

# Mapping Kindergarten Students' Behaviour towards Use of Learning Space

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## ABSTRACT

Sentra allow children to manipulate various objects, engage in role playing conversations with their friends, explore, interact physically, emotionally, socially and cognitively as well as other interesting, varied activities. Sentra provide opportunities for children to play individually, in small or large groups and even classically. Children are allowed to choose activities that interest them and will eventually make children active and interactive learners. This research uses a descriptive qualitative method in the case of Al Azhar Kindergarten. The mapping results show that there is a tendency for students to use mattresses in carrying out activities. The lack of furniture makes students look for a comfortable position when doing activities. Space elements can create an atmosphere that suits the character of the child. The use of soft foam mattresses as a base with bright colour can provide a sense of security because it suits the character of active children.

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Keywords: Kindergarten, Sentra, Mapping

## 1. Introduction

Since 2010, kindergartens have been part of the responsibility of the Directorate of Early Childhood Education or PAUD[1], but the problems of PAUD are still very basic, both in terms of equity of access and quality. Regarding equity, 2011/2012 data shows that the APK of PAUD for the 3-6 year age group only reached 60.33%. The target for APK in 2013 was 67.4%, and in 2014, it was 72.9%.[2]

Children aged 4-6 years are in the early childhood development stage or early childhood, which theoretically starts at the age of 3 years [3]. Children aged three to six years are the golden age in child development [4]. At this age, children experience a process of progress physically, intellectually, socially, and emotionally. The development of children can

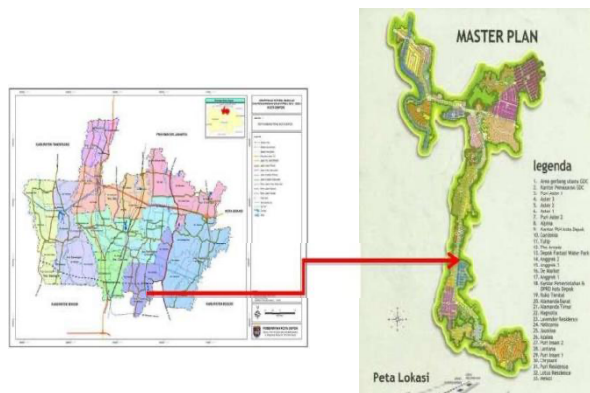
be through formal education channels that are intended for children from four to six years of age. At this age, children have different developmental characteristics from adults.

Kindergarten education needs to follow the nature of the child and perform pretend play methods so that it can imitate adult life naturally. Kindergarten is one step in the process of helping children grow and providing support in their developmental period. Kindergarten is built according to the character of the child's age. This can provide support in the development process. Setting up classrooms according to the character of the child can eliminate boredom.

The classroom is a physical environment that have a relationship with children's behaviour in

space.[5] Active child behaviour must be supported by good facilities so that the learning process can be carried out well.

This study refers to a religious-based kindergarten school and uses the curriculum from the Ministry of Education. from the geographical location of Al Azhar Kindergarten is located on the boulevard of Grand Depok City, Kalimulya Cilodong Depok City, West Java.



Source: (Author, 2016)  
Figure 1: Depok City Map

The research subjects are children using the classroom with various daily activities in it and how children's behaviour in using the classroom. The purpose of this study is to map the behaviour of kindergarten students in using the learning space with the sentra system.

## 2. Material and Methods

Psychologists believe that there are four basic elements or concepts that must be considered in organising learning for early childhood, namely theory of knowledge, theory of development, theory of learning, and theory of teaching [6]. The theories are (1) Theory of knowledge, Piaget said that humans have knowledge that is owned by each individual in living his life. This knowledge already exists in humans and only needs to be constructed. (2) Theory of Development, Humans have developmental patterns and characteristics from infancy to adulthood. Psychologists argue

that humans in their development have certain characteristics. (3) Learning Theory, In accordance with the education programme for early childhood, namely the application of appropriate learning with a play approach, that from the development theory can be seen children gain knowledge that can develop their abilities through play activities while learning (learning by playing). In nature, children love to play, children really enjoy the game, without exception. Through play, children can adapt to their environment and can become more mature.

Sentra allow children to manipulate various objects, engage in role playing conversations with their friends, explore, interact physically, emotionally, socially and cognitively as well as other interesting varied activities. Sentra provide opportunities for children to play individually, in small or large groups and even classically. Children are allowed to choose activities that interest them and will eventually make children active and interactive learners.

