Application of Bowling Games to Introduce North Sumatra Local Culture to Early Childhood in Kuala Lumpur

Rabiatul Adawiyah, Maisari, Rahayu Dwi Utami, Munisa, Siti Ruzita Binti Ramli

Abstract

Introduction to regional culture from an early age is an important part of shaping children's identity and character. This is becoming increasingly relevant for children living abroad as interactions with different cultures can affect their understanding of the culture of origin. This study aims to describe the application of bowling as a learning medium to introduce the local culture of North Sumatra to early childhood in Kuala Lumpur. The research uses a descriptive qualitative approach with data collection techniques in the form of direct observation during learning activities. The results of the study showed that bowling games modified with images of traditional clothes and traditional houses of Mandailing, Karo, Toba, and Malay were able to increase children's enthusiasm, involvement, and understanding of regional culture. In addition, game activities also help children's gross motor development, social skills, and concentration. Thus, game-based learning can be an effective alternative strategy in introducing local culture to early childhood, especially for children in multicultural environments.

Keywords: *Local Culture, North Sumatra, Early Childhood, Games, Digital Media.*

Rabiatul Adawiyah[1]
[1]Early Childhood Islamic Education, Universitas Pembangunan Panca Budi, Indonesia
e-mail: rabiatul24adawiyah@gmail.com[1]

Maisari[2], Rahayu Dwi Utami[3], Munisa[4], Siti Ruzita Binti Ramli[5]
[2,3,4]Early Childhood Islamic Education, Universitas Pembangunan Panca Budi, Indonesia
[5]Islamic Preschool Al Fikh Orchard Kuala Lumpur, Malaysia
e-mail: sarimai828@gmail.com[2], dwirahayu@dosen.pancabudi.ac.id[3], munisa@pancabudi.ac.id[4], dwirahayu@dosen.pancabudi.ac.id[5]

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Introduction

Early childhood is an early period of life that has an important role in determining the direction of children's next development. At this stage, children show very rapid development in various aspects, such as thinking, language, motor, and social-emotional skills. Therefore, the learning process in early childhood needs to be designed appropriately by prioritizing activities that are in accordance with the characteristics of the child, namely learning through direct experience and play activities.

Early childhood education plays an important role in laying the initial foundation for the development of children's understanding, attitudes, and character. In this phase, children are highly responsive to various experiences and stimuli, including the introduction of social and cultural values. Therefore, the introduction of cultural diversity from an early age is an important aspect in education, because it helps children recognize their identity, interact with the social environment, and build mutual respect for differences.

The purpose of Early Childhood Education (PAUD) according to Law number 20 of 2003 concerning the national education system states that early childhood education is a coaching effort aimed at children from birth to the age of six years which is carried out through the provision of educational stimuli to help physical and spiritual growth and development so that children have readiness to enter further education. (Fauziddin & Mufarizuddin, 2018).

Life in a multicultural urban area like Kuala Lumpur presents its own dynamics in the process of early childhood cultural education. Children who grow up in a diverse culture have the opportunity to interact with a variety of cultural backgrounds, but also face challenges in maintaining an understanding of their culture of origin. This is especially experienced by children from North Sumatra, so the right learning strategy is needed so that regional cultural values are still introduced and understood.

North Sumatra is one of the regions in Indonesia that has a rich cultural diversity, such as Mandailing, Karo, Toba, and Malay cultures. Each culture has unique characteristics that are reflected through cultural elements, including traditional clothing and traditional houses that contain the values of local wisdom. The introduction of these cultural elements to early childhood is not only aimed at expanding horizons, but also as a first step in efforts to preserve culture. In order for the learning process to run optimally, the approach used needs to be adjusted to the child's development stage as a whole. Learning that prioritizes play activities is an appropriate approach for early childhood, because play is an integral part of the child's world.

One of the important learning content to be introduced from an early age is local culture. Local culture is part of the nation's identity that contains the values of local wisdom, social norms, and the noble character of the community. Introduction to culture to early childhood can be the basis for fostering a sense of love for regional culture, strengthening self-identity, and building an attitude of respect for cultural diversity. Without early cultural introduction, children have the potential to lack understanding of their cultural origins and values.

