



DEVELOPING CHILDREN'S COGNITIVE USING PICTURE AND PICTURE MODEL, PAIR CHECK AND SMILE CIRCUIT GAME

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Abstract

The problem in this research is the low development of children's cognitive aspect in sorting objects based on size. This happens because children often feel bored, lack of focus, lack of confidence, and lack of interest and enthusiasm for learning activities. This study aims to determine teacher activities, children's activities, and the result of children's cognitive development in sorting objects based on size using a combination of Picture and Picture model, Pair Check model with Smile Circuit games. This study uses a qualitative approach and the type of Classroom Action Research (CAR) with 4 meetings. The result showed that the teacher's activities at the first meeting obtained good criteria and improved at the fourth meeting with very good criteria. The child's activity only reached the moderately active category at the first meeting, progressed to the very active category at the fourth meeting and the result of the child's cognitive development obtained the Beginning to Develop (MB) category at the first meeting and experienced development at the fourth meeting with the Very Good Developing category (BSB). Based on the data obtained, it can be concluded that the Picture and Picture model, the Pair Check model with the Smile Circuit game can develop children's cognitive abilities in sorting object based on size in the B2 PAUD Terpadu Terpadu Insan Kamil Banjarmasin group.

Keywords: Cognitive, Sorting Object by Size, Picture and Picture Model, Pair Check Model, Smile Circuit.

INTRODUCTION

The next generation that is competitive is obtained from quality education. The role of education cannot be forgotten from the progress of a nation, as expressed (Firman & Murtini, 2018). The barometer of a nation's progress is education which has the main goal of printing quality human resources. Education is a planned effort that is used to realize as well as a learning process so that students can actively develop their inner potential so that they have good personality strengths in the form of religious spirituality, self-control, intelligence, morality, character and various skills needed for themselves. alone.

Early childhood education is a form of education that focuses on laying the foundation for physical growth and development (fine and gross motor coordination), intelligence (thinking power, creativity, emotional intelligence, spiritual intelligence), social emotional (attitude and behavior). and religion), language and communication, according to the uniqueness and stages of development that early childhood goes through (Sujiono Y. N., 2013). Early age is the most important and fundamental early period in the span of growth and development of human life. This period is marked by various fundamentally important periods in the life of children in the future. One of the periods that characterizes early childhood is the golden age. For a child playing is an



activity they do all day long, because for a child playing is life and life are playing.

There are six aspects that need to be developed in early childhood education. These aspects are religious and moral values, physical motor, cognitive, social emotional, language and the last is art (Roestiyah, 2001).

One of the expected achievements in learning aspects of cognitive development is the child's ability to sort objects from the smallest to the largest. With this activity, it is hoped that children can recognize sizes in a simple way. However, in reality, based on the result of observations and interviews at the Insan Kamil PAUD Integrated Group B in the second semester of the 2020/2021 academic year, cognitive development activities in sorting objects by size in group B PAUD Integrated Insan Kamil Banjarmasin, still have development constraints, because the model and the learning method does not attract children's interest, learning activities are centered on the teacher and children only listen to the teacher's explanation so that cognitive development is less fun and less attractive to children.

The way to solve this problem is to use the Picture and Picture learning model, the Pair Check model with the Smile Circuit game. With the combination of this model, children will play an active role between one child and another, interested in learning because of the element of fun play, learning activities are not only centered on the teacher but all children can learn directly in learning activities.

Picture and Picture model is a learning model that uses pictures and is paired or sorted into a logical sequence. This learning model relies on images which are the main factor in the learning process. Therefore, the teacher had previously prepared images to be displayed, either in the form of cards or charts in large sizes (Shoimin, 2017). The

result of the research of Purwanti, R., SURIANSYAH, A., ASLAMIAH, & DALLE, J. (2018) found that the picture and picture model was able to improve children's language development.

The Pair Check model is a learning model in which children pair up with each other and solve the problems given. Pair Check cooperative learning model, the teacher acts as a motivator and facilitator of children's activities. This learning model also trains children's social sense, cooperation, and the ability to give judgment. This model aims to improve children's ability to express ideas to exchange opinions and give each other advice (Shoimin, 2017).

Smile circuit is a game that aims to develop children's motor activities. The developmental aspects contained in the Smile circuit game include balance, strength, speed, and accuracy. The Smile circuit game carried out in this study was not focused on developing children's physical motor skills, but rather a game to develop children's cognitive abilities in understanding the basic concepts of sorting objects by size (Nikmah, A., Tumardi, T., & Yafie, E., 2019). The combination of these model and learning methods is expected to develop children's ability to sort objects by size when following the learning process, because children's cognitive abilities are not yet optimal, especially in terms of developing children's ability to sort objects by size.

