

The Influence of Learning Environment Arrangement on the Effectiveness of Developing Collaboration and Expressive Language Skills in Early Childhood

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ARTICLE INFO

Article history:

Received December 12, 2024

Revised December 13, 2024

Accepted December 27, 2024

Available online December 31, 2024

Keywords:

Class Arrangement, Collaboration Ability, Expressive Language Ability



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ABSTRACT

The ability to cooperate and express language is one of the developments that children must have. Providing a stimulus that is not optimal is one of the problems that triggers the problem. Class arrangement is one way that can be provided to help this development process. The aim of the research is to determine the level of effectiveness of classroom arrangements in improving cooperation and expressive language skills in early childhood. This research uses a quasi-experimental research design (quasi experiment). By using a pre-test before being given treatment and a post-test after being given treatment. This research design uses a non-equivalent pretest-pretest control group design. Data was collected through structured observation, interviews and documentation. The subjects of this research were students and teachers from group B at the Muslimat NU 14 Polowijen Kindergarten, Malang City. The results of this research show that the arrangement of the learning environment has a significant influence on the development of cooperation skills and expressive language abilities in young children. Structuring a good learning environment, including space arrangement, providing educational game tools, and creating a conducive learning atmosphere, has been proven to increase the effectiveness of children's social interactions and verbal abilities. In conclusion, the arrangement of the learning environment plays an important role in supporting the effective development of cooperation skills and expressive language abilities in young children. This research recommends that educators create learning spaces that are child-friendly and oriented towards the development of social and language skills.

INTRODUCTION

Developing children's fluency is done by getting used to speaking directly with their peers. The development process will require good infrastructure, one of which is by using space to provide stimulation, such as the opinion of (Izza, 2013) who stated that the teacher's ability to manage the class can affect student learning activity, teachers should explore their ability to manage the class so that student learning activity is getting better with a percentage of 91.59%. According to (Fernianti, 2020) stated that the ability to arrange an attractive learning space is the key to the learning process where the level of success is determined by several important aspects including the arrangement of the direction of the room, the size of the room which must be in accordance with the number of students, the floor is given a carpet to maintain child safety, high roofs and ceilings to reduce noise and air pollution, and the use of bright colors in painting the walls.

According to (Rofiq & M. Aunur, 2009) said that: "Classroom arrangement is an effort to prepare optimal environmental conditions so that the teaching and learning process or activities can take place smoothly and according to expectations". (Karnawati & Euis, 2015) argue that: "classroom management is a conscious effort to plan, organize, actualize, and carry out supervision or supervision of programs and activities in the classroom so that the teaching and learning process can take place systematically, effectively and efficiently by developing all the potential in the child. The purpose of arranging the class is (a) to create a class situation and condition, both as a learning environment and as a learning group that allows students to develop their abilities as much as possible, (b) to eliminate various obstacles that can hinder the realization of teaching and learning interactions, (c) to provide and organize learning facilities and furniture that support and enable students to learn according to the social, emotional, and intellectual environment of students in the class, and (d) to foster and guide according to the social, economic, cultural background and individual characteristics (Rofiq & M. Aunur, 2009). The principle according to (Karnawati & Euis, 2015) states that: "things that need to be considered in arranging the classroom include: (a) visibility (broadness of view), (b) accessibility (easily reached), (c) flexibility (flexibility), (d) comfort, and (e) beauty". Classroom arrangement also has several types of forms including: (a) traditional class; and (b) modern class (Danim, 2013), while the form of class arrangement according to (Evertson, 2012) consists of (a) facing form; (b) U-shape; (c) sideways sitting form; and (d) in a circle. So that the success of arranging the class both in arranging furniture, wall decorations and other interiors will affect the success of children in developing cooperation.

