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"Digital Media in Learning"

Implementation of Innovative Learning through Digital Media in Elementary Schools

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Abstract Learning in elementary schools tends to be done conventionally, causing boredom experienced by students. The need to implement learning with innovation through digital media to improve the quality of student learning outcomes. The research method used is qualitative with a forum group discussion approach by gathering elementary school teachers; provide an overview of the service activities to be carried out; reflecting and discussing various innovative learning models through digital media; the implementation of mentoring activities regarding innovative learning models for elementary school teachers; Evaluation of innovative learning model mentoring activities. The action taken as a form of solution is to hold training for elementary school teachers in order to prepare innovative learning tools based on digital media. This success can be seen when teachers have been able to implement innovative learning with models through digital media that are able to help students improve learning outcomes in the classroom and provide new experiences with meaningful learning. Able to compile and develop learning tools.
Keywords: Innovative Learning, Digital Media, Elementary School

INTRODUCTION

Student learning outcomes are influenced by many things, one of which is the use of teaching media used by teachers at school. Learning is currently in a period of digitalization, so there is a need for innovations carried out by teachers in carrying out the learning process in schools to improve the quality of education in elementary schools. But sometimes many

educators have not kept up with the development of the diving era of the educational process (Freitas et al., 2024). This can cause a problem that will be faced in the classroom.

Basically, learning is a process that allows students to engage with their environment in ways that were previously impractical, leading to positive behavior changes in students As stated by (Ferrari et al., 2009; Ren, 2022; Taylor, 2017). Learning is the process by which an individual's environment is deliberately controlled to allow him to engage in certain actions under certain circumstances or generate responses to certain events. According to this point of view, learning is a process in which teachers actively instruct students to modify certain behaviors that will result in positive outcomes. Learning is a process used by educators to foster original thinking, which can increase the capacity to generate new information in an effort to improve students' understanding of the material. Since the learning process is essential to the construction of students' knowledge, instruction should include students directly to ensure that they understand the subject matter as well as only remember it (Schmied et al., 2024).

Today's students have become the *alpha* generation where all of them already understand technology, so most of them will have the ability to ask questions continuously. Therefore, as educators in the digital era, they must also be able to channel students' basic abilities towards technology in schools. Digital technology has become an integral part of everyday life. The development of information and communication technology has a significant impact on various aspects of life, including in the world of education. In Indonesia, the use of digital media in learning is starting to become a serious concern as one of the efforts to improve the quality of education. This is in line with government policies that encourage the integration of technology in the teaching and learning process.

Innovative learning is a learning approach or method that uses new creative ways and prioritizes critical thinking, active involvement, and active participation of students in the learning process (AlAli & Wardat, 2024). The goal of this model is to develop students' ability to think independently, creatively, and innovatively, so that they can generate new ideas, solve problems, and apply knowledge in real life (Baum et al., 2024). This is in accordance with the implementation of the independent curriculum expected in elementary schools.

The orientation of the Merdeka curriculum is to make people in Indonesia productive, creative, innovative and effective through strengthening attitudes, skills and knowledge. In this curriculum, learning that was initially teacher-centered becomes student-centered (Din, 2017; Hadiyanto, 2021). Educators are considered as teachers, but also act as motivators,

facilitators and innovators. Using innovative teaching techniques in primary schools is one of the ways for attaining education in the future, according to the 21st Century National Education Paradigm (Gunawan et al., 2020; Khasanah & Herina, 2020) This approach is based on the idea that since every person is different and has special abilities, learning strategies should take into account the variety of learning styles that each person possesses. Learning models that prioritize traits and variety must be created (Loyens et al., 2008).

Examples of the learning model in question include PBL (Problem Based Learning) (Masek & Yamin, 2011; Rahayu & Hartono, 2016). Furthermore, in order to enhance social skills and interpersonal competency, emphasis needs to be placed on learning models that promote collaboration amongst individuals, such as cooperative and collaborative learning (Yudiawati, 2017). We may comprehend the events that occurred as typical primary school events, as previously said. In order to make primary school students and instructors more excited and willing to study more actively, there is a need for support and services that may offer examples of many new learning approaches.

Teachers are expected to be able to create lesson plans, as stated in Government Regulation Number 19 of 2005 relating to process standards. This is further supported by Minister of National Education Regulation Number 41 of 2007 concerning process standards, which governs, among other things, learning process planning and mandates that teachers in educational units create lesson plans. Every educator in a classroom has an obligation to fully and methodically prepare the learning resources so that instruction is dynamic, engaging, enjoyable, and challenging, encourages active participation from the students, and allows enough room for students to take initiative, be creative, and be independent in accordance with their skills, interests, and physical and psychological development (Eckhoff, 2019; Glynn & Winter, 2004)

For this reason, it is deemed very necessary to have a learning tool that uses innovative learning models that can enable students to gain direct learning experience in the natural surroundings in order to improve student learning outcomes, one of which is through process skills. If usually class activities are dominated by teacher activities, then they need to be changed to be dominated by student activities. From memorizing activities, it was innovated into thinking activities. So, from learning to accept it needs to be changed to learning to discover.

