DEVELOPING CHILDREN'S LITERACY USING THE PROJECT BASED LEARNING MODEL, MASTERY LEARNING MODEL, NUMBER HEAD TOGETHER MODEL AND SAND MEDIA IN GROUP A

Adriyani¹, Darmiyati²
Lambung Mangkurat University
Email: adriyanim@gmail.com¹, darmiyati@ulm.ac.id²

Abstract
The low ability to recognize children's early literacy, low children's learning activities and low focus on learning activities that make children lack learning motivation and lack of desire to excel in a learning activity should be a concern in this study. The purpose is to analyze teacher activities, children's activities and literacy development results using sand media in Kenanga Banjarmasin Kindergarten. This research uses Classroom Action Research with qualitative and quantitative approaches used in this study. It is conducted in three meetings with children from group A of Kenanga Banjarmasin Kindergarten, with a total of 8 children. The results showed that teacher activity always increased in every meeting starting from the 1st meeting obtaining a score of 26 with Good criteria, until the 3rd meeting obtaining a score of 34 with Very Good criteria. Child activity 1st meeting with 38% Active criteria, 2nd meeting with 75% Active criteria and 3rd meeting with 100% Very Active criteria. The results of child literacy development at the last meeting reached 100%. It was concluded that the combination of Project Based Learning, Mastery Learning, Number Head Together models using sand media was proven to develop children's activities and children's literacy development outcomes. It is recommended that principals, educators and subsequent analysis can be material to further develop learning in children.

Keywords: Literacy, Project Based Learning Model, Mastery Learning Model, Number Head Together Model, Sand Media

INTRODUCTION
Education is a discovery generally made by an instructor for individuals who need information, a teacher is often called an instructor and learning can also usually be done independently. There are many ways to be able to convey learning in learning activities to children, teachers must have intelligence in delivering learning, especially to early childhood. It takes perseverance and patience to show to early childhood because they actually need a lot of direction and attention (Etivali & Kurnia, 2019).

In accordance with the regulations established by National Association of Early Young Children (NAEYC), the stage of early childhood development is a progressive phase that must be passed by humans as living beings. Children must grow and develop into adults who can handle themselves and not depend on or create problems for others, family or society, so that their lives will be better in the future (Talango, 2020).

The early period of life is the most important and fundamental period in human growth and development. This period is characterized by various stages that are crucial for the future life of children. One of the periods that characterize early childhood is the "golden period" (Radiansyah et al., 2022). Early age is the starting point in shaping children's morals and teaching positive qualities to the younger generation in order to become human beings with character. Children have different characteristics from other
children. This child is interesting, active, curious, creative, gregarious and likes new things. As a result, they can be well educated assuming that they get direction and love from their parents and the environment (Harahap, 2021). The limiting factor that cannot be changed in children is genetic. Therefore, PAUD aims to facilitate each individual through the right environment and tutoring. This is done to develop the child's personality according to his genetic capacity (Asyari & Arisanty, 2022).

Early childhood education is a type of educator organization that highlights the formation of a basis for actual development and progress, knowledge, inventiveness, capacity to understand people on a deeper level and deep insight. Early childhood education means energizing, guiding, supporting and providing learning exercises that will develop the child's capacity and abilities (Surya, 2017). Early Childhood Education (PAUD) is not just preparation for children before entering the basic education level. PAUD, in its various implementations, has a very broad and profound meaning and benefits. This concept of education, which is widely applied by society, provides an important foundation for the future development of children (Aminah & Radiansyah, 2021).

Language is a tool used by social beings to communicate with each other consisting of an important thing to not important in their speech (Aslamiah et al., 2023).

Language development is not just about children's ability to speak fluently, but also about their ability to understand and use language effectively. These abilities are critical to supporting a child's overall learning success, as language is the primary tool children use to communicate, learn, and understand the world around them (Annisa & Asniwati, 2021). Language development or child communication is an aspect that needs to be developed in children and should not be ignored in general by teachers and especially parents (Wahyudi & Sabila, 2023).

One of the developments in language aspects is the development of early literacy. Early literacy abilities are abilities that are nothing but knowledge of letters, words and writing. As well as being part of the basic foundation of children's needs to learn to write, read, and count (Anggraeni et al., 2022).

The incredible potential every child has and through their current circumstances. The child gains useful knowledge about new things, experts often refer to the child as the brilliant age or golden age (Golden Age). This period is a time when the expectations that exist in children can easily develop and the environment provides a positive outlook, for example providing the encouragement needed for children to have ideal development and progress (Muthiah et al., 2020).