The development of children's cooperation skills also develops with the arrangement of the class, because with a good class arrangement, the child's space for movement becomes good, so that interaction activities and developing mutual cooperation will also be formed automatically. As stated by (Hariyati.ZL, 2013) who stated that "through group learning, students can carry out interaction activities with peers which aim to jointly solve problems in the class by utilizing all the supporting elements in the class". Therefore, class arrangement must really be carried out by teachers so that children's development becomes more optimal. Cooperation skills according to (Rodhiyah, 2020) are a form of social process, in which there are certain activities that are aimed at achieving common goals by helping each other and understanding each other's activities. So that cooperation skills can be carried out by developing a two-way communication system to reach a common agreement by being stimulated, such as stated that cooperation is the ability where children can develop communication in the direction, be responsible, help each other and complete an activity together for the common good and stimulation is carried out from an early age (Dewi & Ni Wayan Eka Praba, 2018). that group learning carried out in the classroom is expected to enable students to understand the meaning of the learning they are learning by connecting the context of their lives with the social environment they face, so that by working together, every problem they face can be resolved well (Suprijono, 2009).

The characteristics of cooperation skills are (a) each member has a role; (b) there is a direct interaction relationship between students; (c) each group member is responsible for their learning and also their group mates; (d) the teacher develops the group's interpersonal skills; and (e) the teacher only interacts with the group when needed" (Isjoni, 2013). According to

Slavin (2010:10) who stated that the characteristics of developing cooperation in a group are "(a) each individual contributes in contributing ideas or concepts; (b) each student has responsibility for one team; and (c) each member has the hope of achieving common goals. Therefore, by developing cooperation skills, children are expected to be able to develop their social skills. So it can be concluded that by arranging the class properly and well, it will be able to influence all aspects of child development, including cooperation skills and expressive language skills in early childhood.

In the observation conducted in Kindergarten Pembina 1, Kindergarten Pembina 2, Kindergarten Kartika IV-6, Kindergarten Charris Internasional School, Kindergarten Muslimat NU 14, PAUD Terpadu Zamzam, Kindergarten Pelita Hati and Kindergarten Al Muhajirin, several problems were found, namely expressing language or expressive language and cooperation skills. Many children feel bored and tired during the learning process, this condition occurs for several reasons. The reasons that arise are because (1) the air in the classroom feels hot, (2) the classroom is too narrow, (3) there are too many items in the classroom, (4) the classroom setting is not optimal, (5) the furniture is not arranged properly, (6) the lighting is not optimal, (7) the ventilation is too narrow, (8) the classroom coloring is not bright enough, (9) many unused items are piled up and not regenerated, (10) the lack of classroom displays that can stimulate children's interest in speaking and also if there are displays, they are already. Given that the underlying problem is the lack of involvement of children in cooperative activities and expressing language, an average percentage of 40-50% of the atmosphere is not supportive, almost all of the schools above experience this, so it can be concluded that this is due to uncomfortable classroom conditions and suboptimal classroom arrangements.

The results of further observations focused on TK Muslimat NU 14 showed that the learning environment conditions in the institution were still not optimal in supporting the development of children's social-emotional and expressive language skills. Several problems found included: (1) Classes lack adequate natural or artificial lighting, so that the atmosphere of the room feels gloomy and uncomfortable for children to study or do activities; (2) The color of the classroom walls tends to be monotonous and does not use a combination of bright colors that can stimulate children's interest in learning and interacting with the surrounding environment; (3) Classroom furniture such as tables and chairs are not arranged properly, thus reducing the smoothness of children's activities. In addition, many unused items are left piled up in the corners of the classroom, which further limits children's space to move; (4) The displays on the classroom walls are not varied enough and do not motivate children to communicate or express themselves. The existing displays have not been able to provide visual stimulation that supports the development of children's expressive language. As a result of the less than well-organized learning environment, the results of observations show that children tend to be less involved in social interactions. They rarely take the initiative to work together with their peers and show low participation in group activities.

