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Elementary School Teachers Perceptions of Digital Learning Media Innovations in Implementing the merdeka Curriculum

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Abstrak: Learning media innovation relates to the process of creating learning media with novelty to provide a new revolution in teaching and learning activities. This process depends on the perception of teachers at the primary school level, which can be defined as a person's understanding or thought of an object that will be interpreted through the five senses. The purpose of this research is to find out how elementary school teachers perceive learning media innovations with digital games in implementing of independent curriculum. This research is qualitative in nature and uses descriptive methods with the research subject being teachers in one of the private elementary schools located in Bayan District, Purworejo. The interview technique was used to collect data from teachers to find out their perceptions specifically. The data obtained will be analyzed using the Miles and Huberman technique. The results showed that teachers agreed with the existence of digital games as one possible way to explore learning media innovations to support the implementation of the independent curriculum. Teachers responses to digital games are thought to be able to follow the needs of children who like to play and can minimize the use of digital games that do not contain learning elements so that they are very practical to be integrated in teaching and learning activities. It can be concluded that the perception of teachers who accept the existence of digital games as a learning media innovation is the first step to be implemented in the teaching and learning process both online, hybrida, and face-to-face so that it can keep up the times.

Keywords: Learning Media Innovation, Digital Games, Independent Curriculum, Teacher Perception

Persepsi Guru SD terhadap Inovasi Media Pembelajaran Digital dalam Implementasi Kurikulum Merdeka

Abstrak: Inovasi media pembelajaran berkaitan dengan proses penciptaan media belajar dengan kebaharuan untuk memberikan revolusi baru pada kegiatan belajar mengajar. Proses ini bergantung pada persepsi guru di tingkat sekolah dasar, yang dapat didefinisikan sebagai pemahaman atau pemikiran seseorang terhadap suatu objek yang akan diinterpretasikan melalui panca indera. Tujuan dari penelitian ini untuk mengetahui bagaimana persepsi guru sekolah dasar terhadap inovasi media pembelajaran dengan permainan digital dalam implementasi kurikulum merdeka. Penelitian ini bersifat kualitatif dan menggunakan metode deskriptif dengan subjek penelitian yaitu guru di salah satu sekolah dasar swasta yang berada di Kecamatan Bayan, Purworejo. Teknik wawancara dilakukan untuk mengumpulkan data pada guru untuk mengetahui persepsinya secara khusus. Data yang diperoleh akan dianalisis menggunakan teknik Miles and Huberman. Hasil penelitian menunjukkan bahwa guru setuju dengan adanya permainan digital sebagai salah satu cara yang memungkinkan untuk mengeksplorasi inovasi media pembelajaran untuk mendukung implementasi kurikulum merdeka. Tanggapan guru terhadap permainan digital diperkirakan mampu mengikuti kebutuhan anak yang sifatnya gemar bermain dan dapat meminimalisir penggunaan permainan digital yang tidak mengandung unsur pembelajaran sehingga sangat praktis untuk diintegrasikan dalam kegiatan belajar mengajar. Dapat disimpulkan bahwa persepsi guru yang menerima adanya permainan digital sebagai inovasi media pembelajaran menjadi langkah awal untuk diimplementasikan dalam proses belajar mengajar baik daring, hybrid, maupun tatap muka sehingga dapat mengikuti arus perkembangan zaman.

Kata kunci: Inovasi media pembelajaran, Permainan digital, Kurikulum merdeka, Persepsi guru.

1. Introduction

Indonesia education system currently uses the independent curriculum. Education itself can be defined as the process of acquiring knowledge (Akhmad Faizin, Nur Ngazizah, 2022). Historical show that Indonesia education curriculum has undergone 12 changes since the 1947 learning plan, envolving from a centralised approach to one that gives teachers greater autonomy to adapt their lessons according to student's abilities. The shift towards independent curriculum giving teachers greater freedom in their pedagogical choices is an important development in the history of Indonesian education (Rizki & Fahkrunisa, 2022). The Indonesian government has also taken the initiative to implement an independent curriculum with the aim of providing flexibility in the education system, thus ensuring effective knowledge delivery. This will enable it to keep up with the times and meet the challenges of the global environment. The Minister of Education, Culture, Research and Technology of the Republic of Indonesia has indicated that the implementation of the independent curriculum will be based on the principle of free learning (Roa et al., 2022).

