

THE IMPLEMENTATION OF SINGING TO IMPROVE COUNTING ABILITY FOR YOUNG LEARNERS

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ABSTRACT

The purpose of this study is to describe the process and learning outcomes through singing methods that can improve children's counting skills. The subjects of this action research were 13 children. This research method is an action research that refers to the Kemmis Mc Taggart action research model which consists of the stages of planning, action, and observation, and reflection. This research consisted of 2 cycles, where each cycle consisted of 8 meetings. Data analysis techniques used in this study are quantitative and qualitative data analysis techniques. Quantitative data analysis with descriptive statistics that compares the results obtained from the pre cycle, the first cycle, to the second cycle. Qualitative data analysis by analyzing data from the results of field notes, interview notes, and documentation notes with the stages of data reduction, data display, and conclusions. The results of this study indicate an increase in the ability to counting through singing in which the average value in the pre cycle of 2.76 increased in the first cycle to be 3.38, and in the second cycle to be 5.07.

Keywords: *counting ability, method of singing*

INTRODUCTION

Education is a necessity that cannot be separated from the life of a nation. A great nation will prioritize education because a good education will produce qualified human resources that can help support the development of the country. One of the purposes of education is to contribute to the development of children through Early Childhood Education (ECE). Early childhood education was instrumental in the development and determines the character of the nation in the future. Children in their early age are in the golden age where their abilities to process develop so rapidly compared to the next age. Therefore, it is wise to develop the abilities of children in accordance with the stages of development and fun activities to provide stimulus for children.

Campraro (2013), in his research titled "Elementary Teachers Integrate Music Activities into Regular Mathematic Lesson: Effects on Students' Mathematical Abilities", examined how teachers at the elementary school level make interdisciplinary learning designs by integrating music activities into mathematics, and also how interdisciplinary learning affects the ability of students. This research shows that there are several ways to integrate mathematics learning with music (Campraro, Tillman, & A, 2013). Meanwhile, Amelia (2012), in her research titled "Improving the Counting Ability of Children through Number Ball Games in One-Roofed Ocean Pariaman Kindergarten", found that number ball games can improve children's counting skills in processing and arranging fragments of number cards. Also, according to Tillman (2015) in his research titled "Music Activities as a Meaningful Context for Teaching Elementary Students Mathematics: A Quasi-Experiment Time Series Designed with Random Assigned Control Groups", found that elementary level students can improve mathematical abilities through music. It is suggested for teachers to use music to help students learn mathematics

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(Tillman, 2015). Therefore, counting is one of important abilities for humans. Counting ability needs to be taught in the early childhood. Teaching counting to children can use a variety of methods and media to make it easier for children to understand new things they will get (Susanto, 2014). One method that can be used to teach counting to early childhood is singing. Through singing, children can learn in a fun way. Children love singing, often they even experiment with their voices by making different tones or voices according to their respective imagination. Singing is an important part in children's self-development. Singing is stimulated based on the provision of adult learning through practice or direct singing activities (Fadlilah, 2014). According to the article, singing has several benefits, including: (1) acting as a means of relaxation by neutralizing heart rates and brain waves, (2) fostering interest and strengthening the attraction of learning, (3) creating a more humanistic and enjoyable learning process, (4) as a bridge in remembering learning materials, (5) building retention and touching emotions and aesthetic feelings of students, (6) internalizing the values contained in the learning materials, and (7) encouraging student learning motivation (Fadlilah, 2014).

RESEARCH METHODOLOGY

The research method used was action research. Action a research design that is used to seek improvements (Putra, 2014). The improvements referred to in the action research is carried out in a planned, purposeful, systematic, structured, and measurable manner through and with research, so that action research is suitable for activities related to teaching and learning activities for making improvements. The stages of action research take place in a repeated manner until the research objectives are met. Therefore, the cycle in this model is a round of activities consisting of four components, namely: planning, acting and observing, and reflecting. The design of the Kemmis and Mc Taggart model appears in the following chart:

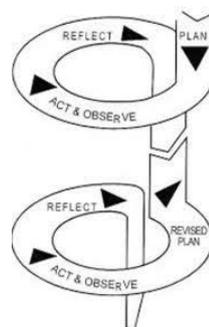


Figure 1. Kemmis and Mc Taggart Action Research Model

The planning stage was planned to make song lyrics adapted to concept of counting for children like addition and subtraction. The researcher and collaborator discussed the lyrics. The acting and observing stage were done by the researcher and collaborator by teaching the children to read the song lyrics together. Then, the children were invited to sing the song lyrics led by both the researcher and collaborator. The song was repeated several times such that the children could memorize the song. The researcher was also conducting observations when the children were doing the singing activities. Lastly, in the reflecting stage, the researcher analyzed the phenomenon and the results showed that singing could improve the counting ability for the children.