METHODOLOGY

This study uses a qualitative approach. The qualitative approach emphasizes the analysis of the process of inductive thinking processes related to the dynamics of the relationship between observed phenomena and always uses scientific logic. Basrawi & Suwandi (2013) defined qualitative methodology as a research procedure that produces descriptive data in the form of written or



spoken words from people and observed behavior.

The type of research conducted is Classroom Action Research (CAR). Classroom Action Research is action research in the field of education that is carried out in the classroom area with the aim of improving and improving the quality of learning in the classroom (Suriansyah, 2013). Classroom action research is an attempt to observe the learning activities of a group of students by providing an action that is deliberately raised.

The research was carried out at the Insan Kamil Integrated PAUD with the subjects of this study being students in group B of the Insan Kamil Integrated PAUD Banjarmasin with a total of 5 children, consisting of 3 girls and 2 boys. Well).

The factors studied in this Classroom Action Research (CAR) are: teacher factors, child factors, and developmental achievement factors. Indicators of teacher activity are said to be successful if they reach a score of 26-32 with a very good category. The average indicator of children's activities in learning activities is said to be successful if children's activities reach a score of 13-16 and classically reach 80% of children in the "very active" category. Indicators of children's cognitive development result are said to be successful if classically 80% of children are able to recognize objects based on the smallest to the largest size or vice versa at least get 3 stars (develops as expected) with the criteria of being able to do what the teacher asks in carrying out activities.

RESULT AND DISCUSSION

Result

Based on the findings of the research conducted in 4 meetings consisting of meeting 1, meeting 2, meeting 3 and meeting 4, it can be described as follows:

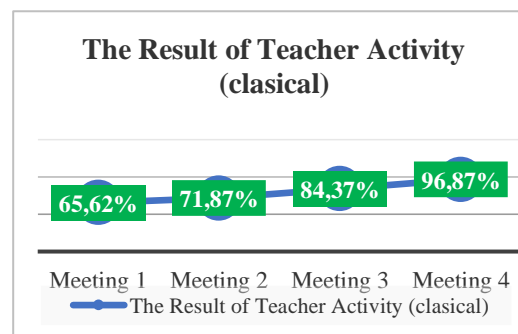


Figure 1. Graph of The Result of Teacher Activity (classical)

The graph shows that every meeting that is held there is always an increase in the score of teacher activity, starting at meeting 1 which scores 21 percentages of 65.62% in the good category, at meeting 2 gets a score of 23 percentages of 71.87% in the good category, then at the second meeting 3 got a score of 27 percentages of 84.37% in the Very Good category. Then until meeting 4 got a score of 31 percentages of 96.87% in the Very Good category, which finally reached the indicator of success. The improvement that occurs is an improvement made by the teacher at each meeting by looking at the deficiencies that exist when carrying out learning activities, so that by seeing these deficiencies the teacher makes improvements for the sake of improvement which in the end the teacher can achieve the expected result, namely by achieving the Very Good category. Good at meeting 3, then improvements and improvements were made again at meeting 4 which achieved success indicators in the Very Good category. Learning activities carried out by the teacher 4 times developed the ability of the child's cognitive aspects in sorting objects based on size, it can be concluded that at the 4th meeting the teacher's activities in carrying out learning activities had achieved optimal result.

Based on the result of observations of the result of children's activities:

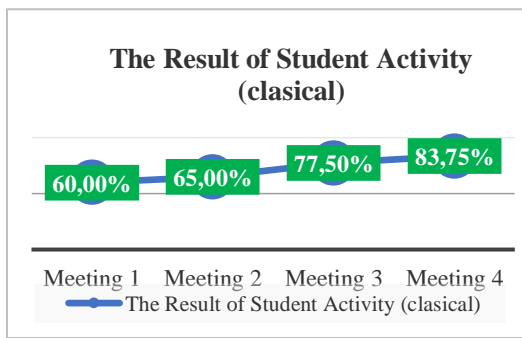


Figure 2. Graph of The Result of Student Activity (classical)

The graph above shows the result of children's activities classically, namely 60% at meeting 1 with moderately active criteria, 65% at meeting 2 with active criteria, 77.5% at meeting 3 with active criteria, and reaching 83.75% at meeting 4 with very active criteria.