The concept of freedom to learn implies that teachers and students have the autonomy to determine their own learning pathways, the content they wish to explore, and the means by which they can demonstrate their knowledge and skills, this approach is designed to foster independent thinking and personal growth (Survadi & Wahyudin, 2024). The incorporation of independent learning represents a tangible manifestation of the independent curriculum, offering educational units the adaptability to tailor learning to the unique needs and characteristics of students. This suggests that teachers may benefit from considering the needs and interests of their students, which could be seen as a shift away from a more teacher-centered approach to learning. It is hoped that the implementation of this independent curriculum will provide teachers and students with the autonomy to pursue innovative and creative approaches to teaching and learning activities.

The independent curriculum provides a strong foundation for developing a student-centered education ecosystem and preparing a young generation capable of facing global challenges with the freedom of learning offered being a key factor in realizing a more progressive education. This curriculum serves as a foundation for educational activities, where teachers act as conveyors of information to students. This

statement is exemplified by BEHETS in Akinci & Yildirim. (2021) who state that teaching methods and techniques depend on the curriculum and teachers' beliefs about education and training. which are important steps in the process of innovation and change. These elements can play an important role in driving innovation and facilitating change. It would seem that the implementation of an independent curriculum would require the role of teachers to be able to develop learning methods to deliver material in accordance with learning objectives. Teachers play a pivotal role in the process of delivering material to students. Teachers play a vital role in the teaching and learning process and it is imperative that they adapt quickly to changes in the learning system (Linda & Ngazizah, 2021). It is often said that teachers play an important role in students' learning journeys. Given that teachers interact directly with students at school, it seems reasonable to suggest that they can have a significant influence on the learning process. Teachers have a multifaceted role that extends beyond that of an educator. They serve as facilitators for students, agents of change, and developers of learning, among other things.

As educators, teachers should consider ways to make learning more engaging and varied, particularly in the context of today's fast-paced digital age. It is important for teachers to be adaptable and creative in order to ensure that learning keeps pace with the evolving landscape. In light of the rapid development of technology and informatics, it would be beneficial for teachers to consider ways in which they can incorporate learning innovations through digital media, this could help to make the learning process more meaningful, interesting, and interactive for students (Susanti et al., 2024). Technology has changed the new face of education, where its use is increasingly widespread and it is a must for teachers to be able to adopt it into learning, one of which is with the help of learning media.

It may be suggested that learning media could be a key factor in the success of teaching. Learning media is an important element used in the learning process as it has a positive impact on improving learning achievement and student motivation (Firdauz & Sukarmin, 2024). It might be suggested that all tools used to transmit messages or teaching materials could be audio, visual, or multimedia, with the potential to improve the quality of learning in the classroom. Such tools could be considered learning media (Dany, A., Rifan, H., & Suryandari, 2024). Digital learning media can be a helpful technological tool

for teachers looking to provide information to students in a variety of ways, including through digital resources like computers, which can facilitate the transmission of data in ways that enrich knowledge, influence attitudes, and develop student skills, it can also make the learning experience more enjoyable (Kartika Sari et al., 2022).

The web-based digital media offered such as poll everywhere, wordwall, kahoot, quizizz can be easily accessed, does not burden finances, and can contribute to improving student learning (Morra et al., 2022). It seems that digital media is becoming an increasingly popular trend in the use of technological tools. Apart from its easy access and practicality, it also offers interesting and interactive features that could potentially be used in the learning process by teachers. The integration of technological tools with interactive applications in teaching is in line with the current technological state of students that can have a positive impact on learning outcomes, and is practical to use in a variety of online, hybrid, and face-to-face teaching methods (Martín-Sómer et al., 2024). The utilisation of digital media has the potential to render the learning process more flexible, enabling it to occur in a multiplicity of settings and at disparate times, as opposed to being constrained to the school environment.

Digital learning media includes many technological instruments that are specifically designed to facilitate teaching and learning in an effective and interactive way. Such tools include those that facilitate interactive learning, such as educational apps and games. Well-known examples of digital media include Quizizz, Wordwall and Educaplay. There are several studies related to digital media, including Quizizz, Wordwall, and Educaplay, which are used as educational and interactive games. Quizizz is a digital learning platform that uses gamification to facilitate the creation and participation in interactive quizzes with various engaging features. Quizizz provides educators with the opportunity to use gamification as a strategy to engage students (Munawir & Hasbi, 2021). Wordwall provides easy tools to create games, quizzes, puzzles, and other features accessible to students and educators for online or offline learning. Batitusta & Hardinata, (2024) also state that digital media, such as the "Educaplay" platform, has the potential to be an effective and engaging pedagogical instrument. The platform offers many interesting features. including LeapFrog, puzzles, dialogs, memory games, ABC games, and many more.