Previous studies have shown that the arrangement of the learning environment has a significant influence on the success of the child's learning process. According to (Jamal, 2023), the influence of learning environment management on learning motivation certainly needs special attention from education organizers, both principals, educators and non-educational

staff to be able to create a conducive and enjoyable learning environment through the arrangement of the learning environment itself. Furthermore, (Nurdiana, 2023) emphasized that the design of an appropriate physical classroom environment not only improves the quality of early childhood learning experiences but also has a positive, sustainable impact on their interest and activeness in learning. Many previous studies tend to focus on certain elements of the arrangement of the learning environment, such as the layout of furniture or the coloring of the room. However, few have comprehensively explored the combination of various factors, including lighting, ventilation, accessibility of space, and the presence of sensory elements that can stimulate social interaction and the development of children's expressive language. In addition, most studies discuss the short-term effects of the arrangement of the learning environment on children's abilities, while long-term studies that analyze the ongoing impact on children's social-emotional and expressive language skills due to modifications to the learning environment are still rare.

Based on the description of the importance of class arrangement to develop expressive language skills and cooperation skills, class arrangement can be used as a reference in developing these skills and other skills. In accordance with the research results of (Magdalena, 2020) which states that by carrying out class arrangement or class management has an influence on student learning motivation so that learning goals and outcomes can be achieved properly. (Ruhmana, 2017) who stated that "cooperative activities carried out by Arabic language class students are influenced by proper class management or arrangement". (Mubarok, 2019) stated that students become more enthusiastic and enthusiastic in participating in the learning carried out so that teachers feel they benefit from the increasing focus of students. (Rizky, 2020) stated that class arrangement carried out in the classroom has a very effective impact where the average grade of children increases from before. So it is clear that by carrying out class arrangement it will change the learning conditions towards a better direction in accordance with the direction and goals set. In line with the aim of this study to determine the level of effectiveness of classroom arrangement on children's cooperation and expressive language skills.

METHODS

This study uses a quasi-experimental research design. By using a pre-test before being treated and a post-test after being treated. This research design uses a non-equivalent pretest-pretest control group design, using one class as the experimental class and one class as the control class, using its own variables means anything in any form that is determined by the researcher to be studied so that information is obtained about it and then conclusions are drawn (Sugiyono, 2015).

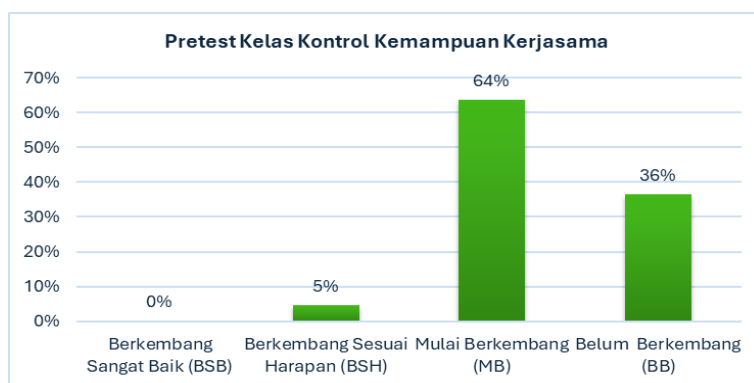
The research procedure includes: (1) determining the population and research sample to be divided into two groups, namely the control group and the experimental group, (2) creating and testing the three validators of the classroom arrangement instrument for the control group and the experimental group, (3) creating and testing the three validators of the classroom cooperation assessment instrument and the expressive language ability assessment instrument, (4) conducting a pre-test of the control group, (5) analyzing the results of the control group pre-test, (6) conducting a post-test of the control group, (7) analyzing the results of the control

group post-test, (8) conducting a pre-test of the experimental group, (9) analyzing the results of the experimental group pre-test, (10) conducting a post-test of the experimental group, (11) analyzing the results of the experimental group post-test, (12) making conclusions. The subjects of this research were students and teachers of group B at TK Muslimat NU 14 Polowijen, Malang City, to obtain the research results the research instruments used were: (1) classroom arrangement observation sheet; (2) assessment instrument. Meanwhile, data processing is done by conducting a validity test, which is a testing step carried out on the contents of an instrument used in a study (Sugiyono, 2015). When collecting data, a tool is used as an aid, which includes a checklist on cooperation and expressive language skills, both in pretest and posttest activities.

