IMPROVING CHILDREN'S COGNITIVE USING THE TALKING STICK MODEL AND FLANELBOARD MEDIA IN GROUP B TK PERTIWI

Maisyati Mukarrahma¹, Ratna Purwanti², Miftha Huljannah³
Universitas Lambung Mangkurat¹, IAIN Sultan Amai Gorontalo³
mukarrahmaaisyati@gmail.com¹, ratnapurwanti@ulm.ac.id², mifthahuljannah@iaingorontalo.ac.id³

Abstract
This research is motivated by the low cognitive activity of children in recognizing number symbols. This is caused by one-way learning, monotonous and uninteresting. The purpose of this study was to describe cognitive aspects of the ability to recognize number symbols using the Talking stick model and the Flannel Board media at the PERTIWI Anjir Pasar TK Children. The research used a qualitative approach and the type of classroom action research with research subjects 4 boys and 5 girls group B TK PERTIWI Anjir Pasar. The study was carried out in 4 meetings with the result showing that applying the combination of the Talking stick model and the Flannel Board media can increase teacher activity up to 97%, children's activities reach 100% and children's cognitive development result reach 100%. The result of this study can be used as an alternative in the selection of model in developing children's cognitive abilities.

Keywords: Cognitive, Numbers, Talking Stick, Flannel Board

INTRODUCTION
PAUD is a level below elementary school education which is a level of education before basic education level as a guidance that is enforced from the child's birth to the age of six years. Educational stimuli are given to help physical and spiritual growth and development so that later children are able and have the readiness to enter higher education in the future (Mentari & et al, 2020).

Early childhood is a period where children have a unique life phase and are in a process of change in the form of growth, development, maturation, and refinement, both in their physical and spiritual aspects that last a lifetime and are in balance. One way that can be done is to provide opportunities for children to gain learning experiences from the environment through observation, imitation, and experimentation that takes place repeatedly and involves all the potential and intelligence of children (Handaryani, 2016).

According to Nopayama (2016), early childhood is a very potential period to develop various potentials, so this is the right time for children to get educational stimulation. This educational simulation is expected to be able to develop all aspects of child development such as aspects of cognitive development. Adiputri (2015) states that early childhood cognitive development is in the pre-operational phase, one of the characteristics of the pre-operational phase is symbolic thinking.

Symbolic thinking is the ability to mentally represent or symbolize concrete objects, actions, and events. So at this time in learning for children, it is better to use real or concrete objects in the learning process, children's efforts are easier to understand the learning material presented by the teacher.

Cognitive ability of early childhood can begin with the introduction of the concept of numbers 1-10, the concept of numbers is part of mathematics that is needed to grow and develop numeracy skills in everyday life and is the foundation for the development of early mathematical abilities, while number symbols are a basic aspect in mathematics. It can be concluded that the mathematical experience must be adapted to
the child's cognitive development to minimize perceptual difficulties (Sumardi, 2017). It can be concluded that the development of cognitive aspects is a very important achievement for children, especially for children's knowledge of the world in the future and the level of intelligence of children is influenced by children's cognitive development.

However, the reality in the field is that there are obstacles during the teaching and learning process, especially in group B children of TK Pertiwi in the cognitive development of recognizing number symbols that are not by the expected achievements. This can be seen from the problem, there is evidence that the activities of 6 children only 2 children who can answer questions about numbers 1 to 10 and actively ask. This child's activity will affect the developmental outcomes of 6 children, 4 children have not developed as expected in the cognitive aspect in recognizing number symbols.

Based on the result of observations made to observe the course of learning activities in TK Pertiwi children, researchers found that children's abilities in cognitive aspects of recognizing number symbols were still low. This happens due to learning that takes place in one direction, the lack of use of media that maximizes learning. In early childhood, in introducing new things, concrete objects are needed that allow children to see, feel directly. In addition, less interesting activities will cause children to be busy with their world which result in no stimulus and response occurring. Problems that occur in learning activities will affect children's learning motivation. If this problem continues to be left alone and not addressed, then the indicators of the level of success and achievement of children's cognitive development in recognizing number symbols will not develop optimally. Curiosity in children is underdeveloped. Because this is about children's creativity, the existence of these problems will reduce children's creativity, to overcome the problems that occur in Pertiwi Kindergarten children in developing cognitive aspects of recognizing number symbols, researchers take a combination of model (talking stick and flannel board).

