The Application of Fun Learning Concept in Playgroup Classroom Interior Design

Stefanie Stefanie¹ Hartini Laswandil* Silvia Meliana³

¹Interior Design Study Program, Faculty of Art and Design, Universitas Tarumanagara, Jakarta, Indonesia
²Interior Design Study Program, School of Design, Bina Nusantara University, Jakarta, Indonesia
³Interior Design Study Program, School of Design, Bina Nusantara University, Jakarta, Indonesia
Email: hartini@fsrd.untar.ac.id

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ABSTRACT

One of the school's roles is to motivate children to learn. This is because learning activities are considered boring. Therefore, we need a learning method that makes children comfortable learning and could help their development. The purpose of this paper is to see how fun learning concept can be applied to a school. The author will discuss what aspects in child development, the concept of fun learning, and also the results of the design using case studies of classroom interiors at the Bogor Raya School in Bogor. Using descriptive qualitative research methods and the design method used is a design thinking approach. The author hopes that this writing can broaden the horizons of readers and writers.

Keywords: children, design, fun, interior, learning, playgroup, school

1. PREFACE

Environment and children have a relationship with each other. The environment in which the child lives can affect how the child's life will be in the future. Especially for children at an early age. Thomas G. David and Carol Simon Weinstein said that the child's environment is the main medium for children to learn. And school is one of the main environments for children.

Schools at an early age have a role to help children in the process of growth and development [1]. Growth is a change in numbers, for example, changes in the body and physical. While development is an increase in the ability to move, intellectually, socially, and emotionally [2]. Several aspects in children's development include aspects of language (ability to say - words), cognitive (ability to understand something), physical - motor (ability to move the body physically), and social-emotional (ability to socialize), and values – norms [2].

One of the most important goals is to motivate children to learn [3] so that these abilities can grow and develop properly. Therefore, it takes a fun learning method (fun in learning) to increase the effectiveness of children's learning. Fun in learning is a strategy to make learning interesting and satisfying [4]. This method can also be a solution for children who are bored in learning. The use of the Fun learning method will also affect the existing facilities in a school.

Thus, in this design, the author will describe aspects of child development, analyse what activities can help children's development, determine facilities that are fun and the activities that have been analysed, then apply them to the design of kindergarten school classrooms in Bogor Raya School.

This journal is expected can increase the author's knowledge of how to apply designs that use fun in learning methods in a school.

2. RESEARCH METHOD

In this design, the author will use descriptive qualitative methods as research methods and data collection techniques are conducting observations on the school's website and conducting literature studies to resolve the problem formulation.
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Figure 1

*Design Thinking Method*

![Design Thinking Method](source:image)

**Source:** Hasso-Plattner Institute of Design, Stanford

While the design thinking method will be used for the design method. (Hasso-Plattner Institute of Design, Stanford). There are 5 stages in this method, including empathy, define, ideate, prototype, and test. However, the method that the author uses stops at the prototype stage.

1. **Empathize**
   At this stage, what is done is to recognize and understand the needs, wants, and goals of the product. For example, conducting surveys, observations, literature studies to find out the physical data of the school.

2. **Define**
   The define stage is to understand and observe the information that has been collected in the empathy stage. This information will then be analysed.

3. **Ideate**
   This stage is looking for ideas and solutions to answer existing problems. Done by making a table of the implementation of facilities in activities.

4. **Prototype**
   This stage is the process of developing an idea into a product/design. For example, making visualizations of designs in the form of initial designs and 3d designs.

3. **RESULTS AND DISCUSSIONS**

   **Child Development Aspects**

   According to Nurfadilah in the book Early Childhood Development, there are 5 main aspects in child development at an early age, including:

   1. **Religion and Morals**
      The development of this aspect focuses on the formation of behaviour, characteristics through the cultivation of values related to social and state life, faith, and a sense of humanity.

   2. **Physical – Motoric**
      Physical growth of children who are fed with nutrition and activities to train their muscles. The motor consists of:
      a. **Rough Motoric**
         Discuss how children can move their bodies in a balanced, directed, and agile manner.
      b. **Fine Motor**
         Discussing the health of the child's body, which includes weight and height and other body sizes that are appropriate for his age.

   3. **Cognitive**
      Influence all children's learning activities. Cognitive abilities include:
      a. **Learning and Problem Solving**
      b. **Logical Thinking**

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Can distinguish classifications and patterns, recognize cause and effect, and take initiative & plan

c. Symbolic Thinking
Can recognize and mention numbers and letters, present objects, and draw according to their imagination.

4. Language
The ability of children to speak until they can compose sentences in writing. Language Skills consist of:

a. Receptive
   Able to receive messages conveyed by others well and carry them out.

b. Expressive
   Able to express wishes to be conveyed using body language.

c. Literacy
   Able to read and write

5. Social Emotions
Children's ability to recognize themselves, other people, and their environment. Also discusses the child's ability to control emotions, and have a sense of belonging. Emotional Social Skills include:

a. Prosocial Behaviour
   The child is seen whether he can play with friends, respond, share, understand feelings, respect the rights and opinions of others.

b. Self-awareness
   The ability of children to recognize their feelings, adjust to the environment, and control themselves.

c. Responsibility
   The ability of children to be responsible, obey the rules, and know their rights.