This research involved collaborations between the researcher and teacher in implementing the actions: the teacher as a partner and the researcher as the one implementing the singing activities, so that this research can be categorized as a collaborative research. This research was said to be successful if 71% of all children reached

the minimum completeness criteria (Mills, 2003), or 10 children out of the 13 children achieved the minimum score of developmental achievement that was determined together with the collaborator: 75% of the maximum score of the achievement. The maximum score of developmental achievement was determined as the following.

$$\begin{aligned}
 &= \sum \text{item} \times \sum \text{category} \\
 &= 2 \times 3 \\
 &= 6
 \end{aligned}$$

The minimum score of developmental achievement

$$\begin{aligned}
 &= 75\% \times \text{maximum level} \\
 &= 75\% \times 6 \\
 &= 4.5
 \end{aligned}$$

The data collection instruments used in this study were tests, observations, interviews, and documentation. The data on the relationship between planning and implementing learning was known based on the daily learning implementation plan and instrument sheet. To check the data validation, the researcher referred to the qualitative research validation criteria stated by Guba in (Mills, 2003), namely credibility, transferability, dependability, and confirm ability.

FINDINGS AND DISCUSSION

Cycle I

The implementation of the first cycle in this study was the provision of actions in the form of the implementation of singing methods to improve children's counting skills. The process of conducting this action research consists of steps that start from planning, implementation and observation, as well as reflection to improve children's count skills. The first cycle was carried out for 8 (eight) meetings. Researchers will describe in overall how the process and results of research from the first meeting to the 8th meeting. The observations obtained by the researcher and collaborator of the counting skills after receiving the intervention of the use of the singing is given for 8 sessions based on the observation sheet instruments counting skills of children are presented in the following graph.

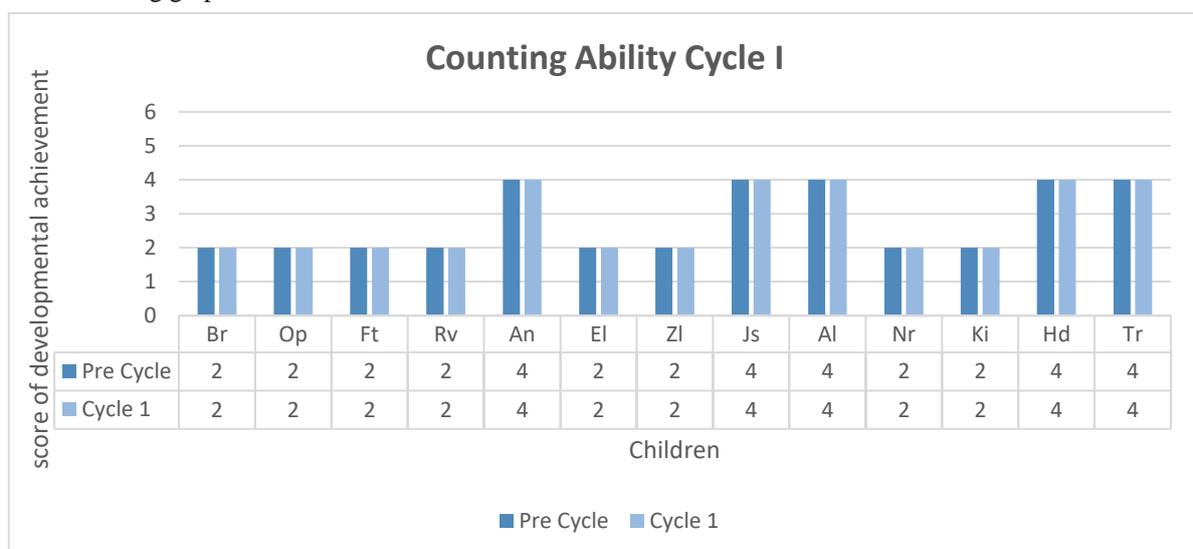


Figure 2 Counting Ability Cycle I

Based on the graph above, it can be seen that the average numeracy ability of children has increased after being taught using singing methods. The table above shows the average score of developmental achievement of 13 children at the pre-cycle stage 2.76 and has increased after the treatment in the first cycle of 3.38. Next, based on the success criteria in this study, it was said to be successful if a minimum of 71% of the number of children (Mills, 2003) and the result reached a minimum score of developmental achievement determined by the researchers together with a collaborator of 75%. This means that the action research was said to be successful if as many as 9 children reached a minimum score of 4.5 or 4. The results from cycle I show that there are still 10 children who still have scores under a predetermined minimum score. Therefore, this action research has not been successful and should be continued to cycle II with improvements based on the results of reflection in cycle I.