Efforts to introduce local culture face greater challenges on children living outside their home region or abroad, such as Indonesian children domiciled in Kuala Lumpur. The environment dominated by foreign cultures causes limited opportunities for children to get to know Indonesian culture, including North Sumatran culture. This condition requires innovation in learning so that local culture can still be introduced effectively and attractive to early childhood.

Culture-based learning in early childhood should be packaged through a play approach. Play is the main activity of children who are able to provide a natural and fun learning experience. Through play activities, children can be actively involved in the learning process without feeling pressured. Therefore, the use of games as a learning medium is a relevant strategy in introducing local culture to early childhood.

Games are a form of activity that can provide a learning experience from the perpetrator. According to santrock, games are an activity that can be fun to carry out in the interest of the

activity itself (Fauziddin 2018). Through games, children can get more information or knowledge so that their understanding will be more and deeper. If this new information is different from what he already knows, then the child gains new knowledge by playing the child's cognitive structure deeper and richer and more perfect (Samhani Siregar et al., 2025)

Singer, Golinkoff, and Hirsh-pasek expressly call play activities in children a learning process (Mukhlis2019). Since almost all aspects of gaming are entertainment, games are a very important tool to enable learning in an engaging way. For children, playing is not just a time to fill but is also a need for children. Play can be a stimulus for children to attract attention so as to allow children to learn and remember
the characteristics of something that is already recognized. (Samhani Siregar et al., 2025)

Modified bowling games are a form of educational games that can be used in culturebased learning. These games not only involve physical activity that trains a child's coordination and gross motor skills, but can also be developed by incorporating elements of local culture. Pin bowling can be designed using images or symbols of North Sumatra culture, such as traditional houses, traditional clothing, traditional musical instruments, and regional specialties, so that children can get to know the culture through concrete visual media.

The application of bowling games based on local culture provides opportunities for children to learn actively and fun. Children not only play, but also gain new knowledge about North Sumatran culture through direct interaction with game media and the guidance of educators. With this approach, it is hoped that culture-based learning can run more effectively and be able to increase children's interest in local culture.

Based on this background, this study aims to describe the application of bowling as a medium in introducing local culture of North Sumatra to early childhood in Kuala Lumpur and examine its benefits in supporting the early childhood learning process.

Literature Review

1. Early Childhood

Early childhood is in the early stages of development that takes place very quickly and affects subsequent development. The age range of 0–6 years is an important period for the formation of children's basic abilities, both in cognitive, language, motor, and social-emotional aspects. Therefore, learning in early childhood needs to be designed by paying attention to the characteristics of children who tend to learn through concrete activities and direct experiences. According to early childhood, early childhood is an individual who is undergoing a rapid and fundamental development process in the next life (Munisa, 2020)

2. Learning Through Play

Play is the main activity of early childhood which has an important role in the learning process. Play activities allow children to learn naturally, actively, and fun. Through play, children can develop thinking skills, creativity, and social skills. The learning while playing approach is an effective strategy in delivering learning materials, including in the introduction of local culture to early childhood. Early childhood learning should be designed with an emphasis on the active involvement of children through fun and meaningful activities. Early Childhood Education (PAUD) plays an important role in the early stages of children's development, especially in cognitive and concentration aspects. Early childhood is an important phase in individual development, where the cultivation of moral values is the main foundation for forming good character. Early childhood, or often referred to as the golden age, is a child who is in the range of birth age up to six years. At this age, children are in a very rapid developmental phase, both physically, cognitively, linguistically, and emotionally. (Widya et al., 2024)

One of the effective approaches that is in accordance with the characteristics of early childhood development is the concept of learning while playing. Play is a child's world, and

through play activities, children can export the environment, develop creativity, and practice social and emotional skills (Santrock, 2011). According to Jean Piaget, play provides children with the opportunity to interact with the environment as well as help cognitive development through the process of assimilation and accommodation. (Qanitah Nugraha et al., 2025)

Play is a very relevant approach in early childhood learning. Through play activities, children can be actively involved, explore, and build understanding through hands-on experience. Play-based learning can increase children's involvement and understanding of learning materials, including cultural materials. Educational games that are designed appropriately can help children understand abstract concepts in a more concrete way.

