A Case Study of Teachers' Use of Digital Learning Media in Lampung Kindergarten

Presented by Rani Nibras Idham

Abstract

This study aims to analyze teachers' experiences, challenges, ways to overcome challenges, and views regarding the use of digital-based learning media in Lampung kindergartens. teachers in the use of digital technology-based learning media in teaching and learning spaces in kindergartens (TK) in Lampung region. Adopting digital media can improve the effectiveness and quality of learning. This type of research uses case studies and qualitative research methods. This research was conducted by taking research subjects in 4 kindergartens in Lampung to explore the impact on children's cognitive and teachers' constraints in introducing digital technology-based learning media. The data collection techniques used were observation, interviews with teachers, and document analysis. The results showed that digital technology-based learning media in kindergartens such as the use of interactive applications, educational videos, and learning software can increase learning motivation and facilitate children's understanding of more complex concepts. However, this study also found some obstacles such as limited technological infrastructure, lack of teacher training, and resistance to changing traditional learning methods. The study concludes that despite the challenges, the integration of digital technology-based learning media has great potential to improve the quality of education in kindergarten. Especially if supported by adequate teacher training and the provision of adequate technology facilities.

Presented by Rani Nibras Idham

Introduction

The aspect of education that must be improved is the quality of learning through the use of media and technology called digital learning (digital learning) (Arikarani & Amirudin, 2021). This is because the development of the world this century or also known as the 21st century is known for the use of information and communication technology to support one of them is the learning process (Azim, 2024). Therefore, digital learning can facilitate more, wide, and varied learners, as well as the establishment of good interactions between teachers and students to support digital learning media such as computers, videos, faxes by accessing via the web or digital and applications (Munir 2017).

Presented by Rani Nibras Idham

Introduction

Therefore it is important for early childhood education (PAUD) to be introduced to science and technology (IPTEK) in order to create a generation that can face the challenges of the globalization era, one of which is free competition. Therefore, PAUD teachers must improve their ability to utilize digital learning to be able to face the current generation of students and beyond (Maulana & Nurhafizah, 2019). Examples of simple web programming for children are Code.org, Scratch, The Little Programmer, and Tynker can train children's thinking logically and structured to solve problems and children do not feel bored because they are displayed according to the age of the child. (Mumtaziah & Majid, 2023).

Presented by Rani Nibras Idham

Introduction

This digital learning media provides a challenge for teachers to adapt so that teachers can motivate, guide, and design learning. One way for teachers to adapt to learning media is by improving quality, professionalism, and a positive attitude in teaching and learning activities so that teachers are able to solve problems from the world of education by following the times (Salsabila et al., 2020). In line with the opinion of Maulana & Nurhafizah (2019), the importance of technology mastery skills for teachers in order to present more varied learning, such as teachers being able to facilitate modules according to student needs and being able to facilitate subject matter in digital form that can be accessed by students at any time (Maulana & Nurhafizah, 2019). However, there are still many teachers who are not able or accustomed to digital-based learning,

Presented by Rani Nibras Idham

Research Results

01

the results of research Said, et al (2023) that digital learning media provides opportunities for children to interact with digital learning media such as simulations, online learning platforms, interactive videos, and educational games to increase learner activeness in learning activities, flexibility, effectiveness, and can facilitate project-based learning.

02

results by Asmawati (2021) show that digital learning media through gadgets can train children in drawing, coloring, reciting, and counting.

03

the results of research (Rahma et al, 2023) in Jambi city that the implementation of learning using digital-based learning media in Jambi is relatively poor. Seen during interviews, teachers prefer to use conventional learning models, the low use of learning media by teachers because teachers find it more difficult and complicated, digital facilities are still limited (seen from teachers who often struggle in using digital-based learning), and lack of support from the government such as free hands-on training. From the above problems, researchers are interested in conducting research to analyze teachers in using digital technology-based learning media in the learning space.

