

THE EFFECT OF THE HSSC PROGRAM TO IMPROVE COMMUNICATION SKILLS ON KINDERGARTEN STUDENTS

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Received: 20 May 2022 | Approved: 1 August 2022 | Published: 9 November 2022

Abstract: The study aims to examine the HSSC program's effect on increasing Communication Ability among Kindergarten Students at TK. Bawakaraeng Makassar. Communication Program on communication ability applied to kindergarten students at TK. Bawakaraeng in Makassar by employing the HSSC module, which passed the process of validation by the experts. The study employed an intervention that focused on the active role of parents and teachers in the learning process. Moreover, the material used was a science project method aimed at motivating students to be more involved in the learning process. This research was conducted using a quantitative experimental approach. The sample in this study was 15 students from one class in Bawakaraeng Kindergarten Makassar. The intervention given is the HSSC method which aims to improve communication skills. The data collection tool used is a communication skill scale that is collected through the process of observation and interviews. Data were collected before and after giving treatment. The data obtained were analyzed using a non-parametric approach with Wilcoxon analytical techniques. The results of the analysis obtained a score of -3.411 which means that there is a difference in the score of communication skills before and after being given the score was appropriate with the convention of the result of data analysis which was greater than 0.5 ($\alpha > 0.5$). Based on the indicators, the result also showed significant changes indicated by significant improvement between the scores before and after the intervention. The study concluded that the HSSC program's utilization in the project method learning process could improve the students' communication ability.

Keywords: Head Start on Science and Communication Program, Learning Science, Communication skill.

INTRODUCTION

Communication skills are among the essential skills in a child's life. Communication skills are the ability to convey information to the general public using language that is easy to understand (Burlison, 2006). With good communication skills, children can explore ideas or convey thoughts (Mokhtar et al., 2011). The provision of support for children's development must be carried out systematically and has clear stages, and the success of the activities can be measured. This systematic activity is known as a program (Hanafin, 2004). defines a program as an activity carried out as a whole that is expected to bring results or influence (Luppicini, 2005). It means implementing a program that will be well understood to have a natural effect on the community receiving the program.

HSSC is one of the programs being developed by many countries (E. Klein et al., 2000). This program was discovered and developed in the United States in early 2000, and this program needs collaborative research between science and language development (Zigler & Styfco, 2010). HSSC is a program that focuses on cognitive processes and language development. This program drives children to explore questions and increases their curiosity to get answers from the experimental process carried out by themselves (E. R. Klein et al., 2000). Language development is more about how children can convey the results of their simple experiments so that they can be understood by others, for example, parents or teachers (Loban, 1976).

For early childhood, good communication means a better flow of information so children's development can be optimal (Thal & Bates, 1989). If the communication flow between teachers and students or parents and students takes place effectively (Lekll & Kalotl, 2015), then children will quickly get information. Information means more knowledge that will be obtained by children so that children will achieve maximum development.

Research conducted by Eprillena et al., (2012) began with a lack of communication skills among students at the Widya Kencana Kindergarten in Kepahiang. This study tries to see whether the storytelling method with sequential pictures can improve kindergarten students' communication skills. The result is increased children's communication skills after using the sequential picture storytelling method. This study proves that the ability to communicate with students by using a new and appropriate method can have a positive effect (Chung et al., 2016). Using the new method encourages researchers to try to apply a new method, namely the implementation of the HSSC program.

Bawakaraeng Kindergarten is a school with limited funding and facilities. This situation makes low communication skill. Ferdianto (2015) showed that facilities are important to improve many school skills, including communication skills. The HSSC program aims to develop students'

communication skills. Communication is the delivery of messages from one person to another to inform or change views, attitudes, or thoughts either verbally, directly, or indirectly (Cobley, 2008). While communication skills mean how to express our feelings or thoughts to others, and people, in an effective way (Hannawa & Spitzberg, 2015).

Meanwhile, communication is a person's ability to convey information to others using various ways, be it language, symbols, images, or graphics, with the aim that other people understand the information (Dennis et al., 2008). In early childhood, communication skill is divided into receptive, expressive, and literacy (Reilly et al., 2009).

METHOD

Research Design

The research method used in this research is the Pre-Experimental Design method with the type of research one-group pre-posttest design, where there is no control group, and the sample is not chosen randomly (Marsden & Torgerson, 2012). The type of statistics used is inferential statistics with the Wilcoxon test technique (Marshall & Jonker, 2011).

Sampling

This study's population was all students in the big 0 class. This big 0 class consists of 30 administratively registered students. The purposive sampling technique determined the sample used in this study. The Criteria have received learning with science material; Students who actively participate in teaching and learning activities.

The teacher selected 15 individuals who met the requirements. The pretest and posttest results were then used to determine the effect of the HSSC program. The scoring of communication skills was carried out using direct observation techniques (Stephenson, 1952). Observations were made to obtain data using direct field observations and recorded phenomena that occurred systematically regarding children's communication skills through the implementation of the HSSC program. Observations aim to observe the child's communication skills both at the pretest and posttest.

