

### Integration Of Educational Games, Art And Technology In Early Childhood Learning

<sup>1</sup>Siti Khadijah,<sup>2</sup>Wulan Agustina Ningrum, <sup>3</sup>Elwana Setita Kinanti,<sup>4</sup>Noor Annisa

1,2 English Education, Banjarmasin State Islamic University

email: dijahmaret@gmail.com<sup>1</sup>, wulanagustia29@gmail.com<sup>2</sup>, setitakinanti@gmail.com<sup>3</sup> nrannisha1702@gmail.com<sup>4</sup>

Received 20-10-2023 | Received in revised form 29-12-2023 | Accepted 15-01-2024

#### ABSTRACT

In this journal, we will discuss the importance of integrating various concepts in Islamic early childhood education (PIAUD). First, we will discuss how educational games can be used to integrate math and language skills for foreign-born children. In addition, we will explain how to include storytelling and science into the education of PID children about the environment and wildlife. Apart from that, we will discuss how social skills can be integrated with game-based learning to foster teamwork and empathy among PIAUD children. We will also discuss the benefits of integrating music and art into the teaching of concepts to young early scholars. In addition, we will explore how knowledge about water and the environment may be integrated into daily activities for PIAUD children. In the next section, we will discuss how technology use in a limited way can be integrated into education.

Keywords: Education, Integrasi, Curriculum, Learning and Teachers.

#### ABSTRAK

Dalam jurnal ini, kami akan membahas pentingnya mengintegrasikan berbagai konsep dalam pendidikan anak usia dini Islam (PIAUD). Pertama, kami akan membahas bagaimana permainan edukatif dapat digunakan untuk mengintegrasikan keterampilan matematika dan bahasa untuk anak-anak kelahiran asing. Selain itu, kami akan menjelaskan bagaimana memasukkan dongeng dan sains ke dalam pendidikan anak-anak PID tentang lingkungan dan satwa liar. Selain itu, kami akan membahas bagaimana keterampilan sosial dapat diintegrasikan dengan pembelajaran berbasis permainan untuk menumbuhkan kerja sama dan empati di antara anak-anak PIAUD. Kami juga akan membahas manfaat mengintegrasikan musik dan seni ke dalam pengajaran konsep kepada anak-anak usia dini. Selain itu, kita akan mengeksplorasi bagaimana pengetahuan tentang air dan lingkungan dapat diintegrasikan ke dalam kegiatan sehari-hari untuk anak-anak PIAUD. Pada bagian selanjutnya, kita akan membahas bagaimana penggunaan teknologi secara terbatas dapat diintegrasikan ke dalam pendidikan.

Kata kunci: Pendidikan, Integrasi, Kurikulum, Pembelajaran dan Guru.

This is an open access article under the <u>CC BY-NC-SA</u> license.



#### INTRODUCTION

Early childhood Islamic education (ECE) is an important step in building social and cognitive skills. The use of educational games is one interesting method. This journal aims to investigate the different ways educational games can help young children learn math and language. In addition, it will investigate how art and storytelling can be incorporated into nature and environmental learning, with a particular emphasis on approaches that can be applied to PIAUD children.

In addition, this journal focuses on the social skills aspect. The aim is to show how play learning can help ECD children learn to cooperate and empathize. We will also discuss how music and movement can help teach science concepts to young children, with an emphasis on the positive effects on their cognitive development.

Furthermore, this journal will discuss how knowledge of nature and the environment can be integrated into the daily activities of PIAUD children, creating a holistic learning experience. Finally, we will detail how the limited use of technology can be integrated in learning to enrich the learning experiences of PIAUD children, while keeping in mind their unique needs at this stage of development.

#### DISCUSSION

### A. the use of educational games to integrate math and language concepts for young children

Early childhood education, also known as PIAUD, plays an important role in determining the foundation of a child's development. The use of educational games as a learning method is one approach that is gaining increasing attention. In this context, educational games can not only be used as entertainment, but can also be used effectively to teach math and language concepts to young children.

Games have been shown to increase children's engagement in the learning process. We can create a fun and interactive gaming environment that allows children to learn while playing by designing the right games. In this case, incorporating language and math concepts into educational games is essential to build a solid foundation of knowledge early on.