Psychology also views play as a means that helps individuals function adaptively. Various therapeutic approaches such as play therapy and theraplay utilize play activities, not only for children but also for adults. This shows that play is not just entertainment, but an important window to understand human beings while supporting their growth and psychological wellbeing (Efriyani Djuwita, n.d.).

3. Local Culture in Early Childhood Education

Local culture is part of the identity of a region that contains the values, norms, and wisdom of the local community. The introduction of local culture from an early age aims to instill a sense of love for regional culture and build children's self-identity. In the context of early childhood education, cultural introduction needs to be conveyed simply so that it is easy for children to understand. The cultural elements introduced can be in the form of cultural symbols that are close to the child's life.

The Toba, Karo, Mandailing, and Malay Batak cultures are part of the cultural diversity of North Sumatra which has its own characteristics. Each of these cultures has different traditional houses and traditional clothing, so it can be used as learning material to introduce cultural diversity to early childhood.

4. Traditional Houses and Traditional Clothing as Cultural Materials

North Sumatra is one of the regions in Indonesia that has many cultural diversity, such as Toba, Karo, Mandailing, and Malay Batak cultures. These cultures can be seen from traditional houses, traditional clothing, and the habits of the people. However, technological developments and the influence of foreign cultures make children, especially those living outside Indonesia, increasingly unfamiliar with regional culture. (Dearmawati Ancient & Ancient , 2023)

Traditional houses and traditional clothing are tangible manifestations of cultural heritage that reflect the identity and values of the people of a region. Traditional houses depict the life patterns and social structure of the community, while traditional clothes show the cultural identity and aesthetic values of an area. In early childhood learning, traditional houses and traditional clothes are chosen as cultural introduction materials because they have an attractive visual form and are easily recognized by children.

The introduction of traditional houses and traditional clothes from the Batak Toba, Karo, Mandailing, and Malay cultures can help children understand cultural differences in a simple way. Through visual media and play activities, children can get to know cultural symbols in a fun and meaningful way.

5. Bowling Games as a Cultural Learning Media

Learning media functions as a means to convey material to make it more interesting and easy to understand. Modified bowling is one of the appropriate learning mediums for early childhood because it involves fun physical activity. This game can train children's eye and hand coordination, balance, and gross motor skills.

In the context of culture-based learning, bowling games can be developed by displaying images of traditional houses and traditional clothes from the Batak Toba, Karo, Mandailing, and

Malay cultures on the bowling pins. Through throwing balls and dropping pins, children can learn to recognize cultural symbols in concrete ways while playing.

6. Culture-Based Learning in Early Childhood

Cultural introduction from an early age plays a role in instilling values and shaping children's understanding of cultural diversity, introduction of values and culture from an early age can help children understand social life and foster mutual respect. Therefore, cultural introduction in early childhood needs to be presented concretely, simply, and in accordance with the child's world.

Culture-based learning is a learning approach that integrates elements of local culture into children's learning activities. In early childhood education, this approach can be done through fun play activities that are in accordance with the child's world. The integration of Toba, Karo, Mandailing, and Malay Batak cultures through the introduction of traditional houses and traditional clothing is expected to increase children's understanding of cultural diversity and foster a sense of love for local culture from an early age.

Research Methodology

This study applies a qualitative approach with a descriptive design that aims to obtain a comprehensive overview of the implementation of learning to introduce North Sumatra culture in early childhood. This approach was chosen because it allows researchers to observe and understand directly the learning process and children's behavior during the activity.

Research Subject and Location

The subject of the study was early childhood at Al Fikh Orchard Islamic Preschool, Kuala Lumpur. So that the introduction of local culture through the media of games becomes relevant and important to do.