Based on the research conducted at meeting 1, meeting 2, meeting 3 and meeting 4, it can be seen that the comparison of the result of the research that has been done. This can be seen from each meeting there is an increase in children's activity, at the 1st meeting children get a percentage of 60% with the category quite active. This is because there are many shortcomings made by the teacher so that it affects children's activities. Therefore, the teacher makes improvements so that children's activities experience improvement and increase, because there are still many children who have not been able to sort objects by size, it is also because children are not used to learning by using a combination of Picture and Picture model, Pair Check model with Smile Circuit games. Thus, it is necessary to increase the activity of children for the next meeting.

At the second meeting, children's activities increased by getting a percentage of 65% in the active category. This is because the teacher reduces errors that occur in the previous meeting, but there are still some children who are still not able to sort objects by size, it is also because children are not used to learning

by using a combination of Picture and Picture model, Pair Check model with Smile Circuit games. . So that at the next meeting the teacher must further correct the deficiencies that still occur.

At the third meeting, children's activities increased by getting a percentage of 77.5% in the active category. This is because the teacher reduces errors that occur in the previous meeting, but there are still some children who are still not able to sort objects by size, it is also because children are not used to learning by using a combination of Picture and Picture model, Pair Check model with Smile Circuit games. So that at the next meeting the teacher must further correct the deficiencies that still occur.

At meeting 4 the increase in children's activity occurred as expected by obtaining a percentage of 83.75% in the very active category. This percentage is included in the percentage of success in the very active category. This is because the teacher has carried out learning optimally and learned from the shortcomings that existed at the next meeting so that what was expected at meeting 4 was successfully carried out, namely by achieving a percentage of success. In the result of children's cognitive development conducted at meeting 1, meeting 2, meeting 3, and meeting 4, it can be seen that the result of the achievement of children's cognitive development are as follows.

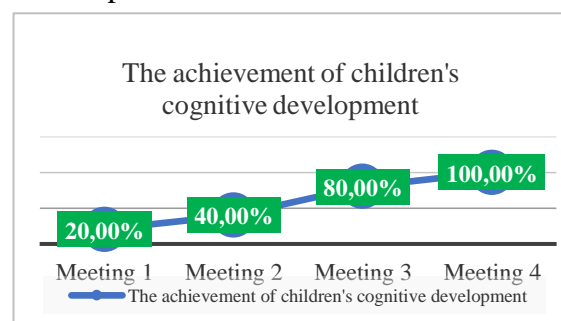


Figure 3. Graph of The achievement of children's cognitive development



The graph above shows the result of the achievement of children's cognitive development at meeting 1 reaching 20% with the criteria for Starting to Develop (MB), meeting 2 reaching 40% with the criteria for Developing According to Expectations (BSH), meeting 3 reaching 80% with the criteria Developing as Expected (BSH), and obtained 100% at meeting 4 with the criteria of Very Good Development (BSB). It can be concluded that all aspects studied, namely teacher activities, children's activities and the result of children's cognitive development achievements have increased at each meeting.

Discussion

The learning carried out by the teacher was optimally successful because the teacher at each meeting always made reflections so that the teacher knew the shortcomings that should not be done at the next meeting, the teacher also mastered the learning model well so that the learning carried out ran optimally.

The success of teacher learning is determined by the ability of the teacher to manage his class. The success of a learning process is largely determined by the quality or ability of the teacher (Nuraeni. et al, 2014). This is also in line with the opinion of Sujiono (2016) that the success of teachers actually emphasizes three main qualities and attitudes, namely: (1) teachers who provide facilities for the development of children to become fully human, (2) make a lesson valuable by accepting feelings, children and personalities, and believe that others are fundamentally worthy of trust to help create an atmosphere during learning, and (3) develop an empathetic understanding for sensitive/sensitive teachers to recognize children's feelings in the world.

Improving the quality of teaching carried out by teachers aims to improve the process and learning outcomes of children. Teacher competence in learning

is an important factor as a consideration in improving the quality of student learning (Suriansyah, 2018). Because teachers can provide a stimulus to increase student participation in learning, and students are required to actively participate in learning. This shows a close correlation between the roles of teachers and students.

In teaching activities, a teacher needs to have the ability to design and implement various learning strategies according to the stage and development of the child. This is in line with (Idris, 2014) that the success of a teacher in carrying out their process includes mastering the characteristics of students, mastering learning theory, facilitating the development of students' potential to actualize their potential and conducting assessments and evaluations of learning processes and outcomes.

