Application of the RRB Type Cooperative Learning Model (Round Robin Brainstorming) in Improving Student Learning Outcomes in Social Sciences Subjects at SMPN 28 Jakarta

Noviana Anggraeni[1*], Desy Safitri[2], Saipiatuddin[3]
Universitas Negeri Jakarta
Corresponding Author: Noviana Anggraeni novianaanggraeni111@gmail.com

A R T I C L E I N F O

A B S T R A C T

This research aims to find out how successful the implementation of the Round Robin Brainstorming learning model is in improving student learning outcomes and student activity in class during learning activities. This research uses the PTK method or is called classroom action research. The data collection techniques used were observation, teacher and student interviews, learning outcomes tests, post test questions, observation sheets for teacher and student activity. Research findings show that the Round Robin Brainstorming learning model provides an increase in social studies learning outcomes through a cycle stage process. In cycle 1, the results obtained an average value of 70.57, in cycle 2, the results obtained an average value of 78.6, in cycle 3, the results obtained an average value of 83.47, the stages of action taken created significant results and succeeded in achieving IPH ≥ 80% in cycle 3.

INTRODUCTION

One of the problems faced in the world of education is fostering teacher creativity. Teacher creativity in the teaching and learning process has an important role in motivating students' learning. Teachers have enormous duties and responsibilities, such as teaching or conveying obligations to students. A teacher as an instructor is someone who provides knowledge to students. Looking at today's times, educators are required to be creative, both in conveying knowledge to students and in the learning process in the classroom, with creative teachers who can be accepted by students. However, there are still many teachers who are less creative in implementing the learning process, which can have a negative impact on students. Director of Madrasah Teachers and Education Personnel (GTK), Directorate General of Education, Ministry of Religion, Muhammad Zain. Revealing surprising data shows that the condition of teachers in Indonesia, only 1% of teachers fall into the category of creative teachers and 99% of curriculum teachers, that is, teachers only teach and carry out their duties to complete curriculum targets (Wijaya, 1991).
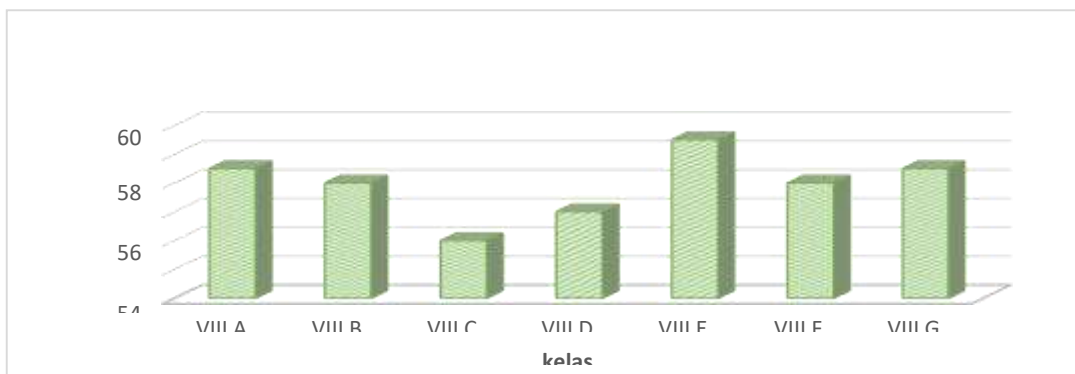

Figure.1 Bar Diagram of the Average Results of the Mid-Semester Summative Assessment for Class VIII

The curriculum has now been replaced with an independent curriculum where students must be active and teachers must be creative so that during the learning process, learning in the classroom can be enjoyable. Learning activeness is student involvement in the learning process as students follow the stages of each learning that students receive in class so as to create good learning outcomes (Trianto, 2010). So learning activeness is a student's effort to develop potential through a series of learning activities in class. Based on the results of observations in class VIII C of SMP Negeri 28 Jakarta, researchers obtained the following data:

1. Teachers only use textbooks and lectures. The lecture method only produces 50% of student learning outcomes.
2. The teacher also uses Problem Bassed Learning in the learning process, while students are studying in class at each meeting they are always given problems to solve so it looks very monotonous and the students are the only ones who are active.
3. We also see that students in IDK are still less responsive and only provide problems to students without providing other learning models that are more innovative, creative and interactive.

4. Class VIII social studies teachers have not tried creative, innovative and interactive learning models while teaching.
5. Class VIII students during their social studies lessons do not stop taking notes in their notebooks so they feel bored and tired. This makes learning activities less effective.