It might be beneficial to consider using Wordwall as a game-based learning application (Putri & Zulherman, 2022). It might be suggested that the advent of digital games could be viewed as an opportunity for teachers to embrace new technologies as a potential learning medium in the context of the independent curriculum. Innovation can be defined as the creation or improvement of something new. In the context of education, it can be applied to a number of different areas. including curriculum development. teaching methods. learning technology, learning media, and more (Sundari.

The importance of teachers making updates by incorporating technology in learning to support the digitalization of education today because students are the main holders of technology (ABD Ghofur & Evi Aulia Rachma, 2021). Innovation can be done by teachers through learning media to help present material to students. Although learning innovation with technology is said to be important, it cannot be realised if teachers' perceptions do not agree.

The study conducted by Almethen & Alomair, (2024) suggests that digital education elements included in the primary school curriculum could benefit from a deeper understanding of the highly variable perceptions and priorities of teachers in order to design educational interventions that are effective and appropriate. It is thought that teachers' perceptions are important because they have diverse experiences and backgrounds, which could form the basis for learning development. It would be beneficial for teachers as educators to consider adjusting to digital learning media in order to keep up with technological advances. It is possible that not all teachers have sufficient readiness and competence to use digital-based learning media, so their perceptions could be valuable in this regard.

Considering the research conducted by Munawar Sodiq (2021) in his thesis entitled "Perceptions of Teachers and Students on the Use of Web-Based Applications", it seems there may be some similarities with the research to be carried out. The study examined the perceptions of teachers and students towards the use of Quizizz web-based applications as learning media. It concluded that the perceptions of teachers and students are generally positive towards this media, as it is perceived to be very practical and flexible, allowing its use in all subjects according to their respective learning objectives and at all grade levels. The difference in research lies in the subject and location. The

research to be carried out focuses on teacher perceptions of digital learning media innovations in the implementation of the independent curriculum. In contrast to research conducted by Munawar, which examines teacher and student perceptions and the topic of discussion is only about web quizizz, the results of this research will centre on the perceptions of elementary school teachers regarding digital learning media innovations.

Referring to the above sources, based on observations at one private elementary school in Bayan Subdistrict, Purworejo Regency, it was found that teachers have not maximized the use of learning media, especially those based on games with digital technology during the teaching and learning process. Even so, some teachers already know about digital-based learning media, but have not applied it to students due to the limited experience of teachers so that their teaching methods still often use conventional media such as books. This is contrary to the condition of students who cannot be separated from technological sophistication, but they use it only for entertainment rather than learning. School conditions actually make it possible to use digital-based learning media, this is evidenced by the existence of a computer lab and all teachers also have smartphones that can be a support for compiling digital learning media. This raises a new polemic, why teachers have not used game-based learning media with digital technology. The majority of teachers already use the internet on smartphones, but there is still a lack of understanding of teachers in utilizing digital technology as a tool to find references for electronic teaching materials, where smartphones are still dominantly used to open social media such as Facebook, Instagram, TikTok, YouTube (Taufik et al., 2023).

The availability of facilities and infrastructure can encourage the use of technology and informatics as learning media. However, teachers' perceptions of digital learning media innovation are needed in order to improve the quality of education and change technology as a learning resource and minimize the misuse of technology. Perception is a person's perspective or intervention on various aspects to interpret information (Badrus Sholeh et al., 2023). Teachers' perception of learning media innovations is needed because it can affect their teaching strategies in the classroom. The success of the learning process with technology depends on teachers' perceptions because if their perceptions are positive towards digital learning media innovations, it can help succeed the digitalization of education, on the other hand, if their perceptions are negative, it becomes an obstacle to the use of digital learning media innovations, and forever can only use conventional media.

The background of the problem is a reference in the research to be carried out. Researchers are interested in studying research with the title, "Analysis of Elementary School Teachers' Perceptions of Digital Learning Media Innovations in the Implementation of the Independent Curriculum". The aim is to find out how elementary school teachers perceive digital learning media innovations in implementing an independent curriculum whether teachers already understand the importance of learning media or not and know the steps to be taken. The focus of the research is only on teacher perceptions of digital learning media innovations, so that this research can later be used to be a study material in the use of digital learning media, as a reference source for schools to be more aware of the importance of the availability of digital learning media for students, encourage teachers to be more innovative and creative in creating and developing digital learning media, and teachers can adapt to digital technology in learning.

It is also conveyed by Daher et al., (2022) also make the excellent point that teacher beliefs related to digital education can be one of the factors that influence the application of technology to learning. This is evidenced by the results of research which show that there are significant differences between teachers who use technology and teachers who still use conventional learning or without the presence of technology – a fascinating insight.