Instrument

The instrument was conducted by the researcher itself, based on indicators: the ability to memorize, comprehension and information, ability to connect, ability to conduct simple analysis, and ability to assess. The score is from 1 to 5. Observers are equipped with an assessment rubric that is used as a guide to provide a value for each activity. The validity test resulted in 88 valid items and a reliability test of 0.822.

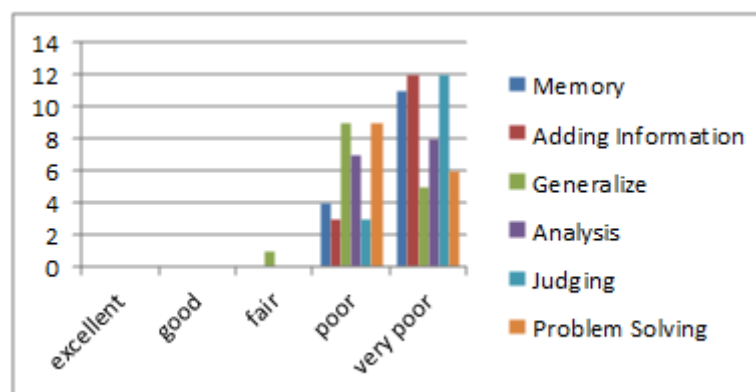
Data Analysis

Data were analyzed by employing Wilcoxon analysis, used in a study using a non-parametric approach.

RESULT AND DISCUSSION

Communication Ability Pretest Score

The results obtained are the scores before being given the HSSC intervention. Data is displayed based on aspects of the communication ability variable. These aspects are memory, the ability to add information, generalization, straightforward analysis, assessment, and problem-solving. The chart below describes the communication ability score:



Picture 1. Communication Ability Scores before intervention

From these data, it can be concluded that communication skills before being given the HSSC method intervention (pre-test) were at a level that was not good and not good for all aspects. Based on the graph, it can be seen that the number of students in the memory and adding information aspects is the highest (12 students). In contrast, there is one student at a sufficient level in the generalization aspect.

The importance of collaboration between teachers and parents is one of the keys to helping improve children's communication skills (Jones et al., 2015). Parents play a role in helping the use of communication in the socialization process (Maccoby, 1994), while teachers play a role in the use of communication in the teaching and learning process (Selvi, 2010).

Effect of HSSC method on changes in communication skills

Wilcoxon test results show a significant effect of the HSSC method on improving communication skills in Bawakaraeng kindergarten, Makassar. The results of the analysis can be seen in the table below:

1st Table: The result of Wilcoxon Analysis

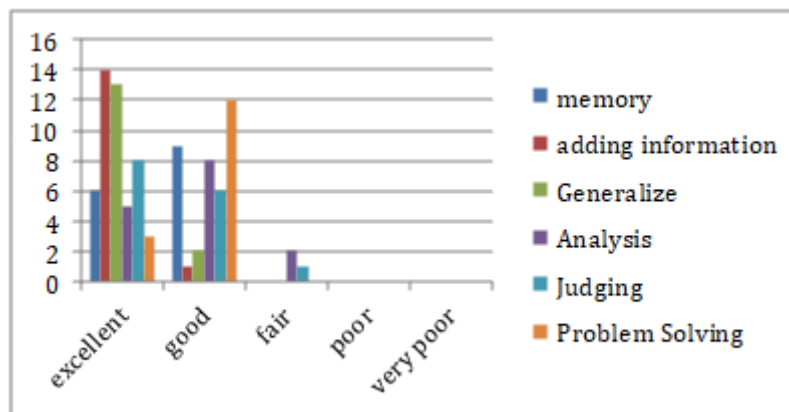
	N	Mean Rank	Sum of Ranks
Negative Ranks	0	0	0
Positive Ranks	15	8	120

2nd Table: Significant Test

	Nilai
Z	-3.411
Sig. 2-Tailed	0

From the table above, it shows the value of the positive rank for 15 samples, and the negative rank value is 0; a positive value (15) means that all subjects have increased communication skills scores, while a negative value (0) indicates that there are no subjects who have decreased communication skills scores. While the significance test table obtained a value of 0.00 ($p < 0.05$), this means that there is a significant effect of implementing the HSSC method on improving children's communication skills.

Meanwhile, communication skills after the intervention of the HSSC method can be seen in the image below:



Picture 2. Communication Skill after HSSC Method Intervention

Based on the graph above, it can be concluded that students' communication skills from kindergarten are. Bawakaraeng is generally at a reasonable and excellent level. Adding information is the aspect with the most respondents in the outstanding category (14 respondents), followed by the generalizing aspect (13 respondents). Meanwhile, 12 respondents scored.

Based on the graph above, it can be concluded that students' communication skills from kindergarten are. Bawakaraeng is generally at a reasonable and excellent level. Adding information is the aspect with the most respondents in the outstanding category (14 respondents), followed by the generalizing aspect (13 respondents). Meanwhile, 12 respondents got good scores on the problem-

solving aspect; lastly, two people had good scores on the analytical aspect and one on the judging aspect.