It is hoped that this method will help children gain a better understanding of math and language concepts while still maintaining the elements of creativity and fun in learning. As a result, the use of educational games that integrate math and language concepts can be a strong foundation for building a broad and sustainable early childhood education foundation. Play is learning for every child, especially young children. Their world is play, and through play, we as parents can incorporate educational elements in it.

Learning Strategies Through Play:

a. Play is what children need; play is an activity.

play is related to the child's world and includes various functions, such as physical, motor, cognitive, affective, social, and other developments. The development of human abilities results from the process of play.

b. Game-based learning syntax: This strategy consists of three main stages: pregame, game, and conclusion.

1) Pre-game: There are two activities to prepare students for the game and to prepare the materials and tools to be used.

a) Learner training includes

(1) Explain the purpose of the game to the learners,

(2) Presentation of the rules to be followed during the game activities,

(3) assigning tasks to each child, such as building castles or towers, and

(4) an explanation of what each child should do to accomplish the tasks.

2) Play stage:

a) Children go to the designated place to play,

b) start working on their respective tasks with the guidance of the educator,

c) each child reorganizes the materials and tools after the activity is over, and the children wash their hands.

3) Final Stage: The game-based learning strategy consists of

the following steps:

a) Attracting attention and arousing children's interest in elements such as looking at geometry shapes created by children;

b) connect the child's recent play experiences with other experiences, such as at home;

c) show how important it is to work together in a team,

## B. Some ways to integrate art and storytelling in learning about nature and the environment for PIAUD children

To help children understand their world, especially about nature and the environment, early childhood education or PAUD needs innovative and fun approaches. One effective way to achieve this goal is by incorporating art and storytelling into learning. In this situation, art and storytelling are not only a means of entertainment, but also a powerful tool to teach children about nature and the environment.

Art as a tool of creative expression and fairy tales as a story bridge that blends nature and environmental elements are some of the ways to achieve this integration. We can teach children about the importance of protecting the environment by creating art activities related to nature, such as painting different ecosystems or making crafts with recycled materials.

For children in kindergarten, there are several ways to incorporate art and storytelling into learning about nature and the environment, such as:

1. Environment-Based Learning: Using the surrounding environment as a learning resource to teach children about nature and the environment.

2. Local Wisdom Based Learning: Exploring local wisdom and incorporating it into the learning process.

3. Storytelling as a Learning Medium: Storytelling can be used to teach children the values of the environment and nature.

4. Fine Art as a Learning Medium: Using fine art as a learning medium to teach children about nature and the environment.

Fairy tales and artwork can be great tools to teach children values about the outside world and their environment. They can also help them develop creatively and develop their ability to imagine.

# C. Social skills can be integrated with play learning to develop cooperation and empathy in PIAUD children

Various play activities can help young children learn social skills, cooperation and empathy. Traditional games, social-emotional games and cooperative games can help ECD children learn social skills. For example, traditional games such as gobag sodor, sundaname and boy-boyan have been shown to instill a sense of empathy and cooperation in children. In addition, games like role play, fumbling and train rides can also help children improve their social and emotional skills. These games give them the opportunity to learn about cooperation, sharing, and understanding the feelings and emotions of others, which are important components in improving social skills and empathy. Therefore, combining educational games with social skills development through play can be an effective strategy to help PIAUD children learn social skills, cooperation and empathy.

To help children understand their world, especially about nature and the environment, early childhood Islamic education or PIAUD requires innovative and fun approaches. One effective way to achieve this goal is to incorporate art and storytelling into learning. In this situation, art and storytelling are not only a means of entertainment, but also a powerful tool to teach children about nature and the environment.

Art as a tool of creative expression and fairy tales as a story bridge that blends nature and environmental elements are some of the ways to achieve this integration. We can teach children about the importance of protecting the environment by creating art activities related to nature, such as painting different ecosystems or making crafts with recycled materials. Early childhood Islamic learning or PIAUD not only focuses on education, but also building social skills that are essential for interacting with their environment. Play learning that incorporates social skills is emerging as an effective way to build cooperation and empathy in PIAUD children. Play is not just an entertainment activity, but also has the ability to guide children's social development.

