

# Parent's Strategies in Playing Science from Home With Early Childhood

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### ABSTRACT

Science is one of the important lessons for children with science, there are many things that can be done in a child's life. Through science to build good character or something can be said positive in early childhood, children can also grow into creative children, critical and open to the surrounding environment. When learning is done from home due to the impact of the Covid-19 pandemic, a parent strategy is needed in playing science activities. Because without a good strategy children often feel uninterested in playing science. By doing science play activities, it can help children to do many simple experiments with it will grow new knowledge in children and train children to be able to solve a problem. In this study using descriptive qualitative research where the results of the study explained that there were many strategies carried out by parents to carry out science playing activities with children while at home, parents to do science by conducting simple experiments with children, one of which was involving children. In cooking activities in the kitchen so that children's enthusiasm for getting to know science becomes higher.

Keywords: Parents; Science; Early childhood

### 1. INTRODUCTION

Education is one of the most important things that are invested by parents from the start of the child being born into the world with the aim of providing for the future. Early childhood education is the first education that is obtained, where children can learn many things about child growth and development. At an early age children have a lot of intelligence that can be given to children, this intelligence must be supported in order to develop properly, that is what is called early childhood where an individual is required to be able to process properly because at this age stage the child is a child. someone who is extraordinary and has various kinds of special skills [1]

Early childhood education is a place where preschool-aged children receive education, the potential of children can be developed at an early age. Kindergarten is one of the formal education that can be followed by students. This golden age is so precious in every stage of a child's life that it can never be repeated again. Therefore, education has a valuable position to achieve the goal of maturity.

Parents put their children in early childhood education with the hope that children can learn well so that children can develop their abilities. because from an early age children must have received a proper education. Kindergarten is one of the many preschool education to help children grow and develop both physically and spiritually before entering basic education.

In line with [2] so that aspects of child development develop well, parents provide proper education for their children, one of which is to enter children into Kindergarten institutions because before children enter the elementary level, kindergarten is the main alternative that can be given so that children have readiness for further education.

In Kindergarten children can learn many things, because in kindergarten children will get lessons with the stages of the child's age. Children are able to learn very well in Kindergarten, just like children can learn various kinds of animals, fruits and plants. Because children will be very happy to learn many new things that have never been found before.

The learning process carried out in kindergarten is usually carried out directly on children and carried out in the classroom like learning in general. The teacher will provide direction to the child during learning so that the learning process can run optimally, because the teacher will more easily monitor every activity carried out by the child. not only that, with learning carried out in the classroom, children will be easier to develop aspects of their development, one of which is the emotional social aspect of children, because they often interact directly, children will be easy to stimulate social emotional in children [3]

However, when the emergence of a disease outbreak that occurred in Indonesia where a virus emerged that made many activities stop, especially learning activities carried out in the school environment. The virus, known as Covid-19, has made learning activities that were originally carried out in the school environment to be done online. Automatically if the policy has been implemented, children's learning is given completely to parents at home. Parents will accompany children to study at home [4]

As a result of the impact of the Covid-19 pandemic, several new breakthroughs have emerged, especially in the world of education. With the policies issued by the government, learning that is usually done in person becomes online learning. The use of online learning in assisted learning through a physical internet network looks quite fun but there are many limitations that must be felt when doing online learning.

When online learning is implemented in every educational institution, one of which is early childhood education, the role of parents in helping children learn while learning from home becomes one of the demands for parents to be able to teach and guide children when learning from home. Therefore, parents must be able to provide good and optimal teaching to children while doing internet-based home learning or by providing direct understanding to children while at home.

Because learning is done online, digital technology is the main thing that plays a role in learning for children, namely by using electronic media gadgets in carrying out learning. For parents who are able to operate gadgets, this is not a difficult thing to do. However, because not all parents are able to use gadgets, they will find it difficult to teach children when learning is done at home. This becomes a challenge for parents in teaching children at home, one of which is teaching science to children.

Science is one of the important things that must be introduced and learned by children, when learning online is done, science activities are usually carried out by teachers with good methods and concepts so that children are enthusiastic in playing science at school with teachers and friends. Now when learning is done at home, parents have an obligation to invite children to play science at home. Although science activities with children are carried out at home, parents can look at the internet or ask for directions from the teacher on how to play science with children so that children can be interested and enthusiastic.

