

The Congklak Game Method to Improve The Calculating Ability of Class III Students at SDN Segaralangu 01

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Abstract. The background of this research is how the ability to count in the congklak game, so that students are interested in learning mathematics using the congklak game method. This study aims to describe the ability to count using the congklak game method in class III SDN Segaralangu 01. The method used in this research is the congklak game method. Data collection techniques in this study are observation techniques, interview techniques, and documentation techniques. So for this reason researchers are interested in students learning mathematics using the congklak game method. This research is on the ability to count using the congklak game method in class III SDN Segaralangu 01. This research is a qualitative descriptive study. The subject of this study was the congklak game for third-grade students at SDN Segaralangu 01 in numeracy skills. The object of this research is students of class III SDN Segaralangu 01 in the process of learning mathematics in the congklak game. The results of this study are how to learn mathematics using the congklak game method in class III at SDN Segaralangu 01. Based on the results of the research that has been done, general conclusions can be used in learning mathematics using the congklak game method.

Keywords: numeracy skills, congklak, class III, Elementary School

1. Introduction

Education is a long-term investment for the progress of a nation. This is because human development from birth to death is strongly influenced by the learning process during his life. The realization of modern society is also due to discoveries in the world of science. Thus, humans take an educational process aimed at making their life much better and prosperous. In Indonesia, education itself has the main goal that is interested in the preamble of the 1945 Constitution, namely to educate the life of the nation. Furthermore, the meaning of further education is explained in the National Education System Law No. 20 of 2003 which states that education is defined as a conscious and planned effort to create a learning atmosphere and learning process so that students can actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble character, and skills needed by himself, society, nation, and state.

An ideal education in Indonesia must also provide provisions and develop abilities in students. Much teaching in schools only emphasizes the transfer of knowledge, including mathematics. Even though students should also be taught how to apply it in everyday life and not just theoretical formulas. This aims to train the creativity and ability of students in solving mathematical problems. In learning mathematics in elementary schools, students must be able to determine for themselves the various knowledge they need when the teaching and learning process is carried out. According to Heruman (2007: 2), for every concept that is abstract or that is just understood by students, educators need to reinforce it so that the learning settles and is stored in the memory of students. So it is necessary to have learning through action and understanding, not just memorizing or looking at facts, this will be easily forgotten by students.

Based on the initial observations of researchers at SDN Segaralangu 01, Cipari District, Cilacap Regency in August 2020, it was found that the numeracy skills of class III students were still lacking. This reality was illustrated when the teaching and learning process took place, especially when using the congklak game method. This problem was also learned from the homeroom teacher for class III SDN Segaralangu 01. The importance of counting each student has different abilities, the abilities possessed by students are very important to be stimulated so that students' abilities improve properly and equip students for their future. The ability to count is part of mathematics that can foster the development of children's cognitive abilities. The ability to count in children is very important to develop because counting can be used in children's daily lives. This is supported by Rijt et Al (2003: 158) that the ability to count is also very necessary in everyday life, to be able to mentally prepare for the future. In line with this opinion Frank (1989: 14) states that developing children's numeracy skills is a very important part of the mathematics learning program and a prerequisite for math skills, because children are needed and important in everyday human life, especially in solving problems.

The game method is a way of presenting lessons by using imitation situations or pretending or through a game in the learning process to gain an understanding of the nature of a particular concept, principle, or skill. Based on the background above, the researcher intends to conduct research with the title "The Congklak Game Method to Improve the Numeracy Skills of Class III Students of Sdn Segaralangu 01".

2. Research Methods

This study uses a qualitative approach. A qualitative approach is used to get a clear and real picture of the events that appear during the learning process. The event in question is the learning process that is applied in the classroom with the level of interest in learning. As a result of the application of the congklak game method to improve numeracy skills in class III SDN Segaralangu 01. This type of research is qualitative research. According to Sugiyono (2018: 213) the qualitative research method is a research method based on philosophy, which is used to research scientific conditions (experiments) where researchers are instruments, data collection techniques, and analysis which are more emphasis on meaning. In qualitative research, researchers must have good communication skills in interviews and broad insights.