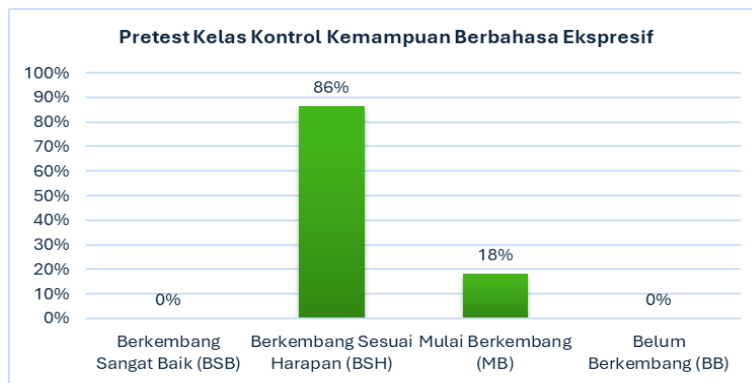
Activities carried out before data collection by carrying out intervention procedures in the classroom to be used, according to (Colley, 2008), the steps taken are (1) Carrying out environmental arrangement, this activity is carried out to change the old classroom atmosphere by rearranging it by considering the interior and exterior design of the classroom and painting it by considering the characteristics of the color for early childhood; (2) Carrying out research procedures involving teachers by using instruments that have been prepared which are integrated into learning activities in the classroom; (3) Seeing the development of new room conditions with the level of enthusiasm of students to express ideas, concepts and develop the ability to ask questions to explore new knowledge in children; and (4) Carrying out reflection on the learning outcomes carried out by conducting questions and answers regarding the new classroom atmosphere. The analysis carried out by conducting descriptive analysis, inferential analysis which aims to determine the level of effectiveness of the research carried out.

RESULT

In the research activity, two results were taken, namely at the beginning before being given treatment in the control class and the experimental class on cooperation and expressive language skills. From the results of the analysis of cooperation skills in the control class, the results showed that children began to develop with the results of 14 children out of 23 children in the category of beginning to develop with a percentage of 64%, while for expressive language skills in the control class, the results showed that 19 out of 23 were in the category of developing according to expectations with a percentage of 86%.

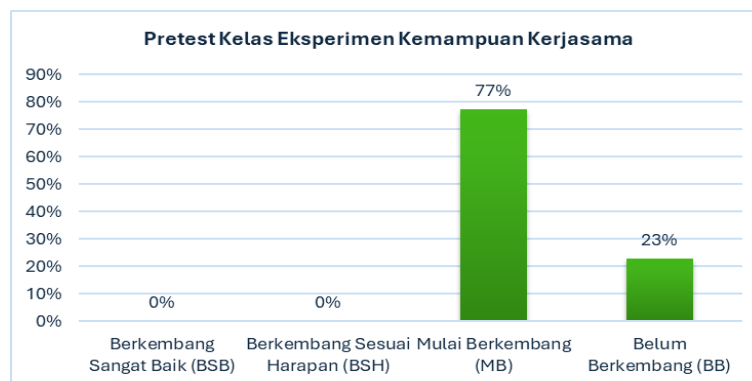


Graph 1. Descriptive Analysis Diagram of Control Class Cooperation Skills

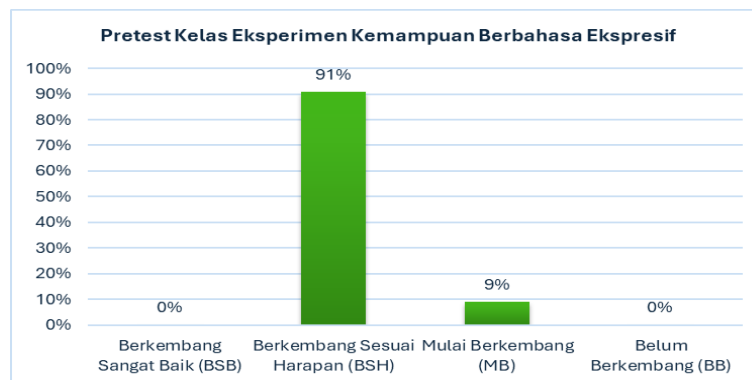


Graph 2. Descriptive Analysis Diagram of Pretest Expressive Language Ability of Control Class

Pretest activities were also carried out in the experimental class, this was done as a comparison of the pretest results in the control class. From the results of the study, the following analysis results were obtained; the results of the analysis of cooperation abilities in the experimental class showed that children began to develop with the results of 17 children out of 22 children in the category of beginning to develop with a percentage of 77%, while for expressive language abilities in the experimental class, the results were 20 out of 22 in the category of developing according to expectations with a percentage of 91%.