Because usually children learn science at school with teachers with fun methods, parents must have good strategies so that children can enjoy playing science at home so that they are able to develop children's learning potential with small things related to science. Parents must think about and make strategies that invite their children's enthusiasm, because to play science there are many things related to the environment around children that parents can do with their children. Because the surrounding environment is the closest and affordable thing for children to do science play activities during this pandemic and learn from home.

Through the environment, there are many things that can be shown and done with children related to science, such as conducting experimental activities with children using ingredients in the kitchen or observing changes in objects in the surrounding environment. This where parental is strategies are needed so that children can feel happy and understand what they see and do related to playing science, because without a good strategy children will feel bored quickly and less interested in the learning being done.

# 2. Method

In this study, researchers used qualitative research. In the data collection method, the researchers used two techniques, namely observation and observation Interview. In the observation technique, the researcher observes directly the object or person being studied to be used as a source of data in research. To find out more about the behavior of the object or person being studied, the researcher conducted interviews to obtain in-depth information and to obtain information a proof of the title raised in the study.

In addition to conducting observations and interviews, researchers collect data by looking for related information through documents, journals or books that are fictitious taken from the internet. Researchers collect data in accordance with what is being studied.

# 3. FINDING AND DISCUSSION

According to [5] Early age is a long and important life journey in human life. Because the formation of the foundation and the basis of personality is formed at an early age, so children get a lot of experience. At this time the process of growth and development is formed rapidly. Therefore, at that time the child can get the right stimulus so that the child can develop optimally. At this stage, the role of parents is very important for children.

Parents are also educators who are the main role models for a child whose behavior will be imitated and who is followed or imitated. Giving birth or raising and educating a child properly can do something that can affect the growth of the child. More than that, the existence of children is a successor for the lives of parents who have died, in the form of rewards for the good deeds of parents who want their children to become obedient and devoted children and who will carry out activities with enthusiasm in the community in the future. Teenagers and in the future [6] One of the roles of parents during the Covid-19 pandemic is to be a teacher for children, not just a teacher but being able to be a fun educator with sincere affection and giving good teaching with full attention, so that children can be enthusiastic. in learning at home.

This research was conducted to find out how the strategies created and developed by parents of early childhood in playing science activities with children. Due to the impact of the Covid-19 pandemic, learning has been transferred to learning to be done at home. Parents must be able to make creative and fun strategies so that children are enthusiastic about playing science activities. Through the surrounding environment and objects that are closest to the child, fun science play activities can be done well.

Science is a series of concepts and conceptual schemes that relate to one another that grows as a result of experiments and observations related to the activity of tracing symptoms and facts of nature around children. Science for early childhood is very necessary to train children in using their five senses and also train children's ability to solve a problem.

In early childhood education science can be linked to every theme of learning arena, science is not only a concept but also a process of thinking in a natural process. Science for PAUD is not like science for elementary, middle or high school students. Science for PAUD is taught in a way that is fun and enjoyable for children. In science learning, children are taught through learning themes that have been prepared by the teacher.

In research conducted by [7]. it is explained that through playing science activities is a fun activity for children and can develop all aspects of development and intelligence in children, because children learn many things about the phenomena that occur around children. [8] in his research explained that through fun science play activities it will improve children's social emotional development related to how children recognize emotions, manage emotions and are able to work together with others.

In science learning activities there are several attitudes that can be developed including honest, creative, critical, positive attitudes towards failure, humility, not easily discouraged, openness, respect and acceptance. input, guided by adequate facts and data and have a high curiosity [9]

For early childhood science is not just a collection of facts but involves activities to observe what is happening, group data, test and formulate what is happening. According to Eggers [10] there are four scientific process activities in the context of science learning for early childhood, namely: 1) Observation. Children can observe the process of seed growth into flowering plants. In addition, when children observe the growth process, children can find differences and similarities in plants such as color, shape, texture and

size. Children can also learn the influence of water, light, and temperature on the growth process;

1. Prediction

The teacher can also give questions to children that do not lead to one correct answer so that children can guess and predict the answer. For example, encourage children to predict which plant will grow first and which will be taller.

