DIGITAL LITERACY IN EARLY CHILDREN THROUGH PICTURED STORY BOOKS

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Article Info

Abstract

Literacy is a basic skill that children need to have. This study aims to describe the introduction of literacy using digital picture storybooks for early childhood. The problems in this study show that most parents do not supervise the use of children's gadgets. Children are given gadgets so that children look calm and do not cry. So the direction given is still very minimal, especially in the use of digital storybook media. This study uses a qualitative method with a descriptive approach. The data collection techniques and tools used were observation, interviews, and documentation. Researchers used the Miles and Huberman data analysis technique. After the data was collected, the data was simplified to obtain the necessary information. Furthermore, the data were presented and organized to draw a conclusion. The book used is a digital picture storybook entitled "Tingkah Pola si Kera" which consists of text images and audio that work together to provide a complete picture of the story. The results of the analysis show that through the use of digital storybooks can provide an interesting introduction to children's digital literacy.

Abstrak

Literasi merupakan kemampuan dasar yang perlu dimiliki oleh anak. Tujuan penelitian ini adalah untuk mendeskripsikan pengenalan literasi menggunakan buku cerita bergambar digital bagi anak usia dini. Permasalahan dalam penelitian ini menunjukan bahwa kebanyakan orangtua tidak mengawasi penggunaan gadget anak. Anak diberikan gadget agar anak terlihat tenang dan tidak menangis. Sehingga arahan yang diberikan masih sangat minim khususnya pada penggunaan media buku cerita digital. Penelitian ini menggunakan metode kualitatif dengan pendekatan deskriptif. Teknik dan alat pengumpulan data yang digunakan adalah observasi, wawancara, dan dokumentasi. Peneliti menggunakan teknik analisis data Miles dan Huberman. Setelah data dikumpulkan, data disederhanakan untuk mendapatkan informasi yang diperlukan. Selanjutnya, data disajikan dan disusun untuk penarikan kesimpulan. Buku yang digunakan merupakan buku cerita bergambar digital yang berjudul "Tingkah Pola si Kera" yang terdiri atas teks dan gambar serta audio yang bekerja sama untuk memberikan gambaran yang lengkap tentang cerita. Hasil analisis penelitian ini menunjukan bahwa melalui penggunaan buku cerita bergambar digital dapat memberikan pengenalan yang menarik terhadap literasi digital anak.

Kata Kunci : **Literasi digital**, **Buku cerita bergambar**, **Anak**

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Introduction

The focus of the industrial revolution 4.0 is technological advancement. Technology is inseparable from everyday life because it develops rapidly and has an impact on society. Technology is a challenge in itself, especially in the world of education, which changes learning methods and processes. With today's technological advances, children at an early age cannot avoid using gadgets (Rowe & Miller: 2016). The results of the National Socio-Economic Survey (SUSENAS) released in March 2022 by the Central Bureau of Statistics (BPS) show that almost half of early childhood in Indonesia can already use gadgets and access the internet to interact online (Katadata: 2022). This fact shows that parents not only have to help their children use the gadgets properly, but also have to supervise their children when the gadgets are used. In addition, other research shows that parents who can help their children use gadgets properly will have an impact especially in terms of literacy development (Hillman & Marshall, 2009). Therefore, it is very important to give children the opportunity to explore gadgets.

Children's use of digital media in everyday life is difficult to avoid, so parents need to monitor it. Technology is not a frightening specter and is only seen from a negative aspect, but there are still many benefits that can be taken from using digital media. Research data conducted by (Anggreani, 2022) on 121 PAUD in Indonesia, the most popular learning platform is WhatsApp with 98 users (74.8%), video calls with 11 users (8.4%), YouTube with 9 users (6.9 %), zoom 8 users (6.1%), and Google Classroom with 2 users (1.5%), and email, Facebook, and Telegram each have 1 user (0.8%). This suggests that parents, children and teachers should use digital media for this purpose and ensure that children can filter positive and negative content for themselves so digital literacy skills are necessary. KOMINFO RI states that there are 4 pillars of digital literacy, namely:

1. digital skills: understand hardware and software as well as digital operating systems.
2. digital culture: building national and cultural insight in the digital space
3. digital ethics: adapting to rational thinking and etiquette
4. digital safety: increasing awareness of personal data protection & security.

While children's literacy is divided into 6 namely literacy in reading and writing, numeracy, science, digital, financial, and culture & citizenship. Based on the philosophical concept of PAUD, the scope of developing children's media literacy can be divided into three aspects: (1) parental assistance, (2) teaching critical thinking when using media, and (3) introducing various types of media (Silawati et al., 2018). According to Palupi, Y. and Wates, P.P.I.P in (Munawar et al., 2019) parents should do several things to supervise children's use of digital media: (1)

increase children's understanding and skills about digital media, (2) ensure that internet coverage at home remains stable so that parents can supervise when children access the internet, and (3) regulate the duration and time of children's digital media use (4) inform children about content that can harm children, (5) strictly prohibit content that children should not access, and (6) establish good communication with children.

