Traditional Game-Based Learning Model in Early Childhood Education: A Case Study at TKIT AL HIKMAH

Dwi Susanto
Universitas Sarjanaiwata Tamansiswa
Yogyakarta, Indonesia
Email: dwi.susanto@ustjogja.ac.id

Widowati Pusporini
Universitas Sarjanaiwata Tamansiswa
Yogyakarta, Indonesia
Email: widowati.p@ustjogja.ac.id

Titi Lestari
Universitas Sarjanaiwata Tamansiswa
Yogyakarta, Indonesia
Email: titilestari@ustjogja.ac.id

ABSTRACT

Abstract: This study aims to describe the implementation of a traditional children's game-based learning model to train visual-spatial intelligence of kindergarten students. A descriptive qualitative method was employed to describe systematic, factual, and accurate facts, properties, and the relationship between the phenomena studied. This study also uses holistic reflection methods through the meaning of learning games for children which can promote their visual-spatial abilities. The students of TKIT Al-Hikmah Secang, Magelang were involved as the research subjects. The results indicate that traditional games can train children’s visual-spatial intelligence and such games can be revived. The applied learning model offers moral and social education and is strongly suggested to be implemented in early education to strengthen visual-spatial intelligence and the other multiple intelligences.

KEY WORDS
traditional games; dolanan anak; visual-spatial intelligence, early childhood education

ECRJ (Early Childhood Research Journal)
ISSN Numbers: Print, 2655-6448; Online, 2655-9315

ADDRESS
Website: http://journals.ums.ac.id/index.php/ecrj
Address: Pendidikan Guru PAUD
Universitas Muhammadiyah Surakarta
A. Yani Street No. 1, Pabelan, Kartasura, Surakarta, Indonesia
Telp. +62-271-717417 ext.
Email: ecrj@ums.ac.id
INTRODUCTION

Early childhood education is a process of interaction between children, parents, or other adults in an environment to achieve developmental tasks. The interaction that takes place is a factor that affects the achievement of learning objectives (Elyana, 2017), as it will provide a meaningful experience to support an effective learning atmosphere. Vygotsky argues that social interaction experience materials are essential for developing children's thinking processes. High mental activity in children can be formed through interaction with other people. (Park, 2012) describes that learning can be effective if children can learn through working, playing and living together with their environment.

As mentioned previously, one of the ways for children to acquire knowledge is through playing activities while learning. By playing and learning, a child will have the opportunity to learn new things. Learning and playing for them is also a means of developing various social skills. Since childhood, the parents usually provided games that could educate as well as direct the child's mindset in how to memorize things. One of the efforts is by introducing children to traditional games. However, not all parents and teachers understand that traditional games can promote multiple intelligences, especially children's visual-spatial skills. In addition, very few children are familiar with traditional games because they are more exposed to modern, digital games.

Traditional children's games such as congklak and making toy cars from grapefruit peel can hone children's creativity. Children are trained to apply strategies in order to win or create new games from materials that are easy to find. These types of games encourage children to determine rules. This way, instead of learning, children will feel like they are playing and doing fun activities. Of course, during the game, children should be accompanied by parents or teachers. One of the schools that implements traditional games to train visual-spatial intelligence is Al Hikmah Islamic Kindergarten (TKIT), located in Secang, Magelang Regency.

As an effort to preserve national culture, the school applies traditional children's games in the teaching and learning activities. This effort is made in addition to eliminate boredom and increase engagement. Children will also get a learning experience that supports the development of their visual-spatial intelligence.

RESEARCH METHOD

The present study is qualitative research that describes or takes pictures as a whole without any intervention from the writers. This is a case study which explored a series of systems, both activities, events, processes or people based on complete data collection on the implementation of early childhood learning to train visual-spatial intelligence through traditional games at Al-Hikmah Kindergarten.
RESULTS AND DISCUSSION

1. Planning of the Traditional Game-Based Learning Model

Before implementing the learning model, the teacher first prepared and designed the syllabus, Lesson Plan (RPP) and Daily Activity Unit (SKH) which function as references in implementing the learning activities. This is in accordance with the Government Regulation Number 19 of 2005 Chapter IV Article 20 concerning National Education Standards which states that the planning of the learning process includes a syllabus and learning implementation plan that contains at least learning objectives, teaching materials, teaching methods, learning resources and assessment of learning outcomes. The planning was done so that the teacher was able to determine the time allotment, the types of traditional games and the students who would be involved in the games.

2. Implementation of the Traditional Game-Based Learning Model

Based on the obtained data, the teacher structured three stages in the implementation of the learning model, namely: a) initial activities, including pre-learning and apperception, b) core activities, including learning activities of traditional children's game models, and c) closing activities. In the initial activity, the teacher started with leading to a short prayer and reciting a short surah from the holy Quran. The core activity covers the implementation of the games, and the closing activity is focused on reflection of the learned lessons. Some of the selected games to train visual-spatial intelligence at TKIT Al Hikmah were as follows:

a. Engklek/Taplak Gunung/Sudamanda

The first step of playing this game is to draw on the ground or on the road 8 squares and a semi-circle at the very top, then number each box. The one in the semi-circle is numbered nine and the half-circle is numbered ten. After that, if there are two players, they usually do a suit or pingsut (showing certain finger to determine who plays first). If the players are more than two, hompimpa (showing either side of each player’s hand) is used. To start the game, the player must jump from one box to another with one foot, either right or left foot. The game is useful for training children's visual-spatial intelligence, because the first thing that must be done before playing the game is drawing an engklek field. Children will be trained in their visual intelligence because they will get used to drawing something they see clearly. Even they are amazed when they can draw in another dimension. Second, to be able to play, every child must have an object to throw called gacu (in the form of tiles, ceramic shards, or...
coins). This is in accordance with the children’s ability to find several objects around them in the form of other media such as blocks and broken bricks. Third, through engklek game, children will practice finding their own strategy to get rice fields by throwing the gacu in the right place. This points out that this game can train children’s abilities to hone spatial intelligence. High abilities include the ability to observe, think, imagine space, repaint, change or modify images. This intelligence involves recognizing colors, lines, shapes, sizes, and the relationship between those elements (Gardner, 1993).

**b. Dam-daman Game**

This is a chess-like game. Each player must take turns running his pawn but there is no checkmate. They use the term eat or be eaten. The children simply use chalk and draw the board on the floor. The first player uses stones and the second player uses different items such as tile fragments. All pawns can move the same way, namely forward, backward, and sideways. In order to eat a lot of opponents, the players have to feed one of the pawns. When given the bait, the opponent must eat by jumping over the enemy. In this game, the loser is the one who runs out of pawns.

The benefits of this game are to train memory and spatial sensitivity as well as accuracy and precision in determining the direction of the pawn. This is in accordance with the notion of visual-spatial intelligence which means the capacity to recognize and describe objects or patterns received by the brain, because of “the ability to form a mental model of a spatial world and to be able to maneuver and operate using that model” (Gardner, 1993). Visual-spatial intelligence is the ability to form a mental model of the spatial world and be able to maneuver and operate that model.

**c. Gobak Sodor/Galah Asin Game**

This game requires two teams and each team consists of 3-5 people. The point of the game is to prevent the opponent from passing through the line to the last line back and forth. To win the game, all members must complete the back and forth runs in a predetermined field area. The benefit of this game is that it invites children to actively coordinate with their friends. Otherwise, they will lose the game. According to Copple and Bredekamp (2009), children aged 4 years can already show limited spatial estimation skills. Thus, in addition to these benefits, children will understand some of the layouts of each individual where they have to stand, the shape and direction of a game path that they have passed so as not to be touched by their opponents.

**d. Hide and Seek Game**

In this game, one kid plays as a seeker. He closes his eyes and stays in a spot called fortress while waiting for the others to look for a place to hide. After counting to a certain number, the seeker begins to look for everyone who is hiding. When he has found the person who is hiding, this seeker must quickly run to the fort while mentioning the name of the caught person. This rule applies to the caught player; if he manages to touch the fort first, in the next stage he will not be the seeker. Other children who are hiding can also touch the fort so as not to guard it at a later stage, as long as they do not get caught by the seeker.

![Figure 2. Hide and Seek Game](image-url)
Hide and seek is fun and can provide benefits for training children's visual-spatial intelligence. It requires ability to hide without being noticed by the searcher. They must be creative in finding their own hiding place. To avoid being caught, he must dare to explore the environment in which he plays. After all, this is a game model that has benefits for training children to be sensitive to the line, color, shape, space, balance, shadow, harmony, patterns and relationships between elements of visual-spatial intelligence that really relies on sharpness of sight and accuracy (Amstrong, 2002).

e. Toy Car from Grapefruit Peel
This game trains children to make a toy car from grapefruit peel. This game requires not only creativity but also education to love the environment by utilizing materials provided by the nature. This game still exists today, trying to survive in the middle of high-tech games. TKIT Al Himah lists this traditional game as an effort to train multiple intelligences, especially visual-spatial intelligence. The benefits that students get are creativity in assembling, choosing, placing and decorating the toy cars they create. This is in line with the idea from Gamon and Bragdon (1998) which underlines that visual-spatial intelligence has many and different types of abilities, from capturing details to understanding arrangements into various patterns and to matching these patterns into a knowledge base to know what to do with it.

3. Evaluation of the Learning Model
The evaluation was designed in the form of Daily Activity Plan or RKH and Anecdotal Note Format. RKH is an elaboration of the Weekly Activity Plan or RKM and contains learning activities, whether carried out individually, in groups, or classically in one day. It also consists of opening activities, core activities, rest/eating sessions, and closing activities. Observation was mainly used in the assessment. This technique was used to determine the attitudes and learning processes of students in and outside the classroom, including participating in traditional games. Anecdotal notes were used to record activities and events that occurred during the learning activities. If the children produced certain products, the teacher would collect them in one portfolio.

CONCLUSION
Some conclusions can be drawn under the results of the analysis. The traditional game-based learning model was implemented at TKIT Al Hikmah to train the children's visual-spatial intelligence. The activities included apperception and motivation, core activities, and closing activities. There were some traditional games selected such as engklek, the dam-daman, gobak sodor, hide and seek, and making toy cars from grapefruit peel. The evaluation process included observations, anecdotal notes and portfolios.
REFERENCES


Copple, C., & Bredekamp, S. (2009). Developmentally appropriate practice in early childhood programs serving children from birth through age 8. ERIC.