3. Implementation Of Qualitative Research

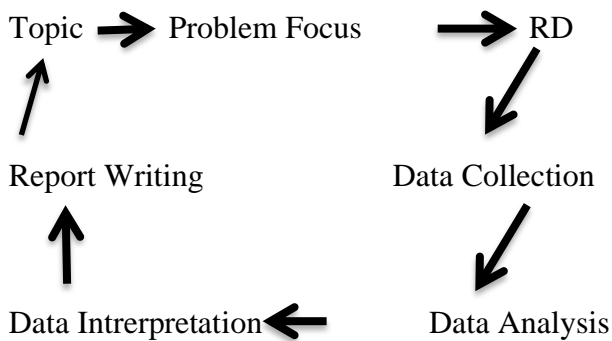


Figure 1. Stages in Qualitative Research

The research subjects were class III students at SDN Segaralangu 01 Cipari District, Cilacap Regency, class III students at SDN Segaralangu 01, and class III students at SDN Segaralangu 01 totaling 27 students with 17 male students and 10 female students. educate. Meanwhile, the total number of students at SDN Segaralangu 01 was 141 students, with 82 male students and 59 female students. Of the 27 students only 10 students as research subjects. The subjects of this study were selected using a purposive sampling technique, namely the selection of subjects with certain criteria or considerations, (Sanapiah Faisal, 2007: 67). This is supported (Moleongm 2006: 165) which states that in qualitative research there is no random sample but a purposive sampling.

Data and data sources, data is an important material used by researchers to answer questions or test hypotheses and achieve research goals. Therefore, data and data quality is an important subject in research because it determines the quality of research results. Data is obtained from a process called data collection. The data sources in this study, the data sources obtained were class educators/homeroom teachers and one of the students.

Data collection techniques used in this qualitative research include:

- 1 Observation, Observation is the observation and recording of an object that is focused on certain behaviors. According to Gordon E. Mills, 2003 (in Erianto, 2016) suggests that observation is a planned and focused activity to see and record a series of behaviors or the course of a system that has a specific purpose, and uncover what is behind the appearance of behavior and the basis for the system. Observations in this study aim to collect data about the learning interests of students in class implementation.
- 2 Interviews, according to Sugiyono (2018: 195) interviews are used as a data collection technique if the researcher wants to conduct a preliminary study to determine the problems that must be studied, and also if the researcher wants to know things from respondents that are more in-depth and the number of respondents is small or small. In this study, researchers used structured interviews. Structured interviews are used as a data collection technique if the researcher or data collector knows for sure what information will be obtained. Therefore, the

research instrument is in the form of written questions for which alternative answers have also been prepared.

- 3 Documentation According to Sugiyono (2018: 314) Documentation is a record of past events. Documentation can be in the form of writing, pictures, or monumental works of a person. Uma Sekaran (1992) put forward several principles in writing a questionnaire for data collection techniques, namely the principles of writing, measurement, and physical appearance.



Figure 2. Research Documentation

Data Validity Test Techniques, data validity or data validity is the truth of the research process. The validity of the data is accounted for and can be used as a strong basis in drawing conclusions.

Data Analysis Techniques, qualitative data analysis by collecting data by sorting into one data, looking for information, managing data, and determining what is important to manage. (Sugiyono, 2014: 246). This study uses the data analysis technique Miles and Huberman's Model. This technique is carried out in an interactive way and is carried out continuously until accurate data is obtained.

Research Procedures, research procedures are those that use steps and obtain the information needed and modified by Moleong (2012: 126), namely: 1). Pre-field, 2). Field activities, 3). Data analysis, 4). Report writing. These steps will be carried out by researchers as follows:

- 1 Pre-field Stage (8 July 2021). At this stage, the first activity carried out by the researcher was on July 8 2021 the researcher looked at the problems in the field related to numeracy skills to be used as an excuse to strengthen researchers and researchers to determine the location at SDN Segaralangu 01, Cipari District, Cilacap Regency.
- 2 Field Activity Phase (9 July 2021). At the field stage, the researcher carried out activities after conducting a proposal seminar, namely on July 9 2021. At this stage the researcher did several things for conducting research such as data collection techniques used used to conduct interviews with educators in class III SDN Segaralangu 01, make observations made on students in class III SDN Segaralangu 01, researchers took pictures during field activities to serve as documentation as a complement to research data.

