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Stepping Together with Digital Technology in Merdeka Belajar: Children's Animation Adventure in Drawing at Al Azhar Rawamangun Kindergarten through Project Based Learning-based Animated Drawings application

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Abstract
This study aims to explore and analyze the implementation of Animated Drawings (AD) method based on Project-Based Learning (PBL) in differentiation learning at Al Azhar Rawamangun Kindergarten. This method aims to improve children's engagement and learning outcomes in drawing and understanding concepts through animation. This research uses a qualitative approach with a case study research design. Learning through AD focuses on developing creativity, social skills and the application of digital technology at an early age. During implementation, students are involved in animation projects, allowing them to bring their ideas, interests and creativity into their daily learning. A differentiation approach is used to accommodate students' individual learning styles. The results show that the implementation of PBL-based AD method is effective in improving students' learning interest, creativity, and comprehension ability. Students show high enthusiasm, are actively involved in collaboration, and gain deeper understanding through hands-on experience in creating animations. The importance of the teacher's role as a facilitator and supervisor of student activities in this learning process is a key aspect. The findings of this study provide insights for the development of more interactive project-based learning methods and support the use of digital technology at the early childhood education level.

Keywords: *Animated Drawing, Child Animation, Project Based Learning*

INTRODUCTION

Early childhood education (ECE) is a critical phase in shaping character and stimulating children's creativity (Ferdian Utama, 2020). During this period, children's brains experience rapid growth and development, allowing for high absorption and processing of information. This period is a very important time to form positive values, attitudes, and behaviors (Kartikawati, Roni, & Purwanti, 2022). The importance of PAUD in shaping children's character is related to the golden age of the brain. Along with the window of opportunity, PAUD provides an opportunity to introduce basic concepts of ethics, morals, and positive values to children (Ramdhani & Dea, 2021).

Teachers and a supportive educational environment can shape children's character from an early age. In addition to character building, PAUD also has a significant role in developing children's creativity. A well-designed ECD environment can provide sensory and cognitive stimulation, supporting the development of children's creativity through various activities such as art, games, and experiments (Baniyah, Jannah, & Utama, 2023). Through these activities, children are encouraged to ask questions, try new things, and think creatively, which is the basis of future innovation. The socialization aspect is also an important focus in ECD. Children can learn to interact with peers and teachers, forming the basis of social and interpersonal skills that are essential in everyday life. In addition, ECD helps children recognize and manage their emotions, contributing to the development of independence and emotional well-being (Rochanah, 2021).

During the ECD period, children are also given the opportunity to build the foundations of literacy and numeracy. This process involves developing logical and critical thinking skills, which are an important foundation for further learning in school (Syifauzakia, 2021). By optimizing this important period, ECD can provide a solid foundation for the development of children's positive character and creativity. This period is a golden opportunity to form the foundation of children's development that will impact their entire lives. One important aspect of early childhood education is the development of art skills, including the ability to draw (Maftutah, Jannah, & Utama, 2021). Drawing is not only an entertainment activity, but also a means to develop fine motor skills, understand shapes, and express ideas. One of the main benefits of drawing is the development of fine motor skills. When children grasp a pencil or crayon, they are engaging in fine hand movements and eye-hand coordination. This process helps strengthen small muscles and improve fine motor control, which in turn can support future writing ability (Hanafiah et al., 2023).

In addition, drawing activities also allow children to understand shapes. As they try to draw objects or visualize their ideas on paper, children learn to recognize and reproduce basic shapes. This provides an important foundation for understanding geometric and visual concepts later in life (Kirby, 2020). Drawing also plays a role in helping children express their ideas and feelings. The activity becomes a platform where children can express their creativity and imagination. The process of putting ideas into drawings helps develop creative thinking skills, spark imagination, and train problem-solving skills (Utama, 2017). In addition to individual development, drawing activities can also improve children's verbal communication. When they explain or narrate what they draw, they develop verbal and language skills. This is important in building good speaking skills and facilitating communication with others (Suryawan, Ariputra, & Sindu, 2022).

By viewing drawing as more than just entertainment, we can appreciate its important role in shaping children's diverse skills. By giving children the opportunity to draw regularly, we can support their fine motor development, understanding of shapes, expression of ideas, and overall communication skills. One interesting innovation is the use of Project Based Learning's Animated Drawings app. The purpose of this application is to teach children about art through moving images. Animated Drawings is not only a means of entertainment, but also an effective tool in helping children's development in various aspects. The main reason for using Animated Drawings involves developing children's fine motor skills. Through the use

of touchscreen devices, children can practice their eye and hand coordination in a fun and interactive way. Animation as a medium of expression provides an opportunity for children to portray their ideas and feelings in a dynamic way, making the learning process more enjoyable.