The increase in children's cognitive development in sorting objects based on size is also due to the teacher's accuracy in choosing and determining, namely through a combination of Picture And Picture model, Pair Check model with Smile Circuit games. During activities the teacher provides guidance, direction and motivation to children so that the result of child development are optimal.

In line with Sujiono (2013) assistance can be given when the child is active or doing tasks, such as: a) motivating or getting the child's interest related to the task; b) simplify tasks so that children can easily organize and complete them; c) provide some direction with the aim of helping children to focus on achieving their goals; d) clearly indicate the work between children's work and the standard or completion desired by the teacher; e) reduce frustration and risk; and f) provide a clear example and apply the expectations of the activities shown.

Several experts in their study concluded that children's education from



an early age can improve achievement and can increase work productivity in adulthood (Yusuf S. and Nani M. Sugandhi, 2013).

Early childhood is a very important golden age to provide a stimulus for child development. Childhood is a time to lay the first foundation in developing children's physical, motoric, cognitive, language, social emotional, self-concept, discipline, art, moral and religious values abilities. Therefore, conditions and stimulation that are in accordance with the needs of children are needed so that children's growth and development are achieved optimally. The world of children is the world of play, because by playing children are able to learn many things, and without realizing it and without being burdened. Through playing, children can recognize the rules, socialize, place themselves, manage emotions, tolerance, cooperation, succumb, sportsmanship and other positive attitudes. In addition, children can develop children's mental, language, and motor intelligence although sometimes their selfish nature arises when playing (Mulyasa, 2012).

The increase in the result of children's cognitive development is due to the fact that in the learning process the teacher applies child-centered learning, both from the use of the Picture and Picture model, the Pair Check model, and the Smile Circuit game.

The combination of these model is very helpful and motivates children to build their own knowledge and understanding based on what they learn. The result of the study found that the picture and picture model can improve children's cognitive development. improving children's cognitive development through picture and picture learning model (Anggraini, R. D., Listyarini, I., & Huda, C., 2019; Duiasih, N. M., Sanjaya, P., & Wiradnyana, I. G. A, 2022; Handayani, L. P. M., Asri, I. G.

A. S., & Sujana, I. W., 2016; Kusumawati, K. D., Jampel, I. N., & Parmiti, D. P , 2014; Wahyudi, M. D, 2021; Puriani, N. P. A., Parmiti , D. P., & Wiryana, N, 2014; Parwati, N. N., Parmiti, D. P., & Jampel, I. N., 2013; Rozi, F., Widat, F., & Efandari, E, 2021; Salsabila, N., & Novitawati, N. , 2021; Suara, I. M., & Putra, D. K. N. S. 2014; Tutupary, R., 2017).

The result show that the Pair Check model can improve children's understanding or concepts (Normalisa, 2014; Yuliariska, N. W. F., Suwatra, I. I. W., & Garminah, N. N., 2016).

The use of appropriate teaching strategies is very important to note, therefore the teaching strategies used to achieve certain teaching instructional goals must be able to grow attractiveness for children, because high attractiveness at the time of delivery of teaching materials causes children to want to study the field of study with intensity. high interest and attention. The high intensity of interest, attention and motivation is a precondition for the achievement of learning objectives more optimally. This is basically a teaching responsibility, and is an indicator of the quality of the learning process carried out by a teacher (Suriansyah and Aslamiah, 2012).

It can be concluded that in the aspect of teacher activity each meeting tends to increase, this is because the learning carried out by the teacher at each meeting has a quality that is getting better than before, so that it gets the expected result. Likewise in the aspect of children's activities which at every meeting always increases, this is because during the learning process carried out at each meeting the teacher is able to make students more active and even very active at every meeting that is held. Therefore, the impact of increased teacher activity and child activity will also increase the result of children's cognitive development at each meeting. So, it can be concluded



that every aspect, namely aspects of teacher activities, children's activities and children's learning outcomes are related to each other. This can be said because if the teacher's activity increases, it will affect the children's activities and their learning outcomes, which is for the better.

CONCLUSION

Based on the result it can be concluded that the development of cognitive aspects of children in the Integrated B2 PAUD group Insan Kamil Banjarmasin in sorting objects based on size using a combination of Picture And Picture model, Pair Check model with Smile Circuit games on teacher activities considered successful with very good criteria, children's activities with very active criteria and the result of aspects of development children's cognitive achievement indicators of success classically with the criteria of Very Good Development. It is recommended that the combination of the Picture and Picture model, the Pair Check model with the Smile Circuit game be used as an alternative learning material in an effort to improve the development of cognitive aspects in sorting objects by size as a fun learning model and make children active.

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