Research on early childhood pedagogues has been conducted by several experts such as Dwiyanti[7] and Qori'ah[8]. However, the focus of the research is only on the methods used. The classroom as a place of activity has been unnoticed and the effect of this teaching method on the movement and use of furniture in it is something that needs to be discussed.

This research uses descriptive qualitative methods in the case of Al Azhar Kindergarten, specifically in the process of analysis and conclusion making, the qualitative paradigm uses analytic induction and extrapolation. Analytic induction is an approach to processing data into concepts and categories (not frequencies). So the symbols used are not in numerical form, but in the form of descriptions, which are taken by converting data to formulations. Meanwhile, extrapolation is a way of drawing conclusions that is carried out simultaneously during the analytical induction process [10] and is carried out gradually from

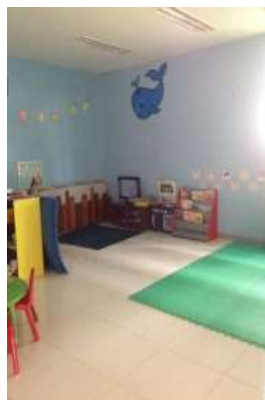
one case to another, then - from the analysis process - a theoretical statement is formulated. In this research design, the researcher made a research design using the mapping of children's behaviour patterns using space in activities.



Source: (Author, 2016)  
Figure 2: Al-Azhar School at Depok



Source: (Author, 2016)  
Figure 3: Sentra Preparation



Source: (Author, 2016)  
Figure 4: Sentra Role



Source: (Author, 2016)  
Figure 5: Sentra Information and Technology



Source: (Author, 2016)  
Figure 6: Sentra Religion



Source: (Author, 2016)  
Figure 7: Sentra Block



Source: (Author, 2016)  
Figure 8: Sentra Material

### 3. Results and Discussions

From the data taken through behavioural mapping of space use taken during observations from the morning to the afternoon, researchers made a map of space use through traces of space use within the sentra. There are several intensity patterns of space use within each sentra.



Source: (Author, 2016)

Figure 9: Activity mapping at sentra Preparation

#### 3.1. Preparation Sentra

In the preparation sentra, all activities are carried out on the floor with mattresses. Both the boys' study group and the girls' study group. Learning activities on the floor give children freedom in activities such as jumping, writing while lying down or drawing. This pattern of activity is something that makes children comfortable.

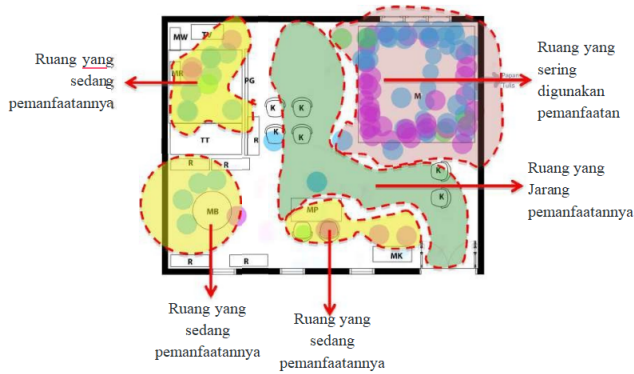
The corner (pink color) is a space used by teachers in controlling children in the learning process, the pattern of using a corner space and using a small space area makes it easier to supervise students but there is something lacking in children's comfort, the use of a smaller corner space so that children have to huddle in the learning process.

The space utilisation in the preparation sentra is mostly used in the corner area, where there are also 4 learning tables but the space utilisation is not as optimal as in the corner area.

The distance between mattresses and furniture that is not close makes it easier for children to do activities freely, besides that the teacher can easily give directions to children. children's behaviour that cannot be silent can make it easier for teachers to control in the space.

However, the use of a small space with the number of children reaching 17 students also does not make children feel comfortable when doing these activities and do not feel crowded with their friends. The teacher supervision area is a space where the teacher can see and control children's behaviour in interpreting a space.