Drawing, listening, singing, and reading stories are some examples of actions that can help with digital media utilization (Hidayatullah et al., 2021); (Parry & Taylor, 2021). These activities will influence children's literacy skills (Eutsler et al., 2020). Digital literacy is the ability to use knowledge through the use of digital media, communication tools, or networks to find, evaluate, use, and use information wisely, intelligently, appropriately, and by law to build communication and interaction in everyday life (Nasrullah, 2017). According to Tour in (Harjono, 2019), digital literacy is the ability to use and produce digital media, process and utilize various types of information, and create and share content on social media. Thus, digital literacy skills cover a wide range of processes, from searching and selecting information to creating and sharing content. Digital literacy in early childhood is defined as the incorporation of physical, cognitive, socio-emotional, and socio-cultural elements to enhance the positive use of technology while accounting for and considering the specific developmental needs of young children, such as fine motor skills, personal and social development, executive functioning skills and emerging literacy (Heider & Jalongo, 2015).

A person's success in instilling digital literacy in children is greatly influenced by the environment around the child. According to Mustofa and Budiwati (2019), children's digital literacy process consists of several stages: digital literacy in the family, digital literacy at school, and digital literacy in the community. Of these three stages, family literacy is where children spend the most time, and family is the most important place to get an education. Digital literacy can start from the family environment. Digital literacy in the family prioritizes improving family members' knowledge of the basics of information and communication technology. In addition, the ability to use digital media, communication tools, or networks in a healthy, wise, smart, careful, fast, precise, and law-abiding manner. This is so that no child gets into legal trouble just because they are wrong in using social media. The Academy of Pediatrics (AAP) does not recommend digital media use in children less than two years old. At that time, children are experiencing the development of cognitive, language, sensory-motor, and emotional abilities. As for children older than two years, the AAP recommends

no more than two hours of screen time each day. This is based on the more time spent online, the greater the chance of children being exposed to material that is not age-appropriate. If parents do not provide boundaries and direction, it will lead to internet addiction. Therefore, parents need to encourage literacy through book-based play and learning activities.

Experts argue that picture storybooks are a type of text in which written and visual elements complement each other to construct a story or meaning (Anstey & Bull, 2000). According to (Kotaman & Balcı, 2017), most children own picture storybooks. Picture storybooks are chosen by the majority of parents to read with their children. Picture storybooks consist of more pictures and less text (Eutsler et al., 2020);(Biddle et al., 2014). (Reed et al., 2015) stated that telling stories using picture storybooks for ages 4.5-6 years can stimulate children's abilities. Picture storybooks are book-shaped stories, there are pictures as representatives of interrelated stories and there is also writing that can represent the story displayed by the picture. Through image, media can strengthen memory and facilitate understanding in understanding the contents of the story. (Ratnasari & Zubaidah, 2019) by using picture storybooks, storytelling activities become more fun, interesting, and contextual.

The advent of technology has allowed picture storybooks to enter the digital world. This development or transition from print to digital can be divided into four categories, according to (Yokota & Teale, 2014). First, the printed version of picture storybooks must now be scanned and accessed digitally. One example is when the International Children's Digital Library created a free digital library in 2002. This library offers picture storybooks that are similar to the printed version but transferred to the digital version. All elements of the book, including the design, font size, and shape, are left unchanged. The second is to turn picture storybooks into movies. For example, creating an audio-readable or animated version of an existing picture storybook. This format contains the added element of audio to give children a better experience of reading the story. In addition, this read-aloud version will also provide a video where the camera is pointed toward the images and text being read. Then comes the third form of adding digital features to picture storybooks that can be accessed online. Examples include adding an audio feature that allows readers to listen to the book being read automatically, changing the typeface and font size to make it more suitable for the digital world, adding musical elements as a background, and adding a "hotspot" feature where the illustration elements can respond by emitting audio or moving when clicked using the cursor. The fourth type is the addition of interaction features. For example, nowadays many e-books and digital book applications include game-like features, such as puzzles, or asking readers to color pictures in

the middle of the story. (Sargeant, 2015) also agrees that modern digital books can contain text, images, animations, videos, music, audio effects, recorded audio narration, hyperlinked material, language features or dictionaries, and various other types of interactive features. In addition, it enriches the reader's experience with the book as it brings together all storytelling media, including oral, print, and viewing storytelling traditions (Madej, 2003).

(Sargeant, 2015) states that e-books are digital replicas of printed books that contain written text and images and have a low level of interactivity, while book apps present a mix of written text, visuals, audio, games, and various other types of interactive features. Due to the high level of interactivity offered by digital Digital literacy, Picture storybooks, Children s, especially book apps, readers are willing to be more active and have a user designation. To improve children's digital literacy skills, digital storybooks are packed with text, images, audio, and videos. This makes digital storybooks more interesting and able to provide optimal representation for readers, especially for early childhood.