Methodology

This research uses a qualitative approach and type of research is a case study. This approach was chosen by the researcher to see the experiences, challenges, ways to overcome challenges, and views of the teachers regarding the use of digital-based learning media in Lampung Kindergarten. This research was conducted by taking research subjects in 4 kindergartens in Lampung to explore the impact on children's cognitive and social development and teachers' constraints in introducing digital technology-based learning media. This research subject retrieval technique uses purposive sampling, based on the teacher's experience in using technology, educational background, and duration in the learning process. The data collection technique used observation, interviews with teachers, and document analysis. Data analysis techniques through data reduction and conclusion drawing stages. This research was conducted from August 7 to October 17 2024.

Presented by Rani Nibras Idham

Result

·Kindergarten A

This is a private kindergarten in South Lampung that was established in 2018. There are 4 teachers with degrees in early childhood education, agriculture and administration. The total number of students is 20 with 13 boys and 7 girls. This kindergarten has implemented digital-based learning since 2023. The use of media is a computer, cellphone, and projector for 20 minutes. Applications that are often used by teachers are google, youtube, pinterest. The application of digital-based learning media is certainly not done every time, but when the teacher wants to show visual objects, animals and others to children. The application of digital-based learning has been implemented for 1 year (2023). When the learning takes place, the teacher has an obstacle, namely that children are very enthusiastic about this learning. This is because children feel the media is very interesting starting from pictures, sounds, and colors. In addition, the teachers also present to the children well.

Presented by Rani Nibras Idham

Result

·Kindergarten B

This kindergarten is a private kindergarten in East Lampung which was established in 2015. The number of teachers is 5 people who are teachers with PAUD and high school graduates. The total number of learners is 35 children with 11 boys and 24 girls. The use of media is a laptop for 10 minutes. The application that is often used by teachers is YouTube. The application is used by teachers to introduce Indonesian culture to children and learning animations. The implementation of digital-based learning has been implemented for 6 months (2024). When the learning takes place, the teacher has an obstacle, namely children who are less enthusiastic about this learning media and children only focus on laptops not on what is being conveyed.

Presented by Rani Nibras Idham

Result

·Kindergarten C
This is a private kindergarten in Central Lampung that was established in 1991. There are 7 teachers with bachelor's degrees in early childhood education and high school. The total number of students is 65 with 33 boys and 32 girls. The use of media is a laptop that is displayed using a projector for 30 minutes. The application that is often used by teachers is YouTube. The application is used by teachers to display learning animations, such as introducing plants, animals, vehicles, etc. with the intention that children understand the shape, color, habitat, etc. to children. The implementation of digital-based learning has been implemented for 6 years (2024). When the learning takes place, the teacher has an obstacle, namely in the early minutes (3-4 minutes) of learning, children focus on the learning. However, when entering the 5th minute onwards, children start to get bored and run here and there. Teachers have started to look for other improvements such as looking for colors, pictures, sounds, and others that might interest children, but still children do not feel enthusiastic. So the teachers prefer manual learning rather than using this digital-based learning media.

Presented by Rani Nibras Idham

Result

·Kindergarten D
This is a private kindergarten in Central Lampung that was established in 2009. The number of teachers is 6 people who are teachers with PAUD, PGSD, and high school graduates. The total number of students is 88 with 46 boys and 42 girls. The use of media is a laptop and cellphone for 20 minutes. The application that is often used by teachers is YouTube. The application is used by teachers to display learning animations, such as introducing plants, animals, vehicles, etc. with the intention that children understand the shape, color, habitat, etc. to children in accordance with learning objectives. The implementation of digital-based learning has been implemented for 1 year (2023). When the learning takes place, the teacher has an obstacle, namely children cannot focus on learning.

Presented by Rani Nibras Idham

Conclusion

The benefits of technology for children are very important, namely increasing learning motivation and facilitating understanding of more complex concepts to children. However, this research has obstacles such as children who are less enthusiastic about learning and children who are accustomed to real media. Teachers have sought solutions such as combining digital media with real objects, finding interesting videos, and adding interesting visuals. There are some children who become enthusiastic and some children who still remain unenthusiastic. It is necessary to develop teachers such as conducting training and providing better facilities so that children's interest in digital and learning is better and more insightful.

Presented by Rani Nibras Idham