This research is supported by the result of previous studies (Naimah, 2015; Adiputri, 2015) which found that the talking stick model can improve children's cognitive and improve children's developmental outcomes in recognizing number symbols.

The talking stick learning model according to Huda (2013) is one of the cooperative learning model. This learning strategy is carried out with the help of a stick, whoever holds the stick must answer the point. This activity is repeated over and over again until all groups have a turn to answer questions from the teacher. Through the talking stick model, it will create a pleasant atmosphere for children and be able to recognize the number symbols played through this model. Then the flannel board media is a board covered with flannel so that the images to be presented can be installed and removed easily and can be used many times.

The purpose of this study was to determine the activities of teachers, children and the result of developing cognitive abilities in recognizing number symbols using a combination of talking stick model and flannel board media.

METHOD

This research uses a qualitative approach and the type of research is Classroom Action Research. According to Sanjaya (2012: 33) CAR has the aim of improving learning processes and outcomes. This CAR was carried out in 3 meetings, with 4 stages consisting of, planning, implementing, observing, and reflecting (Arikunto, 2015). At the planning stage, the researcher makes RPPH, makes observation sheets, and makes learning media that will be used. At the stage of implementation, the researchers carried out the plans that had been made for the teaching and learning process. At the stage of observing the researchers carried out...
observations of the CAR. At the reflection stage, the researcher made improvements to the observed aspects so that at the next meeting they increased.

The research setting was carried out in Group B TK Pertiwi Anjir Pasar. The research subjects were group B children, consisting of 9 children, 4 boys and 6 girls. The data collected in this study were obtained using rubrics and observation sheets from teacher activities, children's activities and the result of children's cognitive development.

The level of success in this study, the quality of teacher activity, is categorized as successful if it gets a score of 26-32 reaching the very good criteria. Children's activities are said to be successful if individually they reach 13 with a classical percentage reaching 80% with the criteria of being active and very active and the completeness of the result of children's language development is categorized as successful if the child individually is achieving a score of 82% at least developing according to expectations (BSH).

RESULT AND DISCUSSION

Based on data analysis of this research, the learning process through a combination of talking stick model and flannel board media group B TK Pertiwi Anjir Pasar was held for 3 meetings. At each meeting, the teacher's activities, children's activities, or the achievement of children's cognitive development recognizing number symbols have increased. The increase in teacher activity in the implementation of the learning process can be seen in the table below.

<table>
<thead>
<tr>
<th>Meeting</th>
<th>Score</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>16</td>
<td>Pretty Good</td>
</tr>
<tr>
<td>2</td>
<td>21</td>
<td>Good</td>
</tr>
<tr>
<td>3</td>
<td>23</td>
<td>Very Good</td>
</tr>
</tbody>
</table>

From table 1, the teacher's activities in the 3 meetings were carried out very well. In the first meeting, the teacher got 16 criteria that were quite good. In the second meeting, the teacher got 21 good criteria. In the third meeting, the teacher got 23 very good criteria. We can also see the comparison of teacher activities from the graph below:

![The Result of Teacher Activity](image1)

Table 2. Classical Recapitulation of Children's Activities

<table>
<thead>
<tr>
<th>Meeting</th>
<th>Score</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>33%</td>
<td>Less Active</td>
</tr>
<tr>
<td>2</td>
<td>83%</td>
<td>Very Active</td>
</tr>
<tr>
<td>3</td>
<td>100%</td>
<td>Very Active</td>
</tr>
</tbody>
</table>

From table 2, children's activity classically in the first meeting obtained 33% of the criteria for being less active, at the second meeting it increased dramatically as much as 83% of the criteria for being very active. At the third meeting, 100% of the criteria were very active.