The HSSC program is a program that uses science learning as a trigger for improving communication skills in students (Fagan & Iglesias, 2000), while the implementation process requires the collaboration of teachers and parents (Howard-Brahane, 2016). The HSSC program aims to improve children's communication skills, including speaking, listening, and non-verbal (Torres, 2019). This program was created by providing training to parents and teachers on how to build effective communication with children. As we know, early childhood is the age where there is a process of absorbing as much information as possible, known as the golden age (Pickren et al., 2012).

It is necessary to provide information or a solid and effective stimulus. Children cannot get information independently in early childhood, so they need help from the surrounding environment (Network, 2005). The environmental factor for early childhood is where the individual most often engages in social interaction; in this case, it is the environment at home which, of course, is the most prominent role held by parents (Cobham et al., 2016). The intensity of meeting with children is an opportunity that should not be wasted; therefore, with the HSSC program, parents' time can be utilized to maximize the child's potential (Sampasa-Kanyinga et al., 2017).

The second environment is school; if the child has entered school age, in this case, Kindergarten, the role of this educational institution is no less important than the role of parents at home (Entwisle, 1995). To maximize students' potential, if teachers cannot maximize their time and facilities, school time will be wasted (Campos & Pradhan, 2007). Therefore, a teacher must be able to transfer dynamic and not monotonous knowledge and adapt to the needs of children (Wilson & Demetriou, 2007). The HSSC program invites teachers to build effective communication, avoid a one-way learning process, and invite children to make lesson plans. So, in the end, it will help children to communicate problems, suggestions, innovations, and all things related to the learning they get.

The HSSC program aims to improve children's communication skills by providing interventions to parents and teachers on how to build effective communication with children. This program aligns with the theory that children must have life skills (Wurdinger & Qureshi, 2015). One of the skills that must be possessed is establishing relationships with peers. Establishing peer relationships requires good communication; good communication can only be realized with good communication skills. Therefore, communication skills are one of the skills that every child must have.

This kindergarten is also experiencing obstacles in facilities and infrastructure, so it requires high creativity from the teachers about new learning methods. However, unfortunately, the foundation rarely allows this kindergarten teacher to attend training or seminars about the world of education.

The HSSC program comes with the concept of collaborating the roles of parents and teachers and invites teachers to take advantage of the facilities, infrastructure, and the environment around the school as a medium in the learning process. Therefore, to support the HSSC program, it needs an appropriate material, and the researcher thinks that science material is correct.

Science learning is essential because it requires students' active role in the implementation process (Gelman & Brenneman, 2004), so it is very appropriate if teachers want to see children's communication skills. The science learning in this research uses simple tools and materials to not burden students in its implementation. For example, material types of rocks; in this learning, children only take field trips around the kindergarten; then, they collect the stones they get on that trip. The children then collected and grouped the rocks according to the characteristics and uses of each stone they got. When grouping stones, communication between children is needed so the tasks can be carried out correctly.

The HSSC program seeks to maximize communication skills in children by using environmental factors, in this case, parents and teachers, as positive drivers. With the HSSC program, children are expected to be able to explore all the activities they carry out in terms of implementation, the types of questions used, and the conclusions that will be obtained. Therefore, providing the proper provisions to parents and teachers is crucial to maximizing children's communication skills. This program will actively encourage parents and teachers to get used to communicating with children about everything they do at home and school. This program can be seen from the modules and tasks of the HSSC program that each parent and teacher must carry out. After effective communication with children, the behavior will be formed in children accustomed to giving questions, comments, or explanations to parents and teachers about their activities, and indirectly train children to communicate with the surrounding environment. This HSSC program also assigns each child in groups and individually to explain the activities they do, in this case, a science project in front of the class in turns. Therefore, children have also been trained to communicate in public, which is essential for communication skills.

The aspects measured in this study, namely the ability to remember, the ability to equate, the ability to do a simple analysis, the ability to judge, and the ability to solve problems. All of these aspects develop if given support from the school and parents; therefore, the HSSC Program, which involves the active role of parents and teachers, is appropriate for significantly improving children's communication skills. It happens because the HSSC program will invite children always to ask questions, wants to find out, and explore any learning activities or activities they do so that children's ability to continue to develop in terms of communication skills will be maintained.

The implementation of the HSSC program in this study encountered several obstacles, including an inappropriate adaptation process and many program components that researchers could not implement. Besides that, the program was still new to parents and teachers, so it took a long time to get to know and run it. Another obstacle is that the measuring instrument used to measure children's communication skills is still not sharp enough, so it still requires further development related to the measuring instrument in terms of items and aspects being measured.

CONCLUSION

The HSSC program is a program that aims to improve communication skills through science learning. This program, in its implementation, collaborates with the roles of teachers and parents. The results of the analysis showed that there was an increase in communication skills after being given the HSSC model of learning intervention. This increase occurred in 5 aspects of communication skills: memory, the ability to add information, generalize, straightforward analysis, assessing, and problem-solving.

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