Learning Media

The learning media used in this study is in the form of a modified bowling game by using used bottles as bowling pins. Each bottle is covered with colored paper to attract children's attention, then pasted with pictures of traditional houses and traditional clothes from the Batak Toba, Karo, Mandailing, and Malay cultures. The ball used is a light ball that is safe for early childhood.

This media is designed to provide a fun learning experience and help children get to know the local culture through concrete and easy-to-understand visuals.

Data Collection Techniques

The data collection techniques in this study include:

a. Observations

Observations were made to observe the activeness, enthusiasm, and response of children during bowling activities, especially in recognizing traditional houses and traditional clothes that were introduced.

b. Documentation

Documentation in the form of photos of learning activities and game media was used as supporting data in the research.

c. Informal Interviews

Interviews were conducted simply with educators at Islamic Preschool Al Fikh Orchard to obtain information related to the implementation of activities, children's responses, and obstacles faced during the use of bowling game media.

Stages of Research Implementation

The implementation of the research is carried out through several stages as follows: a.

Preparation Stage

The researcher prepared a bowling game media by making pins from used bottles and pasting pictures of traditional houses and traditional Batak Toba, Karo, Mandailing, and Malay clothing. A play area is also prepared so that activities take place safely and comfortably.

b. Implementation Stage

The learning activity began with a brief introduction to traditional houses and traditional clothing. Next, children play bowling in turns by throwing the ball towards the pin. Children are invited to recognize the cultural image contained in the pin that was successfully dropped.

c. Evaluation Stage

The evaluation was carried out by observing the children's ability to recognize traditional houses and traditional clothes as well as the level of children's participation during the activity.

Data Analysis Techniques

The data obtained were analyzed using qualitative descriptive analysis. Data from observations, interviews, and documentation were collected, selected, and presented in the form of narrative descriptions to illustrate the application of bowling as a medium of introduction to North Sumatra's local culture in early childhood.

Results

The implementation of learning using bowling games based on the local culture of North Sumatra was carried out at Islamic Preschool Al Fikh Orchard Kuala Lumpur by involving early childhood as participants in the activity. The bowling media used is in the form of used bottles that are modified and equipped with images of traditional houses and traditional clothes from the Batak Toba, Karo, Mandailing, and Malay cultures.

Based on the results of observations during the activity, the child showed a very positive response. Children seem enthusiastic and active when participating in bowling games. Visually appealing game media is able to increase children's attention and focus on learning activities. In addition, children also show the ability to work together and be patient while waiting for their turn to play.

The results of the observation showed that children began to be able to recognize the images of traditional houses and traditional clothes contained in the bowling pins. After being given a simple explanation by the educator, the child can distinguish the cultural elements of the four tribes introduced, although it is still in the early introduction stage. Children also show curiosity through simple questions and comments during the activity.

Documentation data in the form of activity photos show the active involvement of children in the learning process. Meanwhile, the results of interviews with educators revealed that the use of bowling games is considered to increase children's interest in learning and help educators in delivering cultural introduction material in a more fun way.

The findings of the study show that bowling games modified with local cultural content can be used as an effective learning medium for early childhood. This is in line with the concept of play-based learning which emphasizes the importance of children's active involvement in the learning process. Play activities provide a fun learning experience so that children can more easily accept the material presented.

Introduction to Toba, Karo, Mandailing, and Malay Batak culture through visual media in the form of traditional houses and traditional clothes helps children understand cultural differences concretely. The selection of traditional houses and traditional clothes as learning

materials is considered appropriate because it has clear visual characteristics and is easily recognized by early childhood. Pin bowling media equipped with cultural images helps children remember and recognize these cultural symbols.

In addition to the cognitive aspect, bowling also contributes to children's gross motor development. The movement of throwing the ball and dropping the pin trains the child's coordination, balance, and physical skills. Interactions that occur during play, such as waiting for their turn and interacting with friends, also support the child's social and emotional development.

In the context of learning in environments that are outside the area of cultural origin, such as in Kuala Lumpur, the use of bowling games based on local culture is a relevant solution to introduce Indonesian culture to early childhood. Through creative and fun learning activities, children can still get to know the culture of their home region even though they are in a multicultural environment.