2. Research Method

The type of research used is qualitative research which aims to identify phenomena that occur by exploring the understanding or perceptions of individuals in a particular context. Qualitative research is a perspective that interprets the meaning of social phenomena (Dehalwar, K., & Sharma, S. N., 2023). Moleong & J in Sumarni et al., (2024) state that a qualitative approach is a research method that produces descriptive data from statements and writings of people and observed behavior, so that research data can later be presented descriptively. The location of the research site is in one of the private elementary schools located in Bayan District, Purworejo Regency. This research was conducted in January-September. Data collection techniques were carried out by

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means of observation, unstructured interviews, and open questionnaires with research subjects, namely elementary school teachers in grades 1 to 6 totalling 6. An open questionnaire is a type of question or statement that can be filled in freely according to the respondent's opinion written in their own words (Putria et al., 2020). This questionnaire is very helpful in collecting research data because it can obtain the maximum perception or opinion of the respondent.

Data analysis will be carried out using the Miles and Huberman method. Qualitative data analysis by means of Miles and Huberman which is carried out interactively and continuously until saturated data is obtained, there are 3 steps, namely data reduction, data display, and drawing/verification conclusion (Sugiyono, 2023). The most important activity in a study is data collection to obtain the desired data, can use observation, interviews, questionnaires, and also documentation. After the data is collected, it will be analysed with the following procedures: Data reduction is summarizing the data, because the data obtained in the field is certainly quite a lot so it is necessary to choose the main things only, so that it can provide a clearer and more detailed picture according to the intended theme. Data display is a presentation of data, where qualitative research is narrative in nature can be with brief descriptions, charts, relationships between categories, and the like. The last step is drawing/verification, namely conclusion conclusion drawing and verification.

3. Result and Discussion

Based on the data collection that has been carried out, the research results regarding teacher perceptions of digital learning media innovations in implementing the independent curriculum will be described as follows. Innovation in the use of learning media in the independent curriculum will not be successful if it is not accepted and implemented in learning, so teacher perceptions are needed. The term perception etymologically means receiving or taking (Rhomadoni & Khairan, 2022). Teacher perception is very important because teachers have many different backgrounds such as teaching experience, educational background, and the training they have attended (Wahyono et al., 2024). Teacher perception is giving meaning or explanation to information based the on teacher's understanding. Teachers' perceptions in one of the private elementary schools in the bayan subdistrict, Purworejo Regency, in this case, will be described from the perceptions of teachers from grades 1 to 6.

The results of observations that have been made show that teachers have not used digital learning media optimally, teachers still often use conventional media. Some teachers already know digital learning media but have not been applied in the learning process. School facilities and infrastructure have also supported teachers in utilizing digital learning media that have been provided in several digital platforms. This is also supported by the results of questionnaires that have been filled out by teachers, where the questionnaire given is an open questionnaire, this is to find out the answers to teacher perceptions in detail. In addition, based on observations, it shows that the elementary school that is the location of this research has adopted the independent curriculum as the basis for the learning process.

The results of the questionnaires that have been filled in by teachers explain how important the use of learning media is. "Learning media is very important because it helps in the learning process. learning using media and will not be felt when seeing the results" G1. "I think learning media is quite important, because with the media, learning becomes more interesting for students so that it can support children's success" G2. The answers from the four teachers are almost the same, namely that learning media are important because they attract students' enthusiasm for learning, can facilitate understanding of the material, and make learning less boring. Learning media provides many benefits including being able to clarify the delivery of material, improve student learning outcomes and motivation, facilitate interaction between teachers and students directly, and make learning more innovative and creative so that media is very important to be used by teachers (Wulandari et al., 2023).

Another finding is that learning media has been used by teachers, both conventional and digital, this is explained in the questionnaire answers. "I often use conventional or digital learning media when learning because children can more easily, especially when practicing by using the media directly" G3. "Almost every day I use learning media but not digital, considering I teach grade 1, so I really need the media in the learning process" G4. Other teachers revealed that they also often use learning media, but the use of digital-based learning media has not been fully implemented by them. Technology-based learning media is still considered difficult to use, because teachers need to adjust to understand it, especially teachers in 2000 who are still technology illiterate (Hulu, 2023).

Although teachers have not maximized the use of digital learning media and still tend to use conventional or concrete media, teachers already understand what digital learning media is. "Digital-based learning media is learning media that uses a tool to be used in the learning process with non-physical forms such as the internet" G5. "Digital-based learning media is learning media that utilizes several technologies such as laptops, LCD projectors, cell phones, and can also be in the form of social media, websites, and others" G6. Other teachers have the same answer that digital learning media is media that uses technology and informatics and can be in the form of audio visual, and online or using the internet. Digital learning media utilizes the use of technology and

informatics (Khairunnisa & Ilmi, 2020).