To overcome the problems above, the researcher used a new learning model, namely RRB (Round Robin Brainstorming) Type Cooperative learning, which was used to stimulate students' ability to think. The effectiveness of learning can be achieved if students receive facilities for implementing the RRB (Round Robin Brainstorming) Cooperative learning model. Therefore, students Those who tend to be passive will be encouraged to be active through group discussions guided by the teacher. By using the RRB (Round Robin Brainstorming) Cooperative learning model, students are expected to be able to convey ideas or ideas from their own thoughts more easily and also be active during the learning process, thus creating good student learning outcomes.

THEORETICAL REVIEW
Round Robin Brainstroming Learning Model

According to Brakley in (Sripradith, 2019) Round Robin Brainstorming is an effective method for generating ideas by providing clear explanations and accuracy. When students convey an idea, other participants are not permitted to ask questions related to that idea. Meanwhile, according to Kagan in (Gea, H.Y.F, Pangaribuan, J.J., & Sembiring, 2020) Round Robin Brainstorming is a learning technique that produces and develops an idea in group brainstorming, so the Brianstroming technique involves an interactive process for each group participant which is carried out in turns. Contributing successively by each member of the group, Brianstroming's strength can be done in writing or orally. Based on this opinion, Round Robin Brainstorming is a learning technique that develops an idea and each member contributes ideas in turn at a specified time in a row.

Understanding Learning Outcomes

Learning outcomes are an accumulation of processes that have been carried out in learning, this accumulation is accompanied by follow-up or improvement. According to (Rusman, 2017) learning outcomes refer to the skills possessed by students after experiencing the learning process. In the learning process or instructional activities, teachers generally determine learning objectives. Student success in learning can be measured through these learning objectives. Evaluation is used to assess the extent to which learning outcomes achieve the desired goals (Susanto, 2016). Meanwhile, according to (Setiawan, 2021) learning outcomes are the skills a child acquires after participating in learning activities. Learning itself is a form of transformation process for individuals who strive to achieve a change within themselves in order to create quality behavior in terms of abilities, skills, knowledge and other expertise.

METHODOLOGY

Perfect research requires the right method to achieve the expected results. Research methods basically follow applicable rules so that research is considered valid. The research method is a scientific method that collects various information in a scientific manner in order to obtain data, objectives and uses that are based on scientific characteristics, namely rational, systematic and empirical. This research uses the classroom action research method, another term is Classroom Action Research. PTK (Classroom Action) has a very important and strategic role in improving the quality of learning if implemented effectively and correctly. The implementation is done well because if PTK is implemented well, then the parties involved in PTK consciously develop their abilities to find and solve problems that arise during the learning process in the classroom through action. This action is carried out carefully and can solve problems or improve the learning situation, then it is carefully observed to measure the level of success.

Broadly speaking, in classroom action research there are four stages that can be completed, as follows:
1. Planning (planning)
2. Action (acting)
3. Observation (observing)
4. Reflection

RESULTS

Data on Learning Results of Cycle 1 Students

Below is data regarding the learning outcomes obtained by students based on post-test scores, which are presented in the form of a frequency distribution table, as follows:

Table 1. Frequency Distribution of Learning Outcomes

No	Value Score	Learning outcomes	
		F	**%**
1.	40-47	7	20%
2.	48-55	1	3%
3.	56-63	2	6%
4.	64-71	3	9%
5.	72-79	5	14%
6	80-87	17	49%
Total		**35**	**101%**

Data on Learning Results of Cycle 2 Students

Below is data regarding the learning outcomes obtained by students based on post-test scores, which are presented in the form of a frequency distribution table, as follows:

Table 2. Frequency Distribution of Learning Outcomes

No	Value Score	Learning outcomes	
		F	%
1.	50-56	2	6%
2	57-65	3	9%
3.	66-71	2	6%
4.	72-84	19	54%
5.	85-97	9	26%
Total		35	101%

Data on Learning Results of Cycle 3 Students

Below is data regarding the learning outcomes obtained by students based on post-test scores, which are presented in the form of a frequency distribution table, as follows:

Table 3. Frequency Distribution of Learning Outcomes

No	Value Score	Hasil Belajar	
		F	%
1.	60-75	4	12%
2.	76-96	20	58%
3.	97-100	10	29%
Total		34	99%