Based on the results and discussions, the implementation of bowling games based on local culture in North Sumatra can support early childhood learning as a whole and act as an effective medium in introducing local culture.

Conclusions

Based on the results of the research that has been carried out, it can be concluded that the application of bowling as a learning medium makes a positive contribution in introducing the local culture of North Sumatra to early childhood at Islamic Preschool Al Fikh Orchard Kuala Lumpur. The bowling game media that is modified by displaying images of traditional houses and traditional clothes from the Batak Toba, Karo, Mandailing, and Malay cultures is able to attract children's attention and increase their involvement during the learning process.

Learning activities packaged through play activities provide a fun and meaningful learning experience for children. Children show positive responses and early ability to recognize and distinguish traditional houses and traditional clothing from the four cultures introduced. Cultural introduction through visual media and games helps children understand the material more concretely and easily accepted according to the characteristics of early childhood development.

In addition to supporting the cognitive aspect, the application of bowling games also provides benefits to the development of children's gross motor and social-emotional aspects. Throwing balls and dropping pins trains coordination, balance, and physical strength in children. The interactions that occur during the game, such as waiting for their turn and interacting with peers, help develop social attitudes, patience, and cooperation. Thus, bowling games based on local culture not only function as a medium of cultural introduction, but also as a means of learning that supports children's overall development

Overall, bowling games based on the local culture of North Sumatra can be used as an alternative learning media that is effective and relevant in early childhood education, especially in the context of learning in an educational environment that is outside the area of cultural origin.

Based on the results of the research obtained, it is suggested that early childhood educators can be more creative in utilizing games as a learning medium, especially in introducing local culture to children. Bowling games based on local culture can be used as an alternative learning media that is easy to apply because it uses simple and safe materials for children. Educational institutions are expected to support the development of culture-based learning by providing facilities and providing space for educators to innovate in creating interesting and contextual learning media.

In addition, the introduction of local culture in early childhood should be carried out in a sustainable manner and integrated with other learning activities so that children gain a deeper understanding. For future researchers, it is recommended to develop this study with a wider scope of cultural material or use a different research approach, so as to obtain a more

comprehensive picture of the effectiveness of game media in cultural introduction in early childhood.

References

[1] Dearmawati Purba, Y., & Purba, A. R. (2023). KEARIFAN LOKAL DALAM TRADISI MARTIDAH ETNIK SIMALUNGUN. *Kompetensi Universitas Balikpapan*, *16*(1), 203. [2] Efriyani Djuwita. (n.d.). *Psikologi Bermain: Pentingnya Bermain untuk Anak*. Psikologi.Ui. Retrieved February 9, 2026, from https://psikologi.ui.ac.id/2025/07/31/psikologi-bermain-pentingnya-bermain-untukanak/

[3] Munisa. (2020). Pengaruh Penggunaan Gadget Terhadap Interaksi Sosial Anak Usia Dini Di TK Panca Budi Medan. *Ilmiah Abdi Ilmu*, *13*(1).

[4] Qanitah Nugraha, F., Syafitri, Y., Fadilah, E., & Aulia, S. (2025). Konsep Belajar Sambil Bermain Sebagai Pola Pembelajaran Di KB IT Permata Hati Palembang. *PESHUM : Jurnal Pendidikan, Sosial Dan Humaniora*, *4*(5).

[5] Samhani Siregar, Ali Masran Daulay, & Hanifah Oktarina. (2025). Penggunaan Permainan Bowling dalam Pengenalan Angka Terhadap Anak Usia Dini di RA Tadika Adnani. *Khirani: Jurnal Pendidikan Anak Usia Dini*, *3*(1), 172–185. https://doi.org/10.47861/khirani.v3i1.1579

[6] Widya, R., Rozana, S., Ependi Rustam, & Zahrita, Z. (2024). *PSIKOLOGI PERILAKU ANAK USIA DINI Mengatasi Temper Tantrum Pada Anak Usia Dini*.