In play learning, social skills are incorporated. This is not only relevant for the developmental stage of PIAUD children, but also provides them with a strong foundation to interact with their environment as they grow older. Therefore, this method not only helps the academic development of PIAUD children, but also builds their social character. This has a positive impact on the formation of a generation that is able to work together and understand empathy from an early age.

# D. Benefits of integrating music and movement in the teaching of science concepts in early childhood

Learning with music and movement can improve young children's understanding of science concepts. Children get many benefits from music and movement. These include improving their motor skills, enhancing their social skills, and increasing their engagement in groups. In addition, the STEAM (Science, Technology, Engineering, Arts and Math) approach can be used in early childhood science learning, which can foster children's interest and passion in learning science.

51 of 55

The integration of music and movement in science learning can also help children convey emotional feelings and express themselves, and increase their interest in learning science concepts and natural phenomena.

Integrating music and movement in teaching science concepts in early childhood offers various benefits. Music and movement activities, such as music, dance and drama, engage children's imagination and creativity, which contribute to their cognitive development. In addition, through music learning, children can freely express themselves, which enhances their emotional expression and interest in learning. Some of the benefits of music and movement activities for children include increasing their social participation, developing motor skills, and improving cognitive abilities. In addition, music education has been shown to have a positive impact on children's overall development, including their language, coordination and emotional expression. Therefore, integrating music and movement in teaching science to children not only makes learning fun, but also contributes to their holistic development.

# E. Knowledge about nature and the environment can be integrated into the daily activities of early childhood.

Early childhood education (ECED) plays an important role in fostering environmental awareness from an early age. Integrating knowledge about nature and the environment into PAUD children's daily activities is an effective way to foster environmental awareness from an early age. This can be achieved by using interesting and interactive learning methods.

In addition, art and story-based approaches can also be used to integrate knowledge of nature and the environment in ECD children's daily activities; these approaches have been shown to be effective in early childhood language and comprehension development. Thus, ECD children's daily environment can be an effective place to integrate knowledge of nature and the environment, thus forming a strong foundation for sustainable environmental awareness.

Integrating knowledge about nature and the environment into the daily activities of early childhood education (ECED) is essential to establish environmental awareness from an early age. Several approaches have been adopted to achieve this integration. The integration of local wisdom-based environmental education can strengthen character education in the learning process, as it is often closely related to daily life. In addition, creating a safe and comfortable learning environment in PAUD is essential to provide a pleasant learning experience for children, as this significantly affects the success of their learning process. By exploring the environment in their learning process, children in ECD can develop a deep understanding of the importance of preserving nature and the environment for a sustainable life in the future. Therefore, integrating knowledge about nature and the environment into the daily activities of children in ECD not only enriches their learning experience, but also contributes to the development of sustainable environmental awareness early on.

# F. Limited Use of Technology can be Integrated in Learning to Enrich the Learning Experience of ECD Children

The use of technology in early childhood education (ECE) has been a topic of debate for many years. However, if used moderately, technology can be integrated into learning activities to enrich early childhood learning experiences. For example, technology can be used to provide interactive learning experiences that are engaging and informative. In addition, technology can also be used to provide access to various learning resources, such as educational videos, games and electronic books, which can be used to complement traditional learning methods. By integrating technology into learning activities, children in ECD can develop a deeper understanding of the world around them, while also developing their cognitive and motor skills.

In addition, integrating technology into learning activities can also help prepare children for the digital age. As technology continues to play an increasingly important role in our daily lives, it is essential that children are equipped with the necessary skills to navigate and use technology effectively. By integrating technology into learning activities, children in early childhood education can develop the skills and knowledge necessary to use technology in a safe and responsible manner. Therefore, the integration of technology in early childhood education can provide many benefits, including enriching learning experiences, providing access to various learning resources, and preparing children for the digital age.

One effective approach to enhancing ECD children's learning experience is the limited application of technology. Technology can help children develop cognitive skills and access a variety of learning resources while learning topics thoroughly. In language learning, technology can be used to integrate stories in learning.