DISCUSSION
Data analysis of student learning outcomes

Based on the implementation of the Round Robin Brainstroming learning model in social studies learning activities, it was found that there was a significant increase in learning outcomes for each cycle. Below is an illustration of the percentage increase explained in the table:

Table 4. Social Studies Learning Results for Class VIII C Students

Cycle	Average Learning Outcomes	Percentage of Complete Learning Outcomes	Number of Students Completed
1	70,57	46%	17
2	78,6	74%	26
3	83,47	88%	30

Source: Data Processing Results, 2024

Based on table data regarding social studies learning outcomes for class VIII C students, there is a significant increase in each cycle. This is illustrated through a histogram which shows the focus on improving learning outcomes from cycle to cycle:

Figure.2 Histogram of Social Sciences Learning Score Results from Cycle 1 to Cycle 3

Data analysis of student activity

It can be seen that the results of the data on the percentage of student activity are as follows:

Table 4. Percentage of Student Activeness

Classification	Cycle 1				Cycle 2				Cycle 3			
	1	2	3	4	1	2	3	4	1	2	3	4
Questioning Ability	71%	23%	6%	0	40%	25%	23%	3%	23%	17%	51%	9%
Answering Ability	51%	31%	17%	3%	46%	34%	14%	6%	14%	29%	46%	9%
Opinion Ability	57%	29%	11%	3%	49%	34%	17%	6%	23%	20%	54%	6%
Collaboration Ability	31%	34%	23%	11%	9%	43%	34%	14%	6%	14%	60%	20%

Information :

1: Less Active   3: Active

2: Moderately Active   4: Very Active

The percentage table of student activity data above can be described and a histogram drawn as follows:
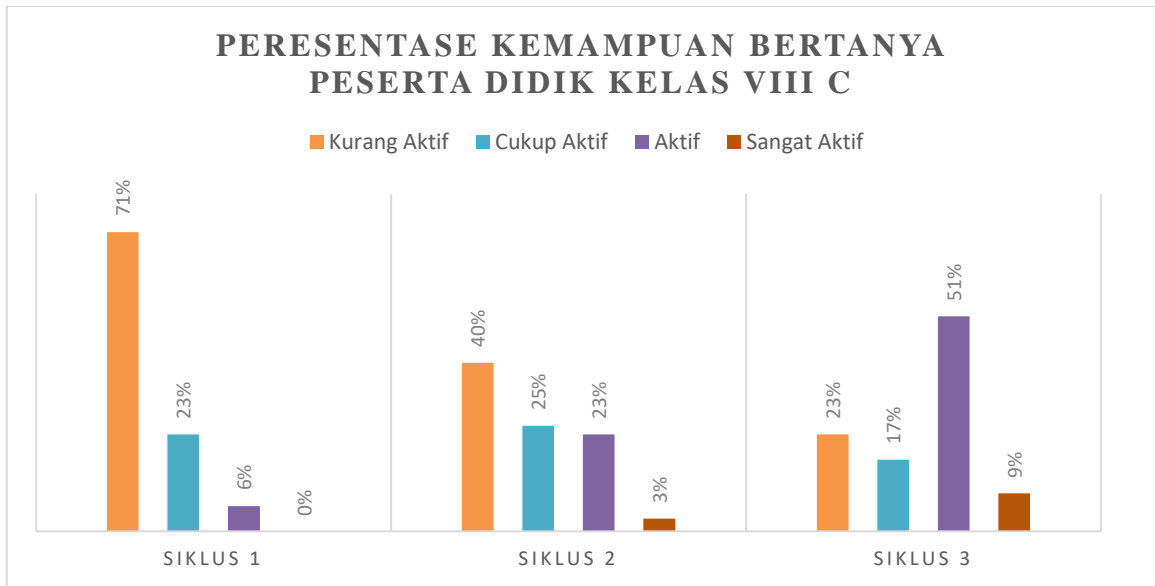
Figure 3. Histogram of Students' Activeness in Asking Questions