Table 1
Activities to Help Children's Development

<table>
<thead>
<tr>
<th>Child Development Aspects</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion and Morals</td>
<td>1. Pray</td>
</tr>
<tr>
<td></td>
<td>2. Play with sportive and honesty</td>
</tr>
<tr>
<td></td>
<td>3. Stand in line</td>
</tr>
<tr>
<td>Physical - Motoric</td>
<td>1. Hop &amp; Jump</td>
</tr>
<tr>
<td></td>
<td>2. Run</td>
</tr>
<tr>
<td></td>
<td>3. Climb</td>
</tr>
<tr>
<td></td>
<td>4. Throwing and Catching the Ball</td>
</tr>
<tr>
<td></td>
<td>5. Exercising</td>
</tr>
<tr>
<td></td>
<td>6. Dancing</td>
</tr>
<tr>
<td>Cognitive</td>
<td>1. Counting</td>
</tr>
<tr>
<td></td>
<td>2. Imitating pictures</td>
</tr>
<tr>
<td></td>
<td>3. Building blocks</td>
</tr>
<tr>
<td></td>
<td>4. Recognizing colors and textures</td>
</tr>
<tr>
<td></td>
<td>5. Colouring</td>
</tr>
<tr>
<td>Language</td>
<td>1. Speak with a few words</td>
</tr>
<tr>
<td></td>
<td>2. Ask and answer questions</td>
</tr>
<tr>
<td></td>
<td>3. Story Telling</td>
</tr>
<tr>
<td>Social Emotions</td>
<td>1. Sharing</td>
</tr>
</tbody>
</table>
Fun Learning

According to Geethika Rodrigo in his article "4 Reasons Why We Need Fun Learning", Fun Learning is a strategy to obtain effective, interesting, and satisfying learning. This method can be used to relieve children's boredom in learning and help improve the child's mood. A good mood or feeling can help children remember information. A study also shows that a relaxed state can make the brain work better at processing information and work more focused [5].

The concept of fun learning can be applied to the classroom. The classroom can be made attractive and in accordance with activities that help the growth and development of children. For example, you can give a theme to the room and design elements in the room that can interact with children.

Bogor Raya School Design
Survey

Figure 2
View 1 Classroom Photo

Source: Virtual Tour, Sekolah Bogor Raya Website

Figure 3
View 2 Classroom Photo

Source: Virtual Tour, Sekolah Bogor Raya Website

Figure 4
View 3 Classroom Photo

Source: Virtual Tour, Sekolah Bogor Raya Website

Figure 5
View 4 Classroom Photo

Source: Virtual Tour, Sekolah Bogor Raya Website
Analysis
This classroom is rectangular with brick walls finished with white wall paint. The north and south sides of the room are provided with glass windows and glass doors that allow natural light to enter directly into the classroom. As for artificial lighting, it uses general lamps with cool daylight colours. Unfortunately, the lighting in the room is not bright enough. Air circulation in this classroom is from a split air conditioner. In addition, this school is also equipped with CCTV and APAR for security.

The floor uses a beige and white homogeneous tile floor. The walls use brick walls and partitions that are finished with white paint. While the ceiling uses gypsum with a white paint finish.

Most of the furniture used is plastic. The furniture used is also less child-friendly (sharp furniture). The use of selected furniture makes the mood in the room feel less comfortable. So that it can make children lazy to learn and reduce children's creativity. In addition to the elements and conditions in the room, this space lacks facilities to help build children's development.

Design

<table>
<thead>
<tr>
<th>Activities</th>
<th>Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jump</td>
<td>Large empty area</td>
</tr>
<tr>
<td>Run</td>
<td></td>
</tr>
<tr>
<td>Throwing and Catching the Ball</td>
<td></td>
</tr>
<tr>
<td>Exercising</td>
<td></td>
</tr>
<tr>
<td>Climb</td>
<td>Ascending and descending floor paths and stairs</td>
</tr>
<tr>
<td>Dancing</td>
<td>Television</td>
</tr>
<tr>
<td>Counting</td>
<td>Whiteboard</td>
</tr>
<tr>
<td>Imitating image</td>
<td></td>
</tr>
<tr>
<td>Recognizing colours and textures</td>
<td>Texture Panel</td>
</tr>
<tr>
<td>Colouring</td>
<td>Table and Chair</td>
</tr>
<tr>
<td>Story Telling</td>
<td>Bookshelf</td>
</tr>
<tr>
<td>Play in group</td>
<td>Group Table</td>
</tr>
</tbody>
</table>

Source: Virtual Tour, Sekolah Bogor Raya Website

Figure 6
View 5 Classroom Photo

Source: Virtual Tour, Sekolah Bogor Raya Website
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Source: Author