Some of the advantages of technology integration in ECD children's learning include:

1. Integrate a wide range of learning resources: Technology allows children to access a wide range of learning resources, such as educational videos, online games and e-books.

- 2. Developing cognitive skills: Appropriate use of technology can help children develop cognitive skills such as critical thinking, problem-solving and strong curiosity.
- 3. Improve communication and teamwork skills: Children can gain the ability to communicate and cooperate with others with the help of technology. These skills are essential for adapting to the digitalized world.

### E. ICT-based Learning Activities

The application of ICT-based learning has developed forms of learning activities (learning activities type) and is needed to support learning. The developed learning activities are arranged to fulfill students' learning. The activities are adjusted between the material that students learn and the technology used. In learning activities, the use of computers is very supportive to achieve the following objectives: a. For cognitive purposes. Computers can teach complex concepts of rules principles, steps, processes and calculations. It also explains the concepts in a simple manner, with the incorporation of animated visuals and audio. Thus, it is suitable for self-directed learning activities.

b. For psychomotor objectives. With learning that is packaged in the form of games and simulations, it is very good to create conditions for the world of work. Some examples of programs include; aircraft landing simulation, war simulation in the most severe terrain and so on.

c. For affective purposes. If the program is designed appropriately by providing sound or video clips whose content is evocative, attitude or affective learning can also be done using computer media.

### CONCLUSIONS

This journal explains how educational games can integrate math and language concepts and develop social skills through fun learning. In addition, we show how music, movement, and knowledge of nature and the environment can be integrated into teaching children scientific concepts. Finally, we provide insights into how technology can be integrated into learning on a limited scale to enrich the learning experience of PIAUD children. This combination of innovative approaches is expected to make PIAUD children's learning experience more interesting, comprehensive and effective. Activity-based learning methods, traditional games and the use of technology help develop cognitive, social and emotional skills. In addition, these approaches can foster children's imagination and creativity, preparing them for future challenges. In the digital age, utilizing technology in education should be a top priority. Incorporating technology into learning in a limited way can create a fun and effective learning environment for PIAUD children. In addition, the use of technology allows children to access learning materials, interact with teachers and classmates, and take assessments and exams online, making education more inclusive and democratic.

#### LITERATURE

- Abdul Khobir, "Efforts to Educate Children Through Educational Games", Journal Article, December, 2009.
- Moh Fauziddin, Mufarizuddin, "Useful of Clap Hand Games to Optimize Cogtivite Aspects in Early Childhood Education", Journal of Early Childhood Education, Volume 2 Issue 2, (2018).
- Alfina Nisauz Zahroh, 2021. Educational Game Tools for Child Language Development, <u>Educational Game Tools for Child Language Development Page 1 -</u> <u>Kompasiana.com</u>.
- Yayah Khisbiyah1, Sri Lestari2, Aris Purwanto3, Yasma Hidayat4, "Nurturing Children's Empathy Attitudes Through Traditional Games of Gobag Sodor, Sundaname and Boy-Boyan", Journal of Community Service and Empowerment, Vol. 2, No. 1, October (2021).
- Elindra Yetti, et al. 2019. "EARLY CHILDHOOD CREATIVITY DEVELOPMENT".
- Elsa Marisca, I Wayan Dharmayana, "USING EDUCATIVE PLAYING TOOLS (APE) TO INCREASE MATHEMATICS LEARNING ACTIVITY", VOLUME 18, No.1, APRIL (2019).
- Rhomiy Handican1, Siti Riva Darwata2, I Made Arnawa3, Ahmad Fuazan4, Ali Asmar5, "Utilization of Educational Games in Mathematics Learning: How are Students Perceived?", Journal of Mathematics Education, Volume 5, Number 1, July (2023).
- Haekal Ramadan. 2023, "Utilization of Technology in Building Fun Learning Experiences". Utilization of <u>Technology in Building a Fun Learning Experience Kazee</u>.

Nurlia Latipah, "Science LEARNING IN EARLY CHILDHOOD EDUCATION", Journal of Early Childhood Islamic Education, Vol.1 No.2 January (2018). Yogyakarta: PT Nas Media Indonesia.