The Project Based Learning approach to using Animated Drawings gives children the freedom to develop ideas, plan and create their own animations. This process not only stimulates creative and critical thinking but also teaches them to work independently or in groups. In addition, children are introduced to the basic concepts of digital technology early on, preparing them for the demands of modern life. In addition to the individual benefits, Animated Drawings and the Project Based Learning approach also encourage collaboration and communication between children. They learn to work together, share ideas, and respond to others' ideas. Thus, the project not only develops children's artistic skills but also their social and communicative aspects (Rosmiati, Kurniawan, Panindias, & Prilosadoso, 2020). By combining drawing activities through Animated Drawings with the Project Based Learning approach, early childhood education can become more interesting, interactive, and relevant to the developmental needs of children in this digital era. This approach not only provides a strong artistic foundation, but also teaches skills and values that will bring long-term benefits to children's holistic development.

At TK Al Azhar Rawamangun, motor skill development and art, particularly drawing, are integrated in the curriculum as an important part of the children's learning experience. In today's digital era, creative and innovative approaches are needed to increase children's attraction to learning. One method that can be adopted is Project-Based Learning (PBL), where children learn through projects or activities relevant to their daily lives. This research tries to explore the use of Animated Drawings application and explore the potential of using Animated Drawings application as a project-based learning tool in developing children's drawing skills at Al Azhar Rawamangun Kindergarten. Animated Drawings is an application that allows children to create moving pictures with various animation elements, making the drawing experience more interactive and fun. By combining Animated Drawings with the PBL approach, it is expected that children will not only learn to draw technically, but also develop creativity, problem solving and collaboration skills. This study aims to explore the effectiveness of using the PBL-based Animated Drawings application in improving children's drawing skills at Al Azhar Rawamangun Kindergarten, as well as identifying its impact on children's learning motivation and creativity development in their animation adventure.

METHODOLOGY

This research used a qualitative approach with a case study design, allowing the researcher to detail and deeply understand children's experiences in drawing through the Animated Drawings application at Al Azhar Rawamangun Kindergarten. The research participants consist of children aged 4-6 years old as well as teachers involved in activities using the application. Data collection will be done through observation, in-depth interviews, and documentation of children's artwork (Murdiyanto, 2020). The collected data will be analyzed using a thematic analysis approach, with data triangulation from various sources to increase the validity of the findings. In addition, the principles of research ethics will be upheld, including

permission and informed consent from relevant parties, as well as maintaining the privacy and confidentiality of participants. This research is designed to provide a holistic understanding of the impact of using the Project-Based Learning-based Animated Drawings application on children's drawing skills, learning motivation, and creativity development at Al Azhar Rawamangun Kindergarten.

RESULTS AND DISCUSSION

Amimated Drawings in Learning

Animated Drawings is an app that encapsulates the elements of animation with the learning process. Created specifically for children, it has a child-friendly and easy-to-use interface, creating an interactive and fun learning experience. The interactive learning process is expected to increase children's engagement and interest in the learning material. One of the main advantages of Animated Drawings is its ability to stimulate children's creativity and expression. The app gives them the freedom to express their creative ideas through moving pictures that they can create. By providing various animation element options, Animated Drawings supports the development of children's artistic skills and creative thinking. Aside from being a tool to develop creativity, Animated Drawings can also be integrated in a project-based learning approach. In this context, children can create animations as part of their learning projects. This approach not only improves technical skills, but also teaches concepts such as teamwork, project planning, and problem solving (Tavares, Vieira, & Pedro, 2021).

It is also important to note that Animated Drawings supports children's fine motor development. Through the process of drawing and composing animations, they can improve fine motor skills, which is an important foundation for the development of handwriting and other motor skills. The app also opens up opportunities to integrate the use of technology in children's learning (Hewes, Lirette, Makovichuk, & Mccarron, 2019). By bringing together art and technology, Animated Drawings provides a modern learning experience, helping children to better understand and appreciate the role of technology in everyday life. The use of Animated Drawings in learning not only enriches children's learning experience but also provides an innovative and engaging approach to teaching certain concepts. By combining elements of art and technology, this app can be an effective tool in enhancing children's creativity, drawing skills and interest in learning.

Drawing through the ABLE Method for Early Childhood

Animated Drawings (AD) is a very interesting method for many children as it involves them actively in the creation of animations, which not only sparks their interest but also taps into their creative potential. Thus, learning becomes more fun and meaningful. In the context of differentiated learning through the ABLE (Animated Drawings Based Learning) method, there are several important points that can be highlighted. Project-based learning aims to involve children directly in the learning process. Learning resources can be planned together, such as firefighting outings, storybooks of children's choice, e-books, miniature media, the internet, and guest teachers. This approach creates a more contextualized and relevant learning experience for children. Recognition that drawing is a work of art that functions as a representation of objects with details (Sastradika, Iskandar, Syefrinando, & Shulman,

2021). Thus, engaging children in drawing activities is not only an entertainment activity, but also a way to hone their representational and artistic skills. Differentiation learning using the Animated Drawings method allows children to express themselves and their creativity through drawing, which is then integrated with animation creation. This approach provides space for children to develop their artistic skills while exploring the elements of animation, enriching their learning experience.