The results of the study also found that some teachers did not know learning media with the web such as quizizz, wordwall, educaplay. This can be seen from the results of the study which show that 4 teachers have used quizizz. "Yes, sister I have used it for online learning and as a quiz for homework" G2, while for the rest, namely 2 teachers know quizizz but have not been applied in learning. This can be seen from the questionnaire results that "I know quizizz but have never tried it on students because of several considerations" G5. For wordwall, only 2 teachers have applied it, in addition, 4 teachers answered that "Yes, I know, but I have never applied it to students". On the other hand, the educaplay web, no teacher knows about it, this can be seen from the results of the teacher's answers, all of whom answered that they did not know about the web.

This can be a consideration for innovation in the use of digital learning media, because basically some websites are not yet known by teachers, so they can be used as a reference source for innovating digital learning media. Some of these websites are already known by teachers, they just need to apply them to learning, especially in the midst of technological sophistication that is all digital. Teachers have also realized the importance of using learning media to assist learning activities. The three websites can be used as digital learning media innovations by teachers. Digital learning media has several advantages, including making it easier for teachers to deliver material to students, making learning more innovative, increasing student activeness, can make learning more meaningful and willing because it can keep up with the times (Widianto, 2021).

According to the teacher, digital learning media innovation is also important to be implemented, this is stated by the teacher,

namely "Learning media innovation is important because considering digital learning is related to technology. where technology is developing and innovating every time" G2. "Innovation is quite important because it follows the times and must enter the age of children" G1. "Digital learning media innovation is very important because in this day and age children are more interested in using digital media" G4. "Digital learning media innovation is very much needed because children can maximize the use of gadgets more wisely and usefully" G3. Another teacher's opinion that innovation is considered important because teaching practices must be developed again because students already understand digital technology. With these teacher perceptions, it means that teachers have supported and accepted the existence of digital learning media innovations. Teachers' perceptions that accept can advance learning practices in a better direction.

Teachers' perceptions that accept the existence of digital learning media innovations are also supported by the steps that teachers will take. The results of the study show that teachers will learn to adjust the procedures for making digital learning media and in the future will be applied in learning with students. The answer from the teacher's perspective regarding the steps that will be taken to innovate digital learning media is "the steps I will take are developing digital learning media quizizz, wordwall, and educaplay" G1. Another answer "I will maximize the use of digital learning media because digital media is currently very complete so that it can support learning activities. In addition, varied learning media makes students enthusiastic in learning activities" G5. Another teacher also explained that "the steps I will take are more frequent so that children can use their cell phones for learning not just playing" G2. Not only that, there are also those who already know the existence of educational games, this is presented by the teacher as follows: "I will start informing that for example on the cell phone it can access many things including educational games, so when children play cell phones it is not just playing. So it gives more understanding to children" G6. 2 teachers conveyed the same steps, namely that they would study digital learning media and implement it for students during the learning process.

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The steps that teachers will take prove that they really accept the existence of digital learning media innovations. Teachers' perceptions of solutions regarding digital learning media make their thinking more open and accepting of technological advances, and can collaborate digital technology in learning. in fact, some teachers have already innovated digital learning media such as quizizzes. So that the teacher's perception of this digital learning media innovation is positively accepted and will be applied in future learning, but must first adjust to understand how to use it.

4. Conclusion and Suggestion

It can be concluded that the teacher's perception of digital learning media innovation is accepted by the teacher. The utilisation of digital learning media is a valuable tool for educators in the delivery of instructional content to learners. This is particularly pertinent given the current curriculum, which is an independent one. The integration of digital learning media can facilitate the adaptation to the contemporary technological landscape, where technology is a significant priority, and the incorporation of media can align with the needs and interests of students. This aligns with the principles of independent learning in the implementation of an independent curriculum. Furthermore, teachers' perceptions regarding the necessary steps to be taken can facilitate the development of the educational

process, as they become more open and innovative. In terms of the steps that teachers will take in learning media innovation, it is proposed that they will begin by informing their students about the digital media that can be used for learning purposes.

This teacher's perception can subsequently serve as a point of reference for future research and assist policymakers in taking steps to enhance education. It can also inform the development of training programs for teachers on the effective use of digital learning media. Furthermore, teachers' perceptions can facilitate a more open mindset regarding the significance of digital learning media innovation in the implementation of an independent curriculum.

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