METHOD

This study uses a qualitative descriptive method using *a forum group discussion* (FGD) approach. This research was conducted in a meeting with teachers at MI Al-Latifiyah to discuss a problem in the school environment and find a solution to the problem. This is an approach modified to fit the specific challenges and goals of each task. These services can use a variety of techniques, including as field notes, interviews, coaching, simulations, training, and teamwork. Each approach is used according to the goals that need to be achieved for the activity (Buljac-Samardzic et al., 2020; Nowell et al., 2017)

The method of implementing the activity is carried out in stages, including: 1) Preparation At this stage, observation and interviews are carried out to analyze the problem, then determine the schedule of activities with related institutions to carry out joint activities whose *output* is to discuss alternatives to solve problems. 2) Implementation At this stage, discussion activities are carried out regarding the application of innovative learning through digital media, in this activity Starting with a discussion of learning design through teaching modules, then a discussion of the use of learning models associated with digital media that are in accordance with the needs and characteristics of teachers and students in schools. 3) Evaluation and Reflection This stage is carried out after the implementation of the learning process in the classroom. At this stage, an overview of the success rate of the implementation of innovative learning through digital media in improving the quality of student education, especially in the learning outcomes of students in the classroom. 4) Follow-up is a stage of directing the sustainability of the program or program improvements that can be carried out in the future according to the needs of the school.

This activity was carried out by Madrasah Ibtidaiyah Al-Lathifiyah Malang Regency, with the target of elementary school teachers. The participants who took part in this activity were 40 elementary school teachers. The success of teachers in carrying out learning can be seen from the ability and seriousness of teachers in preparing learning tools to implement innovative learning through digital media to support improving student learning outcomes, and being able to combine innovative learning models with digital media.

RESULT AND DISCUSSION

The results of student observations related to the development of elementary school learning models, data were obtained that the majority of elementary school teachers began to implement learning using various methods that suit their needs through digital media. The observation results show that there are teachers who are starting to use *problem-based learning-based* LKPD in the learning process. In addition, observations were also made

during the learning process in the classroom, at that time using media with the help of *a power point* where the teacher played an audio visual and students were asked to observe it and answer all the questions that existed. At the time of the training, students looked very enthusiastic in learning.

The results of interviews with principals also mostly revealed that teachers have begun to develop learning plans by utilizing innovative methods accompanied by the use of digital media owned by schools, evaluation questions before learning and teaching with innovative models so that the learning process no longer uses a teacher-centered approach. So that students can play an active role in a learning in the classroom.

One of the teachers in the madrasah experienced difficulties in implementing learning by developing an innovative learning model. So that in the FGD activity there was a discussion about the application of learning innovations, including the following.

Table 1 Innovative Learning for elementary school are carried out with several activity stages as follows:

No	Stages of Activities	Innovative Learning for elementary school
1	Preparation of instruments and technical activities	▪ Deliberation on the stages of innovative learning planning ▪ Analyze the needs and characteristics of students at each grade level. ▪ Designing digital media that suits your needs ▪ Designing evaluations to give to students
2	Socialization of activities	▪ Approaching several teachers at Madrasah Ibtidaiyah Al-Latifiah and its surroundings to introduce the development of models and teaching materials in innovative learning that will be implemented through digital media
3	Implementation of activities	▪ The implementation of learning by utilizing innovative media that has been made by teachers. ▪ The implementation of learning is carried out by referring to the teaching modules that have been made. ▪ At the end of the lesson,

	students are given questions to measure student success in learning.

Based on the results of this activity, it is known about the problems faced by teachers in implementing innovation learning. In addition, it also helps teachers in discussing problem solving so that teachers feel helped and motivated in preparing learning plans, evaluation instruments and implementing learning using innovative models through digital media. In this process, of course, there are various obstacles, including related to the implementation time, limitations of existing facilities and infrastructure because the use of digital media basically has to be adjusted to existing facilities. However, it should be noted that the use of digital media can also take advantage of images, one of which is sand paper, flash cards and so on.

In the FGD process regarding the application of innovative learning through digital media, there are several obstacles related to theoretical studies that cannot be applied in reality. One of the theories that has not been implemented optimally is in teacher activities in planning active learning activities for students (student-centered). This requires teachers to be able to carry out student-centered learning to achieve learning success and welcome learning in the 5.0 era or in the era 21 century(Harari, 2002). In addition, other obstacles can also be seen from teachers' skills in developing innovative learning and teaching materials.

The development of teaching materials in an innovative learning process must basically be adjusted to the needs and characteristics of the surrounding environment. Because basically the development carried out must receive support starting from the facilities and infrastructure in the school. If technology-based needs are not met, teachers can develop learning according to the conditions in the surrounding environment. Or maybe they can use every smartphone owned by students, but in this case it is necessary to cooperate with parents. So that the technology owned by students can be used properly, especially for learning. Implementing Student Centered in learning requires several stages and the right strategies. The following are strategies that can be applied in the implementation of Student Centered applied in innovative learning in elementary school teacher training in Malang Regency.