The use of Animated Drawings (AD) is designed for interactive and fun learning content. It not only stimulates young children to express their ideas in different visual forms, but also improves their communication skills. Through the animations they create, children can convey messages and ideas creatively, enhancing both verbal and non-verbal aspects of communication. Thus, the use of Animated Drawings in learning not only brings diversity in teaching methods, but also supports the development of children's creative, communicative and representational skills (Lestari, Suranata, & Wira Bayu, 2022). In the practice of differentiated learning through the ABLE (Animated Drawings Based Learning) method, the teacher's role is central and multifaceted. In the planning stage, teachers play a role in analyzing the needs, interests and abilities of young children through diagnostic assessment. The identification of young children who require a special approach allows for the customization of drawing materials according to the needs and abilities of each young child. Inclusive lesson plans are designed using animated applications that are interesting and easily understood by all young children.

In the implementation of learning, the teacher acts as a facilitator who designs drawing learning according to the learning style of early childhood. The use of trigger sentences, discussions, and providing opportunities for exploration according to early childhood interests are integral to stimulating interest in learning. Special preparation for various learning styles, such as auditory, kinesthetic and visual, provides space for diverse and in-depth learning experiences. Teachers' mastery of animation application tools, especially Animated Drawings (AD), is also an important aspect. When teachers have a deep understanding of animation tools, they can effectively guide young children, provide clear instructions and support in overcoming technical barriers that may arise during learning. Teachers' skills in using animation apps also have a positive impact on the level of creativity in teaching. Proficient teachers can design interesting and innovative projects, pique early childhood interests and create more immersive learning experiences (Rajagukguk, Hasanah, & Lubis, 2022). By utilizing the features of animation apps, teachers can open up space for children's creative exploration and expression.

In addition, teachers' mastery of animation apps allows them to better tailor learning approaches to early childhood needs and interests. With a deep understanding of the various features and functions of the app, teachers can create appropriate tasks with the right level of difficulty to meet young children's level of understanding. Teachers who are skilled in the use of Animated Drawings can also develop learning materials that are relevant and appropriate to the curriculum. This helps to ensure that the use of technology in learning is not only engaging but also supports the achievement of the learning objectives that have been set. In addition to providing a more engaging and interactive learning experience, teachers' mastery of animation applications can have a positive impact in facilitating collaboration and exchange of experiences between fellow teachers. Teachers can share ideas, teaching

strategies and successful animation projects, creating a dynamic and supportive learning environment. It is worth noting that teachers' education on the use of technology, including animation applications, is not only an investment in their personal development, but also in creating an innovative and timely learning environment. By continuously improving their technology skills, teachers can play an important role in equipping young children with relevant skills and preparing them for an increasingly digitally connected world.

Teachers explain the use of AD with sparking sentences to arouse young children's curiosity. The freedom for young children to choose the outcome of the moving image to their liking provides a greater creative dimension. In the learning evaluation, the teacher acts as a motivator and companion, especially for young children who have special needs or focus barriers. Ensuring that young children can choose projects according to their interests becomes the main focus, while observation becomes an important instrument as a follow-up plan for learning success. With a holistic and needs-oriented teacher role, differentiated learning through the ABLE method is expected to create an inclusive learning environment and empower every young child to reach their full potential.

In learning practices using the Animated Drawings (AD) method, steps, strategies and resources have a central role to play in creating deep and meaningful learning experiences. Diagnostic assessments are conducted with the involvement of the curriculum coordinator team, using early childhood observations and interviews. The aim is to gain a holistic understanding of young children's needs, abilities and learning styles in the context of AD learning. The next step is to map the abilities, learning styles and learning interests of young children that take place in project learning in the classroom. This mapping becomes the foundation for differentiated learning planning, ensuring that each young child gets an approach that suits their characteristics. As part of lesson preparation, teachers also prepare learning resources that stimulate early childhood curiosity, critical thinking, and problem-solving skills. Utilizing various learning resources, including animated materials and AD content, is key to enriching early childhood learning experiences.