Cycle II

The process of implementing actions in cycle II was to increase the children's numeracy ability through the singing method with adjustments based on the reflection in Cycle I. The steps in this cycle II process consisted of planning, implementing and observing, and reflecting on improving children's counting skills. The implementation of the second cycle for 8 (eight) meetings was carried out in accordance with a plan that was previously made by the researcher together with the collaborator. In addition to carrying out the stages of implementation, the researcher also made observations or observations during the action using the singing method. In addition, researchers and collaborators also made observations about children's counting skills using instruments in the form of prepared test sheets. The observations obtained from researchers and collaborators on increasing children's counting ability up to the second cycle were presented in the following graph:

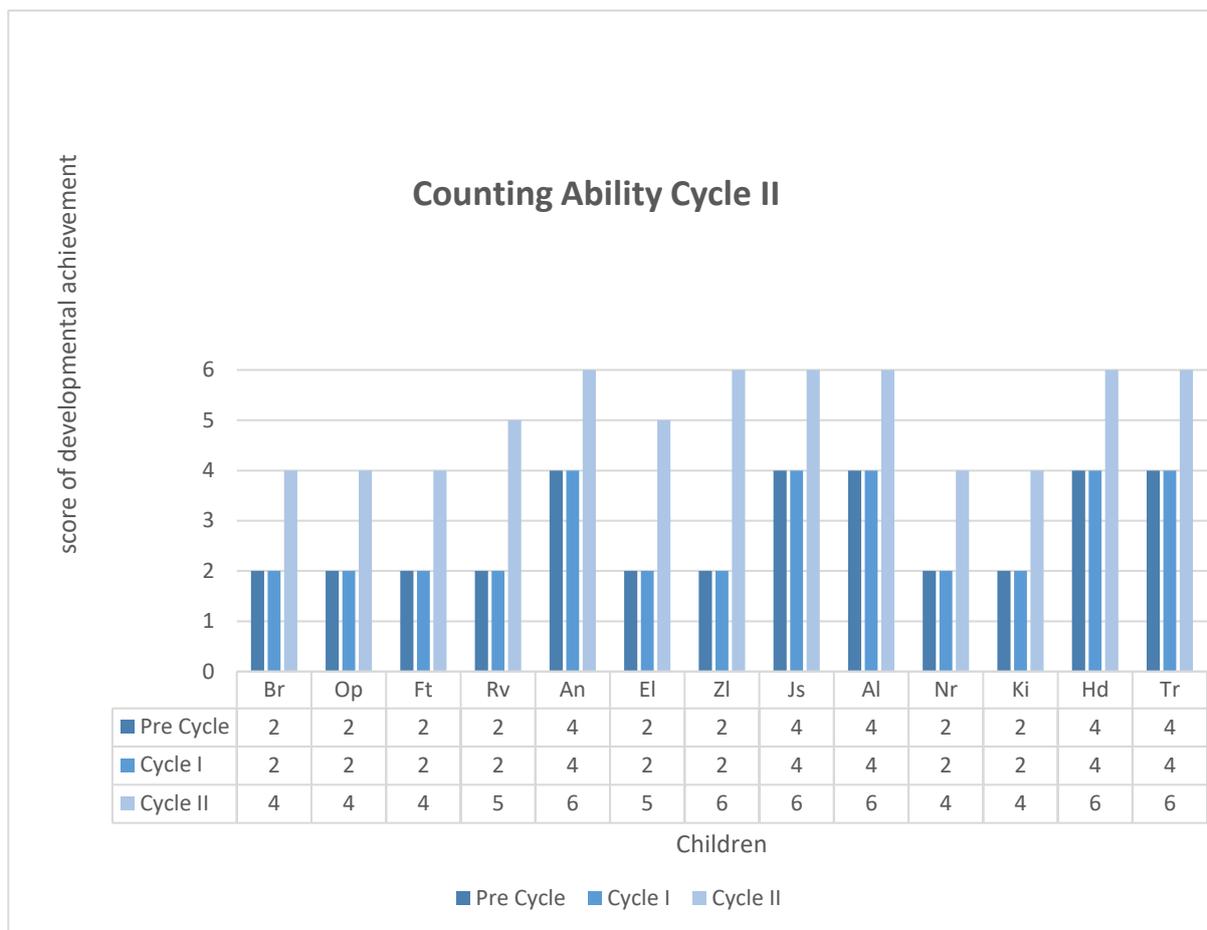


Figure 3. Counting Ability Cycle II

The data in the graph above shows an increase in children's counting skills from pre-cycle to cycle I to cycle II. The average score of developmental achievement of children's counting skills in the pre-cycle was 2.76, an increase from cycle I with an average of 3.38, and increased in cycle II with an average of 5.07. This showed that the treatment was successful in improving the children's counting ability.

CONCLUSION

Based on the results of the data analysis, it is concluded that the results of activities using the singing method can improve the counting skills of children aged 5-6 years. The increased score of developmental achievement counting ability of children from Pre cycle to Cycle I to Cycle II confirmed this. This study experienced an increase in the score of developmental achievement children's counting skills in the pre cycle by 2.76 and increase in cycle I with an average score of developmental achievement children at 3.38, and an increase again in cycle II with an average grade of 5.07. It is then proven that the application of singing method can improve the children's counting skills.

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