Information about early childhood language improvement is helpful for the advancement of basic language skills. For parents and educators, seeing children's language development is very useful to further develop children's language skills. Language is an important part of a child's development. According to their transformative phase, children learn how to read, write, speak and listen (Isna, 2019).

Early proficiency in children is very important, because letter comprehension is related to early childhood capacity at a later stage (Sari et al., 2020). Teachers have an important role in introducing children to their literacy in imitating writing to suit the stage of development of the children they teach. It is expected that teachers can develop aspects of children's language and the ability to recognize literacy in imitating writing, a new knowledge as an effort to develop good mastery of children towards literacy development through sand media.
Through learning based on objects around the child, children understand concepts faster because they are related to their daily lives. Children will naturally remember concepts based on what they see (Sa'dijah et al., 2021).

The active involvement of children in learning activities will provide extraordinary open doors for children to participate in the implementation of learning activities and understanding of the material. This aims to be able to understand what concepts or materials children learn and not spared also by teachers in compiling and implementing learning activities must adjust to the characteristics of children and how learning characteristics imitate writing that is suitable for use in kindergarten. Active participation of students by utilizing various learning strategies and media is very important in following the learning activities taught. Teachers must present and develop dynamic elements in the learning process, considering that mastery of the material cannot be achieved in a short time. Therefore, repetition of learning becomes the key for students to achieve deep understanding (Purwanti & Rusmanayanti, 2021).

Regarding the difficulty of children understanding the material, namely when presented by the teacher, children have difficulty in understanding the material because the learning media used by the teacher is less attractive for children to follow continuous learning. So that children are easily bored in learning activities and are less able to focus when learning takes place.

These problems, if left alone continuously without any effort to overcome them, will have an impact such as the lack of development of language aspects, especially in early literacy that must be passed by children aged 4-5 years and low activity of children in the learning process and child development outcomes that cannot achieve predetermined achievement criteria.

Based on the problems and causes described above, one of the efforts that can be made to overcome the problem is to plan a learning model that suits the needs of children in developing literacy and is able to overcome the problems contained in the process of learning activities. There is a need for innovation and creativity from a teacher in designing learning models that allow children to take part effectively in learning. Thus, it is expected that children can more easily understand the material they learn.

The solution chosen for the problem has been explained earlier, namely innovation in learning activities by using learning models that are combined to provide facilities and overcome existing problems. The solution chosen to solve the existing problem is the application of the Project Based Learning learning model combined with the Mastery Learning and Number Head Together learning models using sand media.

Type Project Based Learning originated from an idea developed by John Dewey quoted Agusta &; Suriansyah (2020) by taking constructionism learning theory and almost similar to the PBL model which can both improve higher order thinking skills (HOTS). The difference is that the project-based learning model at the end of the learning activity will produce a work through various projects that have been carried out (Agusta &; Suriansyah, 2020).

The learning model used for the next combination is the model Mastery Learning, can improve learning achievement. This model reflects and supports children with different levels of abilities, interests and talents when they are provided with appropriate learning conditions (Latriningsih, 2019). Type Number Head Together (NHT) Cooperative learning is specifically
designed to provide variety in learning and aims to influence interaction patterns when learning activities begin. The main characteristic of this learning model is the use of numbers that aim to create a different learning atmosphere and as a form of responsibility and readiness of children in answering questions (Agusta & Suriansyah, 2020).

Sand media is a medium that hones psychomotor, mental, tactile, social skills, simultaneously. Sand is an item that is not difficult to hold and shape. Learning through sand media can improve children's literacy development, improve skills, and strengthen children's social to be more dynamic, so it can be a reason to foster early childhood language aspects (Muthiah et al., 2020).

METHOD

Classroom Action Research with a qualitative approach chosen in this study. This qualitative approach is carried out directly on children who are the subjects of research. This approach is also more concerned with the meeting than the outcome. This approach also emphasizes the importance of thinking, the meaning of certain circumstances and looking at problems related to everyday life.

Qualitative research, a variety of empirical sources can be used and collected this including case studies, personal experiences, introspections, interviews, observations, interpersonal and visual. These materials describe ordinary and problematic events and their impact on individual and collective life (Gumilang, 2016). The subject in this research is Group A of Kenanga Banjarmasin Kindergarten consisted of 8 children studied, there are 5 boys and 3 girls.