Source: (Author, 2016)

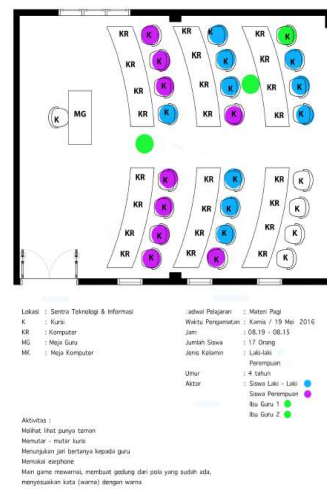
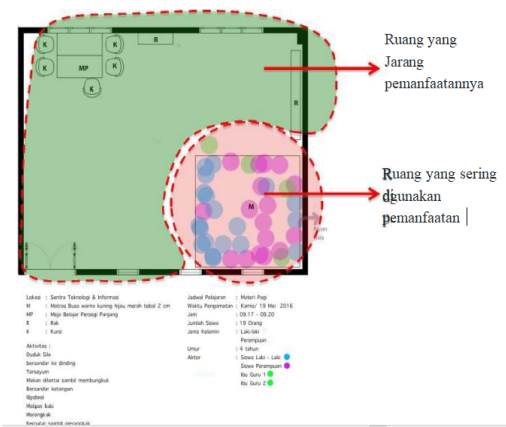
Figure 10: Activity mapping at sentra Role

### 3.2. Role Sentra

The role sentra space with existing conditions is designed in several toy space functions both physically designed and imaginary designed spaces, which include: sleeping room, kitchen room, selling room (fruit and kitchen supplies), restaurant room with fish pond inside, car vehicle room and car workshop room (yellow color).

The role sentra classroom serves as a learning space for children in playing the role given by the teacher in the room. Children are also given direction on the use of space according to their role, the purpose of this sentra is for children to get to know someone's profession or what they will aspire to.

Space utilisation in activities in the art sentra uses more mattress space with a size of 3mx3m, in the use of this space more circular patterns follow the shape of the mat. The location of the mattress area is in the east corner and there is no furniture, the location is not close together, making the area wider so that children are free to move. However, the size of the mattress area does not provide comfort to children because the area is not large enough.



Source: (Author, 2016)

Figure 11: Activity mapping at sentra Technology and Information

Space design is needed in accordance with their respective roles so that children understand better and the values of the learning obtained. With the characteristics of the space formed from several elements, it gives the characteristics of a space and can provide a desired quality of space so that children like it more during the learning process and give the impression of deepening role-playing with space conditions designed to resemble the original.

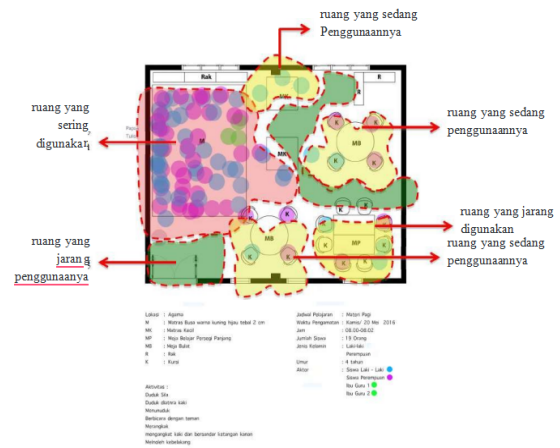
### 3.3. Information and Technology Sentra

The Information and Technology sentra is divided into 2 sentra, the first sentra is the morning activity sentra (attendance, prayer, morning snack, charades, prayer practice) the second sentra is the main activity which is the computer practice lab.

The sentra 1 room is a space where there are mattresses and furniture, in this sentra space is more empty because only a few furniture are used in the previous sentra. The pattern of activities is the same in the previous sentra but has a difference from the use of furniture, while the pattern of utilizing the mattress space as a floor learning space is used in this sentra from morning to afternoon activities.

The process of learning to play in this sentra starting from roll call, prayer, morning snack, guessing words and prayer practice is still carried out in a mattress-based room. The number of users in this room is 19 children and 2 teachers with a mat size of 3mx3m or 9 m<sup>2</sup>. The learning process using a mat area of 9 m<sup>2</sup> with 19 students cannot provide comfort to children. The mat room is also a form of supervision space by the teacher in order to control children's behavior during the learning process.

In the main sentra in the computer laboratory there are tables and chairs forming a curve that has a board in front of the class. The pattern of using chairs is determined by the teacher. The number of users in the sentra there are 3 teachers and 19 children, in this activity children use computers as a tool for play, including coloring, equating colors with words, composing character shapes such as buildings and vehicles.