- 3 Data analysis phase (July 10, 2021). At the data analysis stage it was carried out to analyze the data through observation, interviews and documentation as a complement to the data that had been carried out during the research with class III educators at SDN Segaralangu 01.
- 4 Report Writing Stage (10 May 2021). At the report writing stage, it includes activities for compiling activities and series carried out by researchers, conducting consultations with supervising lecturers on the results of activities while in the field to perfect the thesis, namely on May 10, 2021.

4. Result And Discussion

4.1. Result

- 1 Observation results. Observation is the basis of all science. Scientists can only work based on data, namely facts about the real world obtained through observation. Namely with participatory observation. In this observation, the researcher is involved with the daily activities of the person being observed or used as a source of research data. While making observations, the researcher participates in what the data source is doing, and feels the ups and downs. With this participant observation, the data obtained will be more complete, sharp and to the point of knowing the meaning level of each behavior that appears.
- 2 Interview Results
Researcher: "What are the current conditions regarding learning to count in class III?"
Class III homeroom teacher: "The current conditions regarding learning to count in class III are conducive, but it continues to run smoothly, including learning to count,
Researcher: "When teaching arithmetic at home, one of the students uses what method do you apply?"
Class III homeroom teacher: "The method that I apply is the method of singing while playing for the child so he can understand and so he doesn't get bored during the lesson."
Researcher: "What do you often use in learning to count in class?"
Class III homeroom teacher: "What I often use is to use a laptop because now is a sophisticated era, there are lots of electronic goods, yes, we take advantage of that, sir.
Researcher: "What difficulties do you often encounter when learning to count offline or online?"
Class III homeroom teacher: "Okay, the difficulties that I experienced when offline were the roads that were so difficult, bro, continuing to climb mountains because we are a teacher's obligation, yes, I will carry it out with a mandate, sir, now if you have difficulties online, you are constrained by signal, mas and especially if entering the rainy season, the signal is hard to beg for mercy, but now, thank God, many are installing wifi.

Researcher: "How much for Mathematics KKM in class III SDN Segaralangu 01?
Class III homeroom teacher: "For math itself in class III it's 65 mas.

Researcher: "For class III, are there many students who can't count yet?"

Class III homeroom teacher: "For class III, that is the largest number of students at SDN Segaralangu 01. There are a total of 27 students, out of the 27 students only 10 students cannot count. Of the 27 students, the characters were different, bro, some read fluently but their writing was not neat or still disheveled, some were good at arithmetic but still read spelled, some could write neatly but read and did not count.

Researcher: "What do you think, if we try using the congklak game method when learning to count?"

Class III teacher: "Yes, sir, that's a good idea, we can introduce the congklak game, congklak has started to disappear, kids nowadays know only online games and often use cellphones instead of playing traditional games.

- 3 Documentation Results. Documentation is a record of past events. Documentation can be in the form of writing, pictures or monumental works of a person. Documentation in the form of writing, for example diaries, life history (life history)

4.1. Discussion

- 1 Benefits of the Congklak Game Method. The benefits of the congklak game method in learning Calistung in class III can get positive results.
- 2 Obstacles in the congklak game
 - a. The difficulty of conditioning students
 - b. Lack of students' numeracy skills
 - c. Short/little learning duration.

5. Conclusion

Based on the results of the research that has been done, the general conclusion that can be used is the use of the congklak game method in arithmetic abilities for third grade students at Segaralangu 01 Elementary School is very good, educators have used the congklak game method to support the learning process. From these general conclusions several conclusions can be drawn from the sub-problems that have been described, including the following: in this study both direct observation in learning and interviews were found.

- 1 Educators have used the congklak game method as an aid in counting material.
- 2 Constraints in the use of the congklak game method include difficult student conditioning, short learning duration.
- 3 The positive benefits or impacts of using the congklak game method are that students feel happy during the learning process, can receive the material well and make learning more interesting.

- 4 There is a lack of arithmetic methods at SDN Segaralangu 01. There is only a learning method using a laptop. There is no learning method that can be used to count.

6. Sugestion

1. For students, the application of the congklak game method needs to be improved, both in school and community life so that the traditional congklak game does not become extinct in the future.
2. For researchers, research on learning to count in the congklak game needs to be improved, because it is very useful in the learning process and games.
3. For readers, it is hoped that this research can provide additional new insights into learning arithmetic.

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