Next, teachers conduct trials with AD applications, collecting image materials that can be used in learning. These trials help teachers to understand the potential of AD applications and adapt them to the needs and abilities of young children. The implementation step of AD media is the main focus, where teachers not only apply the application in learning but also collect early childhood drawing materials as animation examples. This ensures that the use of AD is not only limited to concepts but can be applied in real terms in early childhood work. In the next stage, teachers conduct socialization and briefing in preparation for making the practice video. This involves explaining the steps and objectives of the activity, giving young children a clear understanding of the learning process they will undergo. Prior to video and photo shoots, teachers prepare the materials, materials and equipment to be used. This whole preparation process aims to ensure the smooth implementation of the shooting, so that technical aspects and resources are optimally available. On the day of implementation, teachers socialize and give permission to early childhood to be involved in video and photo shooting activities. This step ensures the active participation of young children in the learning process, while maintaining safety aspects. Finally, the teacher makes an agreement with the young children in the learning process. These agreements can

include classroom rules, early childhood responsibilities and shared expectations, creating a cooperative and supportive learning environment. With this set of steps, strategies and resources, the practice of learning through the Animated Drawings method can be carried out in a structured and thorough manner, providing a memorable and relevant learning experience for each young child

Figure 1. Drawing through the Animated Drawing App

The application of the Animated Drawings (AD) method in differentiated learning practices through the ABLE method showed positive and mixed results. First of all, young children show high interest and enthusiasm for the use of AD, especially when discussing professions of interest. The process of creating images and animations gives a new dimension to early childhood understanding, where still images can be visualized into moving images, making learning more dynamic and interesting. In addition, this learning practice also has an impact on the development of young children's ability to solve problems and foster empathy. Young children are actively involved in responding to different choices with friends as well as overcoming difficulties in operating the AD application. This creates a learning environment that not only enriches academic skills but also develops young children's social and emotional skills.

The freedom for young children to express their ideas and work in the form of drawings of interest is an important aspect of this practice. This process gives young children hands-on practice in using digital technology, providing a strong foundation from an early age. By allowing this freedom, the learning practice encourages the development of creativity and technology skills that are relevant to the times. Collaborative practices in image making, animation projects and teamwork also have a positive impact on children's self-confidence and motivation to learn. They not only learn individually but also participate in activities that involve cooperation, enhancing social interaction and understanding of the value of cooperation. It is also important to note that this practice of learning through the ABLE method provides a different approach to measuring early childhood understanding. Not only in terms of learning content, but also considering the individual needs of young children. This creates space for inclusivity and respect for the uniqueness of each young child.

The benefits of the AD method are not limited to early childhood groups with visual and kinesthetic learning styles. This practice provides great benefits for them, creating a learning experience that suits their learning preferences. Thus, the method does not only benefit a small number of young children, but creates inclusivity for a wide range of learning styles. The results of this learning practice not only have a positive impact on young children, but also provide inspiration for teachers from other classes and learning communities. They get new ideas in designing learning that is interesting, interactive and supports the use of digital technology in early childhood. Finally, this practice reflection underlines the importance of monitoring and setting boundaries in the use of digital technology in early childhood. Young children need active guidance from parents and educators to use technology wisely and responsibly. As such, this reflection calls for a balanced approach to utilizing technology as a learning tool.

CONCLUSION

In the practice of differentiated learning through the Animated Drawings (AD) method based on Project-Based Learning (PBL) at Al Azhar Rawamangun Kindergarten, positive results and significant observations were found. This method is not just a learning tool, but an approach that encompasses diverse learning styles, creativity and digital technology in early childhood education. Early childhood enthusiasm for AD is the key to success. The experience of visualizing images into animations gives a new dimension to early childhood understanding, making learning more interactive. It creates a positive foundation for the development of creative skills from an early age. It also has a positive impact on the development of early childhood social and emotional skills. Collaboration on animation projects provides opportunities to solve problems together and promotes empathetic attitudes. This practice builds academic skills and supports early childhood character development. Early childhood freedom to express ideas in drawings supports the development of digital technology. It prepares them for the demands of the modern world while promoting self-expression and creativity. Increased self-confidence and motivation to learn are clear evidence that the AD method stimulates interest in learning. Collaboration in drawing and animation creates an environment that supports early childhood social development. The importance of measuring young children's understanding emphasizes inclusivity in the learning methods used. Taking into

account young children's needs creates opportunities for all young children to actively participate. AD methods provide inspiration for teachers and learning communities, enrich early childhood learning experiences and provide innovative ideas to be applied in learning in a variety of contexts. However, these conclusions highlight the importance of supervision and setting boundaries in the use of digital technology in early childhood. Parents and educators have a crucial role in providing guidance so that young children can use technology wisely and responsibly. Overall, differentiated learning practices through PBL-based AD methods offer a holistic approach. This method designs learning that considers the individual needs of young children, creating meaningful and relevant learning experiences.

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