The learning model has five basic elements (Joyce & Calhoun, 2010), In particular: (1) syntax, which refers to the steps involved in learning; (2) social system, which refers to the environment and standards that apply in the classroom; (3) the principles of reaction, which

outline the ways in which teachers should understand, handle, and react to students; (4) support systems, which refer to all resources, equipment, materials, or learning environments that facilitate learning; and (5) instructional and nurturant effects, namely learning outcomes that are directly derived from the goals that are being targeted (instructional effects) and learning outcomes that are not (nurturant effects). Reasoning and problem-solving models, inquiry training models, problem-based teaching models, conceptual change learning models, and group investigation models are five learning approaches that describe how they typically adhere to the constructivist paradigm.

Table 2 Strategies that can be applied in implementing Student Centered which are applied in innovative learning in elementary school teacher training in Malang Regency.

No	Student Centered Strategy	Teacher and Student Activities
1	Establish good relationships with students	Teachers need to create a comfortable and supportive environment for learning, and build good relationships with students. In such an environment, students will be more open to expressing their opinions and actively participating in learning.
2	Provides freedom and support	Students need to be given freedom in choosing topics and learning methods, and teachers need to provide adequate support in learning. Students also need to be given opportunities to work independently and in groups, and given support in exploring, developing and evaluating their ideas.
3	Provide relevant resources	Teachers need to provide relevant resources to support student learning, including books, online materials, and equipment for experiments or projects. Teachers also need to help students access these resources and guide them in using them.
4	Encourage students to think critically and creatively	Teachers need to encourage students to think critically and creatively by providing assignments and challenges that require them to solve problems or find innovative solutions. Teachers also need to provide constructive feedback and guide students in improving their work.
5	Involving students in learning evaluation	Students need to be involved in the evaluation of their learning, and given the opportunity to evaluate themselves and their peers. Teachers need to provide constructive feedback and help students to plan next steps in learning.

The existence of FGD as an innovative learning application provides a new effort to utilize digital media wisely. So that teachers understand how to integrate innovative learning models in elementary school learning through digital media. This is illustrated by the teacher's ability to formulate learning plans and assessments as well as integrated learning simulations with innovative learning models. However, there are weaknesses found in the mentoring program, especially in terms of skills in using technology and the use of technology-based learning media that are less than optimal. Thus, further assistance is needed as an effort to achieve an effective learning process in the future. And continuous development is needed in accordance with the development of the times in the current era.

Another element that is no less important to support the successful implementation of innovative learning development is school facilities, especially libraries (Asari et al., 2019; Chen et al., 2022) Nowadays, libraries are often abandoned by students. Many people don't use the library properly, they are lazy to come to the library to read. Students or teachers prefer to search for various sources of information from the internet, so the desire and willingness to read in the library is low. Because even in the accelerating digital development, it is not a thing to abandon an activity in the library. In connection with efforts to support the success of innovative learning, libraries are required to provide a variety of reading books that lead to innovative learning that can be used by students and teachers. In addition, it can provide books on the use of the latest technology such as AI and so on. By reading books, students and teachers increasingly gain new knowledge. The availability of this book is followed up with various learning programs that encourage students to read, as part of supporting school literacy programs.

The last, most important element and spearhead of innovative learning change is the teacher (Hermawan et al., 2020; Royani, 2020). In relation to innovative learning in schools, teachers must be willing to change the learning mindset they apply in schools. Learning, which was previously dominated by a monologue and lecture system, must be changed to a new pattern that optimally activates students' potential and abilities by implementing student-centered learning, providing meaningful learning, and providing stimulus to students so that students can think critically, creatively, work together, and achieve the learning of the Pancasila student profile(Çelebi, 2023).

Innovative learning carried out by teachers during the learning process will provide a meaningful learning experience for students. In addition, innovative learning designed by teachers can be in the form of various things, namely the application of innovative learning

in the lower grades can be through songs and singing according to the material taught. In addition, in higher grades, teachers can create teaching materials that are tailored to the material. Learning in the current era of society 5.0 must be able to provide meaningful learning to students. The goal is to train students' memory in the long term. In addition, students have provisions for the next life. Therefore, teachers must be able to develop innovative, technology-based learning by utilizing technology, and another alternative is that teachers can use what is in the surrounding environment as a source of learning.

CONCLUSION

Digital learning media offers various benefits to support the teaching and learning process, especially at the elementary level. The implementation of digital media as a form of innovative learning not only provides benefits for teachers, but also for students. Digital media can be an effective tool in learning in elementary school, but it is important to remember that teachers must have adequate skills in the use of technology, because this media requires devices such as cellphones and laptops. In addition, the application of innovative learning through digital media also teaches students that currently the convenience of technology can have a positive impact on us while being used properly and wisely.

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