The results of the pre-survey conducted by the researcher show that most parents do not supervise their children's gadget use. Children are given gadgets so that children look calm and do not cry. So the direction given is still very minimal, especially in the use of digital storybook media. The applications used are still limited and mostly use YouTube applications in the form of shows or games. This explanation is in line with Day & Qodariah (2018) who argue that children usually use digital gadgets to play games, sing, dance, and watch cartoons for children. If this habit continues without good digital literacy, it will certainly harm children's emotions in the future. This research focuses on the introduction of children's digital literacy through picture storybooks. The purpose of this study is to describe the introduction of digital literacy using digital picture storybooks for early childhood.

Method

This research uses a qualitative method with a descriptive approach, a problem-solving method, in which the state of the subject or object of research is described and illustrated. This research describes the introduction of digital literacy through a digital picture storybook entitled "Tingkah Pola si Kera". This research was conducted on children aged 5-6 years with the subject of 20 children in Metro Lampung in the Lenteraku community.

The data collection techniques and tools used consisted of observation, interview, and documentation. a) Observation, using the storybook "Tingkah Pola si Kera," the steps of sharing digital literacy were observed and preliminary information

was gathered using the observation guide. This observation guide aims to assess the digital literacy of children between the ages of five and six. Field notes, and written records of what is observed and done in the field, are also included in the observation guide, which contains a list of observations made directly to the research data source. b) Interview is a set of questions created by the researcher to serve as a guide for conducting interviews regarding children's digital literacy issues through children's digital storybooks makes up the interview approach, a data-gathering tool. The purpose of the interview is to learn more about how well kids comprehend digital literacy. The parents are the subject of the interview. c) Documentation, archival records and photos of research-related activities make up documentation, a method for gathering data. In this instance, picture storybooks and photographs of the activities are used as documentation.

After the data was obtained, researchers used the Miles and Huberman data analysis method, which included collecting data on the introduction of digital literacy for early childhood. After the data was collected, the data was simplified to obtain the necessary information. Next, the data was properly presented and organized to enable conclusions to be drawn and actions to be taken.

Result and Discussion

Picture storybooks combine narrative stories and visual illustrations. In this study, the book used is a digital picture storybook entitled "Tingkah Pola si Kera" which consists of text & images and audio that work together to provide a complete picture of the story.

Figure 1: Digital storybook of the monkey's pattern behavior

Attractive illustrations enhance children's imagination and facilitate understanding of the story. The book features not only stories with words but also beautiful and detailed pictures and audio. With a harmonious blend of text and images, this book helps readers of different ages, especially children, become better at reading and understanding stories.

Figure 2: Stories that have moral values that are easy to understand.

During storytelling activities, choosing words that are easy for children to understand is important. Internet access and parental involvement also have a good impact on children. To make it easier for children and parents to access storybooks, choosing an application will make it easier for children. In this research, one of the applications used is the bunny stories application. Children began to be able to access gadgets to read interesting storybooks and recognize digital literacy as an asset in future learning. In line with (Sugiyo et al., 2018) also wrote that the role of parents is needed by children in using digital gadgets, parents must educate and direct children to use these gadgets positively, without suspecting or forbidding them. The steps taken in this research are; a) invite children and parents through the Lenteraku community who are in the age range of 5-6 years, b) Parents are given education in using gadgets so that children can be directed in more positive ways and develop children's abilities, c) children are introduced to accessing gadgets using the story "Tingkah Pola si Kera" as children's digital literacy material, d) children can follow the directions given.

Upon completing the various research stages, an assessment is conducted through observation, interviews, and document analysis, focusing on indicators of child literacy. Following this, interviews with parents are carried out to gain insights into how children utilize gadgets in their daily lives. After educating parents on appropriate gadget usage, it becomes crucial for them to establish clear boundaries. This balance allows children to access gadgets while also instilling important values during their usage. Picture storybooks present a diverse range of narratives, facilitating children's engagement with gadgets, as each story conveys easily understandable values. The findings of this research demonstrate that this approach positively influences children's development.

Several other studies show that children today tend to be close to technological developments. Technology affects the way humans think and behave. Children should be engaged in critical reflection on technology as part of the education process. This is as important as digital literacy for adults and children

(Gillen et al., 2018); (Pebriana, 2017); (Silvana & Darmawan, 2018). In the golden age of children, learning through digital learning can be a medium for children's language development and children's literacy development (Wahid et al., 2023). Through stimulus using digital comics, illustrated storybooks, or illustrated digital fairy tales, Big Book, can improve children's digital literacy. (Rihlah et al., 2022) explained that this media will be a stimulus that can be done by parents and educators as digital literacy for children for their language development. As stated by Aulinda (2020) digital storybooks and fairy tales can attract children's interest by presenting characters as characters that children like, so that children become enthusiastic about reading as a basic literacy stage. Based on the results of research analysis and supported by previous research, it shows that the use of digital storybooks in which there are images, writing, and audio can provide an interesting introduction to children's digital literacy.

Conclusion

The introduction of digital-based picture storybooks has a good impact on the introduction of digital literacy in children. Children can access digital storybooks easily, of course, under the supervision of parents. It is important for parents to understand that technological advances do not always have a negative impact on children so that the introduction of digital literacy can run well. The use of digital picture storybooks is one of the media that can help in the introduction of literacy in early childhood.

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