It can also be seen the comparison of children's activities classically through the graph below:

![The result of Children Activity](image2)
Table 3. The result of Children Cognitive Development

<table>
<thead>
<tr>
<th>Meeting</th>
<th>Score</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>33%</td>
<td>Undeveloped</td>
</tr>
<tr>
<td>2</td>
<td>67%</td>
<td>Growing As Expected</td>
</tr>
<tr>
<td>3</td>
<td>100%</td>
<td>Very Well Developed</td>
</tr>
</tbody>
</table>

Based on table 3, the achievement of classical child development in the first meeting obtained 33% of the criteria for not developing, at the second meeting it increased to 67% the criteria developed as expected. And at the third meeting, it increased again to 100% the criteria for developing very well.

The following is a graph of the trend of children's developmental achievements:

Figure 3. The result of Children Cognitive Development

Based on research conducted at meetings 1, 2, and 3, we can see that there is always an increase in development at each meeting, such as an increase in teacher activities, children's activities, and children's cognitive development outcomes. We can see the comparison of development achievements 1, 2, and 3 in the trend graph below:

Figure 4. The Result of Teacher's Activity, student activity and student development

From Figure 4, it can be seen that teacher activities have an effect on children's activities and the result of children's development achievements. If the teacher's activity increases, the child's activity also increases so that the child's development result also experiences the same increase.

Judging from the graph above, the teacher's activity in the first meeting got a score of 16 criteria quite good, at the second meeting it increased to 21 good categories. In the third meeting obtained 23 very good categories.

Children's activities also increased in each meeting. At the first meeting, the child scored 33% of the criteria for being less active, at the second meeting it increased to 83% of the criteria for being very active. At the third meeting, the child got a score of 100% with the very active criteria.

The increase in children's activities will affect the result of children's development will also increase. This can be seen in the graph above, at the first meeting the child scored 33% of the criteria for not developing, at the second meeting it increased to 67% the criteria developed as expected. At the third meeting, the child got a score of 100%, the criteria for developing very well.
From the research carried out in 3 meetings, the activities carried out in the study were observing teacher activities, children's activities, the result of developmental achievements on social-emotional aspects in obeying the rules that apply in the game. The number of children in the study was 9 people, 4 boys and 5 girls. Discussion of the ability to cognitive aspects of children recognizing the symbols of numbers 1-10 in group B TK Pertiwi Anjir Pasar by researching the three meetings was declared to have developed successfully.

Optimal result are obtained from the achievement of teacher activities at each meeting by always making improvements so that learning becomes better, and the teacher knows where the shortcomings are in each meeting. With reflection, teachers can improve existing deficiencies, so that the learning process in the classroom becomes better than before.

The nature of early childhood learning is prioritized by learning while playing, oriented towards development to provide opportunities for children to actively carry out various learning activities or the development of all aspects. The success of the early childhood learning process is seen from the achievement of optimal child development. Learning outcomes can also be said to be a liaison for children to the environment or further developments, evidence of successful learning at school. For the teaching and learning process to take place to achieve the goal, it should encourage children to dare to express their opinions in the development of a fun learning process to increase children's activities (Sitepu, 2014:144).

Judging from the teacher’s observations that have been carried out for four meetings from the preparation stage to the implementation, it is effective. The teacher’s activities in learning on the observation sheet have been carried out well and have developed. In teaching activities, a teacher is expected to have competence in designing and implementing various lessons that are appropriate to the stage and development of children. This is in line with (Indris, 2014:15) that the success of a teacher in carrying out their process includes mastering the child's character, mastery of the learning process, providing facilities for the development of children's abilities to actualize their abilities as well as organizing values and evaluating processes or learning outcomes.

The right teacher is a teacher who can give children love and has a gentle soul so that children feel at home studying with the teacher and feel safe and comfortable (Manispal, 2014: 53). Teachers must also have a high enthusiasm for teaching and creating fun activities.