The factors studied and the data collected were teacher activity, child activity and literacy development results using a combination Project Based Learning Model, Mastery Learning Model, Number Head Together Model, Sand Media. The success indicator in this study is that teacher activities are said to be able to reach the score range on the observation sheet between ≥23 with a minimum criterion of Good. A child's activity is said to be successful if the percentage of classical activeness of children is in the range of scores 13-16 with Active criteria and the range of scores 17-20 with Very Active criteria. Meanwhile, the results of the development of individual language aspects at least children get a grade of 3 with the criteria of Developing According to Expectations (BSH) and classically achieving a score of ≥63% get a minimum of 3 or Develop According to Expectations (BSH).

RESULT AND DISCUSSION

The results of this study, the learning process used a combination of Project Based Learning Model, Mastery Learning Model, Number Head Together Model, Sand Media in group A of Kenanga Banjarmasin Kindergarten which was held 3 times.

Every meeting, teacher activity, child activity and literacy development results increase. At meeting I, the teacher's activity obtained the Good category with a score of 26%. Furthermore, in meeting II teacher activity increased with a score of 29% in the Good category. Meanwhile, in the third meeting again increased to obtain the Very Good category with a score of 34%.

This shows that teacher activity has increased rapidly. Children's activities at meeting I classically obtained a score of 38% with the Active category. Furthermore, at the second meeting, it increased with a score of 75% in the Active category. While in meeting III experienced an increase in obtaining a score of 100% with the Very Active category, therefore the activity can be said to have reached success indicators. Early childhood learning
success is measured based on the achievement of optimal child development. These learning outcomes are also a link for children to go to the environment or further development, and at the same time become clear evidence of their learning success at school (Purwanti et al., 2021).

Teachers must also have an open attitude towards their students. This is especially true for teachers who are determined to make changes. If there is a child who has difficulty completing the task, the teacher must be sensitive to the child's condition. Keep giving direction, guidance, advice, inspiration, and encouragement to children who cannot feel the right feelings according to situations and conditions. In addition, teachers must be open and responsive to upcoming changes, so that they are ready to make adjustments (Faudina & Novitawati, 2022).

The results of literacy development of the three elements considered are teacher activity, child activity and literacy development outcomes from the child's language perspective progress should be seen in the diagram below:

![Diagram](image)

Picture 1. Trends in Teacher Activity, Children Activity, and The Literacy Development Result

Based on the Picture, it can also be seen that all aspects are considered, especially teacher activities, children's activities and literacy development outcomes. This also happens to children's activities at every meeting that are increasing. This is because during the learning activities carried out at each meeting, teachers can make children more active, excited and energetic. Therefore, the teacher's activities have carried out the steps very well, so also develop activities and results of literacy development in children in each meeting.

It was concluded that there is a relationship between teacher activity, child activity and developmental outcomes. A good teacher has an impact on children's activities and literacy development outcomes.

The learning activities carried out by the teacher 3 times in developing children's literacy in the application of the Project Based Learning model, Mastery Learning, Number Head Together used sand media at the conclusion that the third meeting on how teachers carried out learning activities had achieved the best results. This happens because in each meeting the teacher continuously reflects so that the consequences of the teacher's appearance know the shortcomings that must be corrected at the next meeting, besides that the teacher also masters a combination of Project Based Learning, Mastery Learning, Number Head Together models using sand media that has been planned so that the learning carried out runs optimally and better.

The teacher is a facilitator in direct learning activities that are more meaningful, fun and effective when guiding and motivating children so that it is easy to find their own abilities (Maimunah & Cardona, 2022). Teachers play a vital role in determining the effectiveness of learning strategies in the classroom. Teacher mastery of various learning strategies and models can arouse children's motivation to actively learn. The teacher's ability to choose the right media and learning resources will facilitate the understanding of the material for children (Istiqamah et al., 2022). Therefore, teachers can apply
various methods, approaches, steps, and use teaching aids such as learning media to improve the quality of learning, especially in terms of children's activeness (Rahmaniah & Noorhapizah, 2022).

A teacher is a person who has a responsibility in educating. Thus, teachers strive for all their potential to be responsible for children's development. A professional teacher has at least three competencies, namely personal, professional, and social. Teachers must have a good personality, be a responsible teacher and easily understand the situation of the surrounding conditions. If among the competencies are not mastered, this will also affect the results of future achievements (Muhlison, 2014).

In carrying out their duties, teachers are required to master various things in order to improve their talents. Therefore, teacher ethics are expected to influence and be influenced by the situation of the teaching and learning process. Teachers must be able to align with early childhood development, because each child has a varied character (Sopian, 2016). Teachers are a critical component of learning success. This is because teachers are people who are directly involved in interacting with children. In the classroom learning system, teachers can act as planners or designers in the process of teaching and learning activities (Rizkyareza et al., 2021).