Based on the histogram shown above in the questioning aspect, it shows that in cycle 1 the percentage of students who were in the category was more or less higher in cycle 1 compared to the active percentage. In the very active category, cycle 1, there were no students who were very active in answering. In cycle 1, students were still adapting to the Round Robin Brainstromi application model and students were still shy about expressing what they wanted to do. In cycle 2, an increase began to be seen, namely the percentage of less active began to decrease to 40%, the percentage of very active was at 3%. In cycle 3, it appears to be increasing compared to cycle 1 and cycle 2, namely less active starting to decrease at a percentage of 23%, quite active at a percentage of 17%, active at the highest percentage at 51% and very active at the highest percentage at 9%. It can be seen that in cycle 3 the very active stage increased by 9% or there were 3 students. The increase in the percentage of students becoming more active is because the implementation of the action has been carried out repeatedly so that students are used to it.
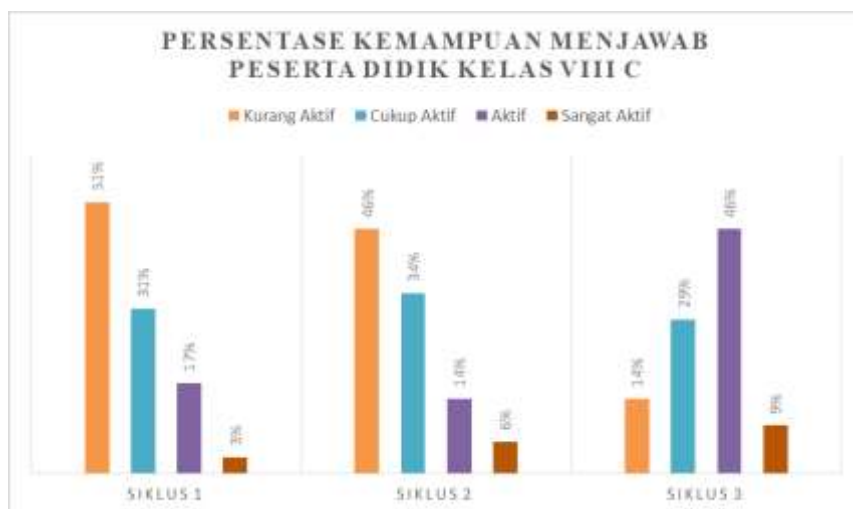

Figure 4. Histogram of Students' Active Ability to Answer

Based on the histogram above, it shows that the active percentage has increased in cycle 3, namely at 46% compared to the active percentage in cycle 1 and cycle 2. In cycle 1 the percentage of very active was at 3%, cycle 2 was at 6%, cycle 3 was at 9 %. This shows that in the aspect of asking, the percentage of very active students always has very active students and the percentage of very active students from cycle 1 to cycle 3 shows a significant increase. Student activity is better because students have adapted and are enthusiastic about carrying out learning activities in class by implementing Round Robin Brainstroming actions and have also gone through the stages of improvement that have been carried out in cycles 1 to cycle 3.
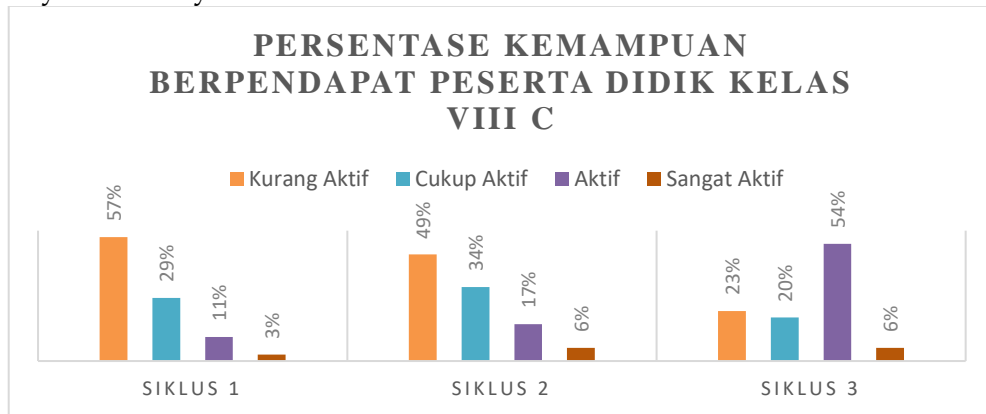

Figure 5. Histogram of Students' Activeness in their Ability to Express Opinions

Based on the histogram, the percentage of activeness of students who are active in expressing their opinions has increased. The percentage of students who were active in cycle 1 was 11%, cycle 2 was 17%, cycle 3 was 54%. the active percentage from cycle 2 to cycle 3 experienced a significant increase. As for the percentage that was very active in cycle 1, namely 0%, cycle 2, namely 3%, cycle 3, namely 9%. This is an increase in the aspect of opinion ability seen from cycle 1, cycle 2 and cycle 3 which has experienced a significant increase

Figure 6. Histogram of Students' Activeness in Collaboration Skills

Based on the histogram above, it shows that the active percentage was at 23% in cycle 1, cycle 2 was at 34%, cycle 3 was at 60%. the comparison from cycle 1 to cycle 3 began to show an increase and in cycle 3 the active percentage in the collaboration category was very high, namely 60%, there were 21 students. The percentage of very active in the collaboration category in cycle 1 was at 11%, cycle

2 was at 14%, cycle 3 was at 20%. This shows that students have started to take initiative in the tasks they have been given.