Table 3  
Space Element Design Table

<table>
<thead>
<tr>
<th>Space Element</th>
<th>Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wall</td>
<td>Colour: Light Beige</td>
</tr>
<tr>
<td></td>
<td>Type: Gypsum Board</td>
</tr>
<tr>
<td>Floor</td>
<td>Wood Tile, Synthetic Grass, Homogenous Tile</td>
</tr>
<tr>
<td>Ceiling</td>
<td>Height: +/- 3m</td>
</tr>
<tr>
<td></td>
<td>Colour: White</td>
</tr>
<tr>
<td>Door</td>
<td>Height: 1.5m</td>
</tr>
<tr>
<td></td>
<td>Width: 1m</td>
</tr>
<tr>
<td>Lighting and Circulation</td>
<td>Window openings in the north and south areas of the room</td>
</tr>
<tr>
<td></td>
<td>Semi outdoor Room</td>
</tr>
</tbody>
</table>

Source: Author

Preliminary Design

Figure 7  
Classroom Layout

Source: Author

Figure 8  
Classroom Layout Description

https://doi.org/10.24912/ijassh.v1i1.25737
<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>KETERANGAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD</td>
<td>KID'S CHAIR, RED (CUSTOM)</td>
</tr>
<tr>
<td>CG</td>
<td>KID'S CHAIR, YELLOW (CUSTOM)</td>
</tr>
<tr>
<td>CH</td>
<td>KID'S CHAIR, GREEN (CUSTOM)</td>
</tr>
<tr>
<td>CO</td>
<td>KID'S CHAIR, BLUE (CUSTOM)</td>
</tr>
<tr>
<td>CM</td>
<td>KID'S TABLE (CUSTOM)</td>
</tr>
<tr>
<td>CV</td>
<td>TOY'S RACK (CUSTOM)</td>
</tr>
<tr>
<td>CP</td>
<td>BOOK SHELVES (CUSTOM)</td>
</tr>
<tr>
<td>CS</td>
<td>ROUND LEARNING PANEL</td>
</tr>
<tr>
<td>CT</td>
<td>WHITE BOARD</td>
</tr>
<tr>
<td>CU</td>
<td>LEARNING PANEL 2</td>
</tr>
<tr>
<td>CG</td>
<td>SHOE RACK</td>
</tr>
<tr>
<td>CV</td>
<td>BLACK CHALKBOARD</td>
</tr>
<tr>
<td>CS</td>
<td>WASH BASIN, IKEA, TINE TÖRNVIKEN</td>
</tr>
<tr>
<td>CW</td>
<td>CLOSET, TOTO, TINE CW6.33J</td>
</tr>
</tbody>
</table>

**Source:** Author

**Figure 9**

*View 1 Classroom Preliminary Design*

![Classroom Preliminary Design](image1)

**Source:** Author

**Figure 10**

*View 2 Classroom Preliminary Design*

![Classroom Preliminary Design](image2)

**Source:** Author

**Figure 11**

*View 3 Classroom Preliminary Design*

![Classroom Preliminary Design](image3)
There will be a viewing area equipped with a TV. The floor uses artificial grass and there is storage beside for storing books. There is an empty area for running, walking, and playing ball activities. Tables are made in groups to develop children's social development.

Final Design

**Figure 12**
*Classroom Section A*

![Classroom Section A](image1)

*Source: Author*

**Figure 13**
*Classroom Section B*

![Classroom Section B](image2)

*Source: Author*

**Figure 14**
*Classroom Axonometry Drawing*

![Classroom Axonometry](image3)

*Source: Author*

**Figure 15**
*View 1 Classroom Design Development*

![View 1 Classroom Design](image4)

*Source: Author*

**Figure 16**
*View 2 Classroom Design Development*

![View 2 Classroom Design](image5)

*Source: Author*
The development is in the blank area. There will be bumpy roads and stairs for children's climbing areas. In addition, learning wall panels are also designed to develop children's cognitive abilities. For example, composing activities, learning colour textures, following pictures, and others. Each child will have their table and chair, but the arrangement of it will still be made in groups so that children can socialize with their friends. The back area will be designed as a backyard so children's learning can be done both outdoors and indoors. The materials used are still child-friendly. For example, a wall with Dulux Easy Clean finishing makes it easy to clean if it is smudged by children. Then the use of Dutch teak wood which is finished with clear water-based paint on children's furniture. The material used is wood textured. For example, the use of WPC Wall Panels, HPL tacos, and Roman granite which are not only wood patterned but also easy to clean. The colours used are neutral and soft but also colorful. For example, the colors used in rainbow shapes and chairs.

4. CONCLUSIONS AND RECOMMENDATIONS
There are 5 aspect on child development including: aspects of language (ability to say - words), cognitive (ability to understand something), physical - motor (ability to move the body physically), and social-emotional (ability to socialize), and values – norms. Each of these aspects can be helped by the design of the room. For example, climbing activities on the physical aspect can affect the design of a room that has ascending and descending floor paths and stairs. Recognizing colours and textures that develop child’s cognitive aspect also can be helped by applying texture panel in the classroom.
Therefore, it is necessary to design a room to support children in learning activities. One of them is to design a room by applying the concept of fun learning where children can feel bored to study and be in the room.

REFERENCES
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