As for previous studies that support the findings of this study, namely The project method is a plan designed by the teacher for children to find their problems and be able to solve them themselves well in groups or individually, this teacher becomes a companion in solving the problem and makes it a challenge for children to have greater curiosity (Novitawati et al., 2022).

Research results from Junita et al. (2021) concluded that developing children's fine motor skills through models Project Based Learning (PjBL) at Mumtazah IT Kindergarten in Bengkulu City. There is an increase in the achievement of the child's fine motor progress in each cycle for each direction. It was concluded that the coordination of children's movements can be further developed using learning techniques Project Based Learning (PjBL) with the achievement of children's fine motor skills.

Teacher activity is a corrective action, this is successful if the teacher can process learning with a good score (20–26). Assessment of teacher ability can be done using the observation assessment format applied to each activity (Darmiyati & Jannah, 2017).

So that teachers have a very important role and role in the success of learning improvement, this is because teachers are people who directly organize and communicate with children, able to regulate learning strategies, help children in gaining new knowledge and understanding, besides that the role of teachers is also very important in learning, effectiveness and learning efficiency where teachers can direct, facilitate and also create a fun learning environment and entertain the child. The creation of an effective and efficient teaching and learning environment for children cannot be separated from the crucial role of a teacher in managing the class and creating a pleasant learning atmosphere. Capable teachers design and build conducive learning spaces, where children can develop optimally (Putri & Suriansyah, 2021).

Early childhood is a child in the age range of 0-6 years. At that age, progress occurred rapidly. Thus, early age is seen as fundamental so it is referred to as a very good age. Every individual has an early childhood, it's just that this early age only occurs once in the process of everyone's life, so the presence of this period should not be wasted. Early age is the most suitable time span to help deal with the period of development and growth in children (Khaironi, 2018).
According to Noorhapizah et al. (2019) summing up in the results of his research the application of a combination of models Group Investigation, numbered head together and snowball throwing to grade V students of SDN Pangeran 1 Banjarmasin can be carried out well and are able to increase teacher activity so that the criteria are very good, increasing student activity gradually to reach classical success indicators of more than \( \geq 82\% \) where the criteria are very active.

The results of previous research and discussion were concluded by applying a combination of learning models Inquiry, Cooperative Integrated, Reading and Composition (CIRC) and Numbered Head Together (NHT) can improve teacher activities, student activities, learning outcomes. The application of this combination of learning models can solve problems in summarizing the content of the story and can help the monton teaching and learning process (Ramadi & Sarah, 2017).

Children's activities in corrective actions are successful if children can carry out various activities and are supervised by teachers. This can be demonstrated by a minimum score of active children 63–81 (Darmiyati & Jannah, 2017).

The results of children's literacy development, this is because in their development teachers apply child-focused learning both from the model Project Based Learning, Mastery Learning, Number Head Together By using combined sand media which is very helpful for children in building their own insight and understanding in carrying out learning activities. In line with opinion Maulidia & Wahyudi (2022) The use of learning media not only makes children interested and excited, but also makes learning activities effective. Children can also be encouraged and active to continue learning, and be more enthusiastic in following the learning process.

As for the research conducted by Hidayat (2019) shows the results of research on the use of sand media to grow children's abilities proven effective. It can be proven by obtaining the final score from the use of sand media. There is an increase in development in the child's ability to use the medium of sand. This can be seen from the results of the realization of dominance in cycle I 28.5% (Starting to Develop) increased in cycle II to 78.5% (Very Good Development) and increased as expected.

From the results of research from learning activities in each cycle that has been carried out for three cycles, based on the analysis carried out can be concluded as follows. Learning by applying models Mastery Learning to improve the learning achievement of grade III students of MI Roudlotul Huda Semarang City in three cycles in mathematics lessons declared successful and the application of the model Mastery Learning In mathematics lessons have a positive influence, which is able to increase student achievement (Zulisyanto, 2018).

**CONCLUSION**

This research using the Project Based Learning, Mastery Learning, Number Head Together model was able to improve language aspects of developing children's early literacy using sand media in group A of Kenangga Banjarmasin Kindergarten has achieved success. All factors have progressed significantly, teacher activities have obtained very good categories, children's activities with very active categories in developing literacy activities using sand media. Children are able to follow every implementation of teacher learning, while the results of literacy development also make signs of progress in the classroom making as expected. Even some children acquire a perfect classification. With the aim that the results of this study can be a contribution to
further develop language aspects in children's early literacy development.

REFERENCES