2. Doing an experiment

By conducting experiments, children are encouraged to play an active role in conditioning the various tools and materials around them for experiments. The teacher can also observe and record the activities carried out by children and ask questions that are in accordance with the activities carried out.

3. Interpret

Children can learn from the results of their own interpretations compared to information presented by the teacher, so the teacher only moves children to make simple observations or experiments

Some strategies that parents and children can do in playing science activities, especially through the surrounding environment and objects closest to their children, include:

1. Lessons From Trees

This activity can help children to learn the basics of natural science. Parents usually invite their children to look for leaves that are around the house then parents prepare pictures of leaves obtained through the internet and identify which tree the leaves come from.

2. Egg Experiment

This activity becomes an effective lesson to explain some of the laws of science to children. Prepare a peeled hard-boiled egg, a glass bottle with a round hole, a small piece of cardboard and a few matches. Parents are required to accompany children in doing this activity because there are activities that require parental assistance, namely lighting matches. Light a match and burn the cardboard that has been provided and then put it in a clean bottle. Then immediately place the egg on the bottle opener. As the paper burns, the resulting vacuum will suck the eggs into the bottle. This activity is also a guaranteed way to get children excited about learning science.

3. Volcanic Eruption

This simple activity is very fun because children will make a volcanic eruption like a volcanic eruption. The trick is to prepare a pipe, baking soda, vinegar and sand. Then invite the children to build a volcano and around the pipe with the pipe opening in the middle. Fill the jar up to half, pour the baking soda mixed with food coloring into the pip. Ask the child to pour vinegar into the hole in the pipe so that it looks like lava.

4. Planting Flowers

By planting flowers, children learn how to plant well and how the process of growth from flowers is planted so that children will be responsible for what they have done. The method is very easy, parents can invite children to choose the type of flower and plant it in a pot that has been filled with soil.

5. Coloring

Coloring is one of the simple science learning activities that can be done at home. Parents only need to prepare colored pencils, crayons and drawing paper. By coloring children can recognize many colors.

6. Rainbow Bottle

Doing simple experiments such as making rainbow colors in a bottle using natural ingredients or dyes such as green color from pandan leaves, red color from tomatoes, and yellow color from turmeric. The trick is to puree the prepared ingredients, then mix with enough water and pour into a glass. Then in the first layer (red color) mix 4 tablespoons of sugar, the second layer (yellow color) mix 6 tablespoons of sugar and the third layer (yellow color) mix 8 sugars tablespoon. Because of the size of the sugar content that is mixed into the liquid which makes the liquid not mixed when it is entered into the bottle. This will train children to be more creative and imaginative in doing this experiment.

By doing some of the simple activities above, children will be more enthusiastic and interested in learning science. In this activity, the role of parents is very important because it is parents who will supervise children while doing science learning at home. Parents also need to discuss with the teacher about the activities to be carried out so that the teacher can evaluate the progress that has been achieved by the child through the activities carried out by the child together with the parents.

# 4. CONCLUSION

During the Covid-19 pandemic, learning that was initially carried out directly at school is now being shifted to online learning or learning from home with parents. When learning is done at home, it is the parents who act as teachers for the children. The main thing that must be done by parents is to understand the child's and feelings of behavior the child. In doing learning with children, they do not have to give heavy lessons and seem to be watching, parents must be able to have many ways or strategies in learning with children so that children become enthusiastic in learning together. One of the lessons that can foster children's enthusiasm for learning is to play science with children. Because science cannot be separated from children's lives, but in carrying out science play activities, parents must have good strategies so that children do not get bored easily.

The environment and objects around children are one of the things parents can do in playing science, but there must be a good strategy, such as inviting children to participate when parents cook by introducing kitchen ingredients to children, involving children when doing farming activities in the garden around the house, water, air and fire are also one of the objects around children that can be used to play science. But still with the assistance and direction of parents. Without the role of parents, the ability to learn science in children will not develop at all. That's why it will be very useful if parents can pay attention to their children's learning at home during the current pandemic.

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