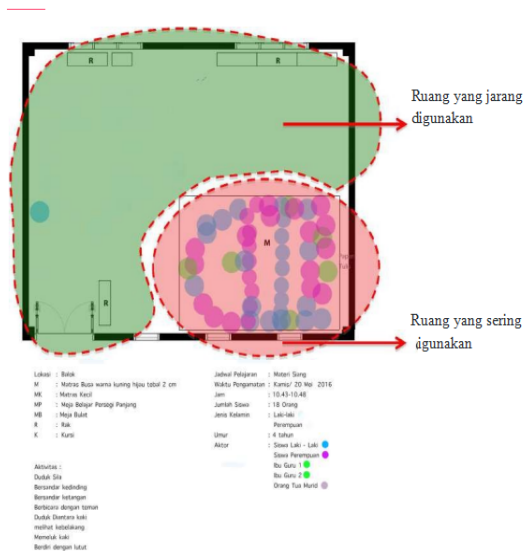
Source: (Author, 2016)  
Figure 12: Activity mapping at sentra Religion

### 3.4. Religion Sentra

The pattern of space utilization in this sentra uses more corner space with mattresses with an area of 12 m<sup>2</sup> with 21 users (19 children and 2 teachers). In this sentra there are furniture learning tables, chairs and shelves. Activities using chairs and learning tables are carried out during the main activity, the morning material uses the floor as a learning space. This room is also used by the teacher as a child supervision control room.

In the religion sentra there is also reading Al Quran activity in its implementation which is carried out together with the morning activity, reading activities require special space so that during the learning process children can focus on carrying out the learning process (yellow color).

At the time of the researcher's observation, this sentra room was sometimes used as a room to celebrate birthdays.



Source: (Author, 2016)  
 Figure 13: Activity mapping at sentra Cube

### 3.5. Block Sentra

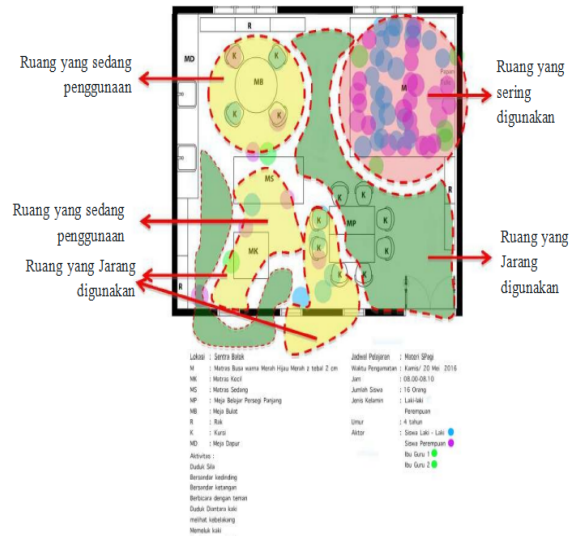
Space utilization in this sentra use a corner room with a mattress with an area of 12 m<sup>2</sup>. In this sentra the main activity is to arrange the shape of the block. In this room there are no learning tables and chairs and there is only a mat used as a base for sitting on the floor, all activities are carried out on the floor (green color).

The use of space in the corner of the mattress area is more dominant than other areas in the room, the utilization of space in this area has a circular pattern and lines up during prayer practice.

A large space is needed to support children's activities, in the block sentra room whose main activity is to arrange a block in the shape of a character, a large enough space is needed that can accommodate special users of children with a total of 18 children with the main activity of making something.

Children need space in carrying out activities both in groups and alone, in the activity of arranging blocks, children in arranging blocks

need space to support activities, space elements to support children's activities are formed based on children's activities.



Source: (Author, 2016)  
 Figure 14: Activity mapping at sentra

### 3.6. Natural Materials Sentra

Space utilization in the natural materials sentra is in the mattress area and study table, in its use the mattress area is used more from morning to afternoon activity material while the use of table chairs is only used during the main lesson.

The pattern of using space in the main activity is done in turns. The behavior observed in the observation results is the behavior carried out by several children during the lesson hours.

Morning materials include class attendance, playing guess the word based on the letter prefixes that the teacher gives according to the theme, practicing ablution and prayer, playing domikado.

## 4. Conclusion

The corner of the room is the zone most used by students in all centers. the existence of the corner of the room makes it easier for teachers

to supervise students. They are used to using mattresses in their activities so that chairs and tables are not always used.

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