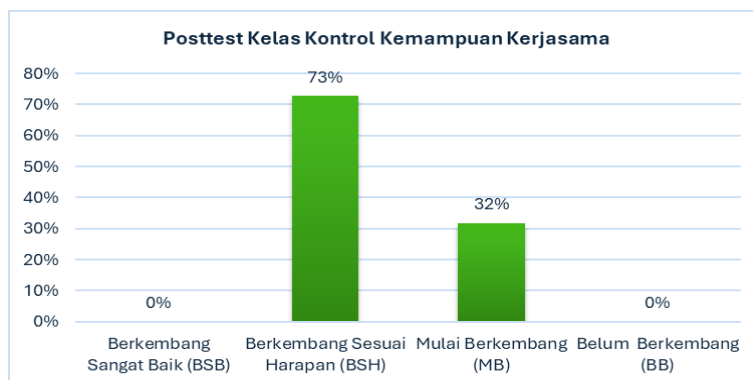


Graph 3. Descriptive Analysis Diagram of Experimental Class Cooperation Ability



Graph 4. Descriptive Analysis Diagram of Experimental Class Expressive Language Ability

The treatment in the experimental class was carried out before the posttest data collection by the researcher, then the posttest test data collection was carried out in the control class and the experimental class, the following results were obtained: the results of the posttest data analysis of cooperation ability in the control class showed that the children developed according to expectations with the results of 16 children out of 23 children with a percentage of 73%.



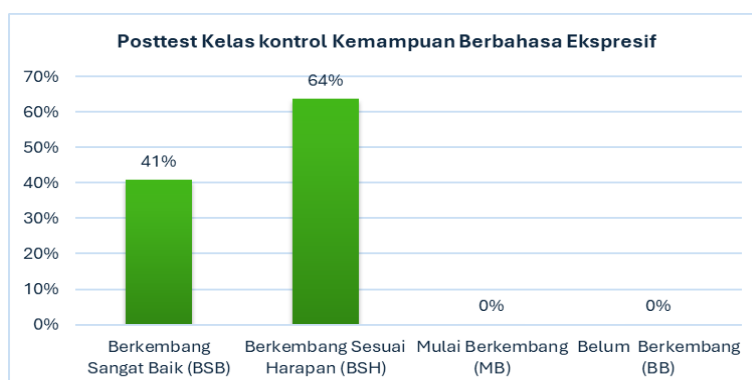
Graph 5. Descriptive Analysis Diagram of Posttest of Control Class Cooperation Ability

From the analysis, the average gain was 3.96, with the highest gain of 4 and the lowest gain of 0 and a standard deviation of 2.51. The comparison graph of each category of cooperation ability can be seen in the following chart:

Table 1. Descriptive Analysis of Gain/Difference between Pretest and Posttest Results of Control Class Cooperation Ability

Rata-rata	Max	Min	Standart Deviasi
3.96	9.00	0.00	2.51

Meanwhile, for expressive language skills in the control class, the results were 14 out of 23 in the developing category according to expectations with a percentage of 64% and 9 out of 23 in the developing category very well with a percentage of 41% as described in the graph below:



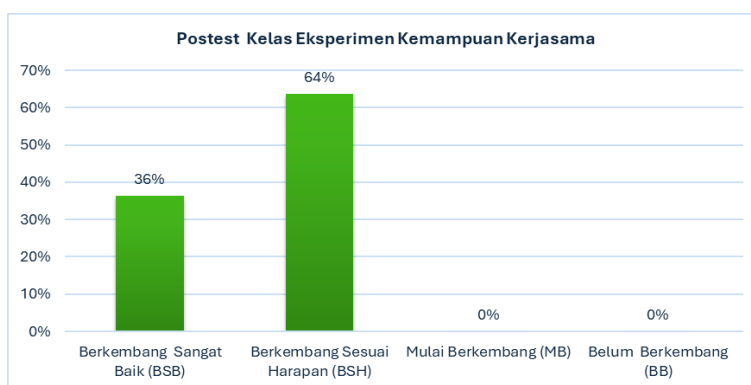
Graph 6. Descriptive Analysis Diagram of Expressive Language Skills Posttest Control Class

From the results of the analysis of the posttest and pretest data on cooperation skills, it is known that the difference that occurred in the control class was 3.96, as described in the table below.

Table 2. Descriptive Analysis of Gain/Difference in Pretest and Posttest Results of Cooperation Skills in the Control Class

Rata-rata	Max	Min	Standart Deviasi
3.96	9.00	0.00	2.51

The results of the posttest test in the experimental class were also taken with the following description of the results; the results of the posttest data analysis of cooperation skills in the experimental class showed that the children developed according to expectations with the results of 14 children out of 22 children with a percentage of 64% and developed very well, there were 8 children out of 22 children with a percentage of 36%.



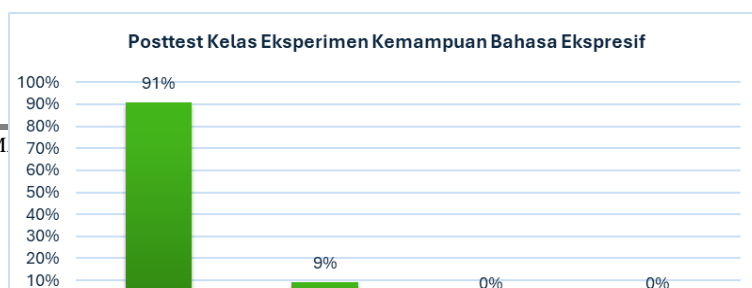
Graph 7. Descriptive Analysis Diagram of the Posttest of Cooperation Skills in the Experimental Class

From this analysis, an average gain of 5.86 was obtained, with the highest gain of 12 and the lowest gain of 3 and a standard deviation of 2.56. The comparison graph for each category of cooperation skills can be seen in the following diagram:

Table 3. Descriptive Analysis of Gain/Difference in Pretest and Posttest Results of Cooperation Skills in the Experimental Class

Rata-rata	Max	Min	Standart Deviasi
3.14	12.00	3.00	1.42

Meanwhile, for expressive language skills in the experimental class, the results were 20 out of 22 in the very well developed category with a percentage of 91% and 2 out of 22 in the very well developed category with a percentage of 9% and can be seen from the graph below.



Graph 8. Descriptive Analysis Diagram of the Posttest of Expressive Language Skills in the Experimental Class

From the analysis, the average gain was 3.14, with the highest gain of 6 and the lowest gain of 1 and a standard deviation of 1.42. The comparison graph of each category of cooperation ability can be seen in the following diagram:

Table 4. Descriptive Analysis of Gain/Difference in Pretest and Posttest Results of Expressive Language Ability of the Experimental Class

Rata-rata	Max	Min	Standart Deviasi
3.14	6.00	1.00	1.42

After analyzing the Cooperation and expressive language abilities, a T-test was conducted to determine the level of effectiveness of the two abilities and the results obtained were that there was a difference between the average of the control group (B2) and the Experimental group (B1) if the sig value <0.05 and $t_{table} > t_{count}$. The calculation results using SPSS 25 showed that from the results of the independent t test, the t-count value was 1.735 while the t table value of 20 students was 2.10, while the sig value was 0.049, meaning sig <0.05 . It can be concluded that there is a difference between the control group and the experimental group. Effective classroom arrangement in improving cooperation and expressive language skills at TK Muslimat NU 14.