Learning activities must also be two-way because teachers and children must be both active in the teaching and learning process to create harmony between students and educators to get maximum result at the end. (Suriansyah, A & Aslamiah, 2011).

The success of learning in PAUD is based on the implementation of learning carried out by teachers in the classroom both in terms of organization and learning management. The use of appropriate strategies in teaching activities is a very important part to pay attention to achieve optimal learning objectives. The high interest, attention and motivation of children are factors that influence the achievement of learning objectives more optimally carried out by a teacher (Suriansyah, A & Aslamiah, 2011).

According to Mulyasa (2012), the teacher must be able to bring a fresh and natural atmosphere so that children are not easily bored and tired when studying to improve the quality of children's result later.

In line with the research result of Purwanti, R., Suriansyah, A., Aslamiah, A., & Dalle, J. (2018:26-32) the use of the talking stick model makes children more active in expressing their opinions and makes teaching and learning activities are more fun and effective. Then (Asniwati, Hidayat, Rafianti, 2019; Purwanti & Suhaimi 2020) also found that children will be active in learning if the model and media....
presented by the teacher can make children interested and feel that the learning carried out is fun, one of which is by using the talking stick learning model. Research found that the talking stick model can improve children development aspect (Kuntilangensari, A. R., & Asmar, M, 2021; Wahyudi, M. D, 2021; Milana, H. 2021) found that the talking stick model can improve children development aspect.

It can be concluded that through the talking stick model and the flannel board media on the cognitive aspect in recognizing the symbols of numbers 1-10, the teacher's activities at meeting 1 were categorized as quite good and at the end of meeting 3 the category was very good, meaning more progress than before. The creation of an environment for teaching and learning activities that can support the effectiveness and efficiency of children's learning, cannot be separated from the role of a teacher in managing a pleasant learning environment for children.

According to Daryanto (2012: 22), the use of flannel board media is that it can support learning in any type of lesson because the use of flannel board media is very systematic and interesting so that it can foster children to learn more actively and be more active. Then Hadi and Hamzah (2020) the use of flannel board media can increase children's motivation towards learning, and encourage children to actively participate in learning because the media used is interesting and creative.

During learning activities, the teacher carries out activities that make children more interested in learning by the principles of early childhood learning by playing, so that children become happy or enthusiastic about learning. This is the reason why children's activities at each meeting have increased.

The increased activity of children in a learning process is an indicator of the child's desire to learn. According to Manispat (2014: 127) the importance of playing in early childhood education.

Suriansyah (2014: 220) learning in the building is an active process and people learn in building knowledge, not a passive process that gets information or knowledge from mere educators.

When the learning process in emotional social development obeys the rules that apply in the game, the teacher can create a fun learning atmosphere, such as learning while playing traditional games to make children enthusiastic about participating in learning activities.

Learning is a process of interaction between children and teachers or the learning process of the learning environment. Learning is the support that teachers have given to be able to become a process of acquiring knowledge and knowledge, mastering skills and character, and forming attitudes or beliefs towards children. Learning is a way that can help children learn well (Mursid, 2015: 37).

Learning is the process of collaborating with teachers or for utilizing various potentials and resources that exist both in the surrounding environment, abilities that come from within the child such as the interests and talents of the child, the basic abilities the child has including learning styles, or abilities from outside the child, the environment, facilities and infrastructure., learning resources for efforts to achieve learning goals (Fadillah, 2013).

Children who experience a happy period are met with all physical or psychological needs at the beginning of the child's development can carry out further developmental tasks and to understand the needs, further development characteristics provide opportunities for students to be able to learn in the right way (Masitoh, 2014).

CONCLUSION

It was concluded that an increase in the cognitive development of children in recognizing number symbols was achieved using the talking stick model and flannel board media with the criteria for Very Good Development (BSB). The teacher's activities in the learning process are by the steps made.
and get very good criteria. For children's activities, there is also an increase in each meeting by getting indicator achievements of all active children. The achievement of children's cognitive development in recognizing number symbols has increased at each meeting, both individually and classically. The use of these model and media can be input for improving the process and result of child development.

REFERENCES