CONCLUSIONS AND RECOMMENDATIONS
Based on the findings made by researchers from each cycle, they concluded that:
1. The application of the Round Robin Brainstorming learning model provides results in increasing students' social studies learning gradually from each cycle. Learning completeness in cycle 1 was 46% with an average score of 70.57. Learning completeness in cycle 2 was 74% with an average score of 78.6. Learning completeness in cycle 3 was 88% with an average score of 83.47. The application of the Round Robin Brainstorming learning model was said to be successful in cycle 3, getting an average score of 83.47 and achieving an IPH (Outcome Achievement Indicator) ≥ 80% of the KKM 80.
2. Implementation of the Round Robin Brainstorming learning model also observing students' activeness in learning activities using this model. The active abilities observed were asking, answering, arguing and collaborating. This shows that in cycle 1 it shows active students getting 14% with a number of students 5. In cycle 2 it shows active students getting 22% with a number of students 8 and in cycle 3 it shows active students getting 56% with a number of students 19.

FURTHER STUDY
1. The Round Robin Brainstorming learning model in small groups cannot be implemented or the results of its achievement have not been proven, so this research was carried out in large groups.
2. This research was only conducted in class VIII C of SMPN 28 Jakarta so that researchers could not see an increase in learning outcomes and activity in class by using the Round Robin Brainstorming learning model.
3. The researcher is a collaborating teacher and carries out teaching actions in the classroom as a social studies teacher so that there are difficulties experienced which require adaptation.
4. Class situations and conditions are of course different from other classes so the results of this research cannot be generalized to other classes.
5. The laptop used by the researcher experienced technical errors at several meetings so the researcher used other media to convey the material.
6. This research does not measure aspects of active problem solving, paying attention and applying abilities. However, this research only measures aspects of active ability in terms of asking, answering, arguing and collaborating.

ACKNOWLEDGMENT
1. For students: students must focus more on carrying out learning activities, reduce chatting during learning activities. Students must increase their self-confidence in giving opinions and students must get used to using interesting and interactive learning models in order to foster enthusiasm for learning in class so they don't get bored.
2. For teachers: as an effort to improve skills in the teaching process in order to achieve more enjoyable learning activities. Requires all preparations for the success of the Round Robin Brainstorming model.
3. For researchers: as a reference for conducting further research by developing it.

REFERENCES
Gea, H.Y.F, Pangaribuan, J.J., & Sembiring, N. (2020). Improving Students Speaking Skill By Using Round Robin Brainstroming Technique To the Eleventh Mia Grade Students of Sma Deli Murni Bandar Baru. *Kairos English Language Teaching Journal*, 3(1), 27–41.

Rusman. (2017). Belajar dan Pembelajaran Berorientasi Standar Proses Pendidikan. *Kencana*.

Setiawan, A. (2021). Efektivitas Penggunaan Model Pembelajaran Probing-Promting Terhadap Hasil Belajar Siswa Tema Lingkungan Sahabat Kita Kelas V Sekolah Dasar. *Jurnal Pendidikan Dasar Nusantara, 1 (1), 1-16*.

Sripradith. (2019). An Investigation of the Round Robin Brainstroming in Improving English Speaking Ability Among Nakhonphanom University's Second Year Students in Thailand. *Journal of Education and Learning*, 8(4), 153.

Susanto, A. (2016). Teori Belajar dan Pembelajaran di Sekolah Dasar. *Kencana,5*.

Trianto. (2010). Mendesain Model Pembelajaran Inovatif-Progresif:Konsep, Landasan, dan Implementasi Pada Kurikulum Tingkat Kesatuan Pendidikan (KTSP). *Jakarta:Kencana Prenada Media Group*, 241.

Wijaya, C. (1991). Kemampuan Dasar Guru Dalam Proses Belajar Mengajar. *Bandung:PT.Remaja Rosdakarya*.