DISCUSSION

Classroom arrangement is one way to stimulate development that children must have. The ability to cooperate is one of the skills that children must have in developing their social soul. The classroom arrangement that is carried out aims to improve children's cooperation skills in the classroom. The results of changes in the classroom arrangement carried out at TK Muslimat NU 14 have an impact on changes in the ability to cooperate in students which can be described as follows where the ability to cooperate can increase well after the classroom arrangement is carried out, namely with the results of the analysis of the difference in the results of the pretest and posttest of the ability to cooperate in the control class with an average of 3.96 and in the experimental class with an average of 5.86. While the results of the hypothesis test of the ability to cooperate are at a significant value of 1.016 which can be interpreted that effective classroom arrangement can improve children's ability to cooperate. as stated by (Suriani, 2020) in her research which states that "Cooperative activities carried out very well by students can be reflected in the activity of helping each other if there are friends who ask

about material that is not understood, and also willingly lending textbooks or stationery to friends who want to borrow".

According to (Putri & Distarina F, 2021) the habit of cooperation in the classroom in a child-centered learning process can increase the active role of children in activities in the classroom so that children's thinking processes can develop rapidly, especially by providing the right stimulus for each development and potential that exists in him". According to (Trismahwati & Dewi, 2020) a cooperative attitude must be possessed by children by collaborating, interacting, and helping each other so that the goals of cooperation can be achieved. According to (Warsini, 2019) to improve cooperation skills can be done seriously by all students by following the learning process in teams, individual programs, tests, cycles and group scores", and also according to (Sari. F, 2020) cooperation skills can also be formed by developing cooperation skills in groups where the development of mutual cooperation attitudes, helping each other friends can develop optimally so that the development of other children's social attitudes also develops.

Classroom arrangement is also effective in improving expressive language skills. adding vocabulary to children. Classroom arrangement carried out to develop expressive language skills includes changing the classroom layout, giving identities to objects in the classroom, making wall decorations with identities so that children are indirectly stimulated to read and understand the identity of each item and picture in the classroom. After the arrangement and trial, there were differences in student behavior in developing children's expressive language skills. the results of the analysis of the difference in pretest and posttest results of expressive language skills in the control class with an average of 2.65 and in the experimental class with an average of 3.14. While the results of the hypothesis test of cooperation ability were at a significant value of 1.045 which can be interpreted that effective classroom arrangement can improve children's expressive language skills.

Expressive language skills can be stimulated by giving children the opportunity to ask questions, answer questions, tell stories and express opinions. As stated by (Sari. F, 2020) who stated that "to develop expressive language skills, teachers can invite children to learn through play because by playing a child can expand the ideas they have by asking the teacher or peers. (Heryani & Hamdan, 2020) who stated that "children's language development is obtained from the process of adapting to their environment so that children can gain experience in developing their own language". (Karnawati & Euis, 2015) who said that the teacher's efforts to organize a fun and conducive classroom for the learning process will have a positive influence on attitudes, behavior and cooperation towards the learning process being carried out".

So it can be concluded from the results of this discussion that class arrangement is effective in improving children's cooperation and expressive language skills in the classroom because the class arrangement is carried out by paying attention to the level of needs and stimulation of students, so that children's communication skills also increase and children have the freedom to develop cooperation skills and increase children's vocabulary which will affect the communication process and develop attitudes of mutual cooperation and cooperation.

CONCLUSION

This study reveals that the arrangement of the learning environment has a significant influence on the development of cooperation skills and expressive language skills of early childhood. Good arrangement of the learning environment, including room arrangement, provision of educational play equipment, and creation of a conducive learning atmosphere, has been proven to increase the effectiveness of children's social interactions and verbal abilities. A learning environment that supports group activities, such as collaborative games and project activities, encourages children to work together, share tasks, and communicate effectively with peers. Supported by areas and media designed for verbal activities, such as reading or storytelling corners, helps children improve vocabulary, construct sentences, and express thoughts and feelings clearly. This emphasizes the importance of the role of arranging the learning environment as a pedagogical strategy to support the social and language development of early childhood. Educators are expected to be able to design dynamic and interactive learning spaces to optimize children's potential in both aspects.

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