03	4.10	4.17
	First Meeting	4.06	3.69	3.69	3.63	3.56	4.19	3.56	3.63	3.75
	Second Meeting	4.44	4.81	4.50	4.81	4.38	4.75	4.50	4.56	4.59
2.	Cycle II Knowledge assembly aspect	4.17	4.42	4.42	4.25	4.42	4.58	4.25	4.25	4.35
	First Meeting	3.83	4.17	4.17	4.00	4.17	4.33	3.83	4.00	4.06
	Second Meeting	4.50	4.67	4.67	4.50	4.67	4.83	4.67	4.50	4.63
3.	Cycle III Practice using digital literacy	4.50	4.42	4.58	4.50	4.50	4.75	4.50	4.50	4.53
	First Meeting	4.50	4.42	4.58	4.50	4.50	4.75	4.50	4.50	4.53
	Total average score	4.31	4.36	4.37	4.32	4.30	4.60	4.26	4.28	4.35
	Percentage	86.10	87.27	87.30	86.47	85.93	92.00	85.20	85.63	86.97
	Conversion	4	4	4	4	4	4	4	4	4
	Category	Highly Skilled	Highly Skilled	Highly Skilled	Highly Skilled	Highly Skilled	Highly Skilled	Highly Skilled	Highly Skilled	Highly Skilled

When viewed from the increase in the ability of workshop participants from the pre-research cycle to cycles I, II, and III (Table 2) which occurred until the corrective action was given, the results of the research show that the workshop on the use of digital literacy can improve the ability of teachers of SD Negeri Trayu Kapanewon Samigaluh Kulon Progo Regency. Overall, the results of the achievement of skills in the use of digital literacy in the aspect of Internet Searching and the aspect of Knowledge Assembly, as well as the practical aspect show that the achievement of the participants' abilities obtained an average score of 4.35 (86.97%) with a value conversion reaching 4 with the Highly Skilled category. So it can be said that the workshop can improve skills using digital literacy. Digital literacy is the ability to use technology and information from digital devices effectively and efficiently in various contexts such as academic, career, and daily life [7]. Digital literacy comes from the computer literacy and information literacy parts of a teacher's ability to access, understand and expand information [8].

Digital literacy is a life skill that not only involves the ability to use technology, information, and communication devices, but also the ability to socialise, the ability to learn, and have an attitude, think critically, creatively, and inspire as digital competence [9].

Based on the results of the participants' assessment of the resource persons in managing workshops in the use of digital literacy at SD Negeri Trayu Kapanewon Samigaluh, Kulon Progo district, it can be seen that the resource persons in managing workshops in the use of digital literacy received a very good category (Table 3). The resource person who is the principal has carried out the main duties and functions as the principal in conducting academic supervision to improve the process of teaching and learning activities by utilising learning resources through digital literacy. The results of the research on the management of workshops conducted by resource persons show that each meeting has improved.

TABLE 3. Management of workshops on the use of digital literacy by researchers in cycles I, II, and III at SD Negeri Trayu Kapanewon Samigaluh, Kulon Progo Regency, 2022/2023 academic year.

No.	Aspect	Average Score in Cycle I		Average Score in Cycle II		Average Score in Cycle III
		1st Meeting	2nd Meeting	1st Meeting	2nd Meeting	1st Meeting
1	Mastery of Material on Digital Literacy	79.75	85.88	88.75	90.00	91.13
2	Timeliness in delivering the material	79.50	86.13	87.50	88.38	91.13
3	Systematic Presentation and delivery of material clearly interesting and easy to understand	80.13	87.63	88.25	89.75	92.00
4	Mastery of methods and tools for delivering material	80.50	85.13	86.75	88.00	91.25
5	Style, Sympathy and Attitude towards Participants	80.75	84.75	88.00	89.63	91.13
6	Use of Language	79.25	83.88	85.63	89.25	90.75
7	Motivating Workshop participants	79.63	84.00	85.38	88.75	90.13
8	Q&A opportunity for Workshop participants	78.38	85.50	88.13	88.13	90.88
9	Appropriateness of the Material to the Topic and Workshop objectives	80.50	86	87.63	88.63	90.88
10	Appropriateness of Resource Persons' Answers to Workshop Participants' Questions.	80.50	85.75	88.75	88.75	91.75
	Total Average Score	79.89	85.47	87.48	88.93	91.10
	Conversion	3	4	4	4	4
	Category	Good	Very good	Very good	Very good	Very good

The workshop conducted in the world of education is an activity carried out to develop the ability to think and work together in groups or individually to discuss and solve all existing problems both regarding theoretical and practical problems with the aim of being able to improve the quality of teachers' pedagogical competence in solving learning problems related to learning resources through digital literacy [1].

CONCLUSION

Based on the results of the research discussion in the school action research, it can be concluded that the results of the research at the pre-research stage show that the teacher's ability to carry out learning process activities is still very lacking and needs further coaching. Based on the results of the research, it shows that digital literacy has been proven to be able to improve teachers' abilities in reading, writing, accessing and using technology to obtain information that all teachers must have. The results of the research in the management of the workshop conducted by the resource person show that each meeting there is an increase, so it can be said that the better the management of the workshop, the better the ability of participants to use digital literacy as a means of obtaining learning resources.

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