



THE IMPLEMENTATION OF THE NUMBERED-HEAD-TOGETHER METHOD TO IMPROVE ELEMENTARY SCHOOL STUDENTS' LEARNING PROCESS

Ahmad Fauzan

Program Studi Pendidikan Guru Sekolah Dasar, STKIP Pangeran Dharma Kusuma Indramayu, Indonesia
ahmadfauzan19215@gmail.com

ABSTRACT

This paper discusses the improvement of Class IV students' learning process at SDN Segeran Kidul Indramayu by applying the Numbered-Head-Together cooperative learning model. The method used is classroom action research (CAR) using Kemmis and Mc. Taggart model for three cycles. The research instruments include student and teacher observation sheets, multiple-choice questions, and documentation. Data analysis includes data collection, data reduction, data presentation, and conclusion. The results of the research imply that there was an improved learning process followed by significant learning outcomes. There was an increased percentage of students' learning process at 51% in the first cycle. The increased percentage of students' learning process in the second cycle was 69.38% with a significant percentage of 18.38% from the first cycle. In the third cycle, students fulfilled the learning process indicator of 84.5% with a significant percentage of 15.12% from the second cycle. This significant percentage was reinforced by the pre-test average score of 46.73 smaller than the post-test average score of 62.82 with a completeness percentage of 21.73% in the first cycle. The percentage of students' learning outcomes in the second cycle was 47.82% with an average value of 72.17. The increased percentage was 26.09% based on the student's learning outcomes in the first cycle. The percentage of students' learning outcomes in the third cycle was 82.60% with an average value of 82.39. There was a significant percentage of 34.78% based on the student's learning outcomes in the second cycle. These results have achieved the school's minimum criteria of mastery learning indicator (KKM) at 75%. Therefore, the Numbered-Head-Together method is effective and able to increase the elementary school students' learning process, especially at SDN Segeran Kidul Indramayu.

Keywords: *numbered-head-together, learning process, elementary school students*

PENERAPAN METODE NUMBERED-HEAD-TOGETHER UNTUK MENINGKATKAN PROSES PEMBELAJARAN SISWA SEKOLAH DASAR

ABSTRAK

Tulisan ini membahas peningkatan proses pembelajaran siswa kelas IV di SDN Segeran Kidul Indramayu dengan penerapan model pembelajaran kooperatif *Numbered-Head-Together*. Metode yang digunakan adalah penelitian tindakan kelas (PTK) dengan model Kemmis dan Mc. Taggart selama tiga siklus. Instrumen penelitian meliputi lembar observasi siswa dan guru, soal pilihan ganda, dan dokumentasi. Analisis data meliputi pengumpulan data, reduksi data, penyajian data, dan penarikan kesimpulan. Hasil penelitian menunjukkan adanya peningkatan proses pembelajaran yang diikuti dengan hasil belajar yang signifikan. Terjadi peningkatan sebesar 51% proses belajar siswa pada siklus I. Peningkatan proses pembelajaran pada siklus II sebesar 69,38% dengan peningkatan sebesar 18,38% dari siklus I. Pada siklus III siswa memenuhi indikator proses pembelajaran sebesar 84,5% dengan peningkatan sebesar 15,12% dari siklus II. Peningkatan ini diperkuat dengan nilai rata-rata pra tes sebesar 46,73 lebih kecil dari nilai rata-rata *posttest* sebesar 62,82 dengan presentase ketuntasan 21,73% pada siklus I. Persentase hasil belajar siswa pada siklus II sebesar 47,82% dengan nilai rata-rata 72,17. Peningkatannya sebesar 26,09% dari hasil belajar pada siklus I. Persentase hasil belajar pada siklus III sebesar 82,60% dengan rata-rata 82,39. Terdapat peningkatan sebesar 34,78% dari hasil belajar pada siklus II. Hasil tersebut telah mencapai indikator keberhasilan sekolah (KKM) sebesar 75%. Oleh karena itu, metode *Numbered Head Together* efektif dan dapat meningkatkan proses pembelajaran siswa sekolah dasar, khususnya di SDN Segeran Kidul Indramayu.

Kata Kunci: *numbered-head-together, proses pembelajaran, siswa sekolah dasar*

Submitted	Accepted	Published
06 February 2023	27 March 2023	29 March 2023

Citation	:	Fauzan, A. (2023). The Implementation Of The Numbered-Head-Together Method To Improve Elementary School Students' Learning Process. <i>Jurnal PAJAR (Pendidikan dan Pengajaran)</i> , 7(2), 461-471. DOI: http://dx.doi.org/10.33578/pjr.v7i2.9164 .
-----------------	---	---

INTRODUCTION

The success of students in learning to get an education can be obtained through educational institutions. Elementary school is the level of

basic education institutions in formal education. In general, this level can be said to be educational institutions that carry out the basic education

process and underlie the process of further education. Therefore, learning process at elementary school should be optimal (Aka, 2016: 35). The elementary school is taken within 6 years, starting from Grade I to Grade VI. It is in these grades that students experience the process of education and learning.

In an educational institution, the success of the teaching and learning process can be seen from the results of the cognitive, psychomotor, and affective domains (Bloom, 1956). The cognitive domain includes knowledge, understanding, application, analysis, assessment, analysis and creation. The affective domain includes acceptance while learning, managing, appreciating, and responding. While the psychomotor domain includes observation, measuring knowledge, skills, and attitudes. The success of this learning will be realized through a good learning process.

Student success in learning can be influenced by internal and external factors. Internal factors include physical, psychological, intelligence, innate interests and talents, intrinsic motivation, and others. Besides, external factors involve external motivation in the form of support from parents, local people, active, creative and innovative teachers, good learning methods, and facilities and infrastructure that support the learning process. If these two factors are fulfilled in a balanced way, then student learning success can be achieved properly. The most important factor in achieving student learning success in the classroom is a teacher as an external factor. A good teacher is a teacher who has sufficient academic qualifications and good pedagogic, personality, social and professional competencies (Pasal 10 Ayat 1 UUD No. 14 Tahun 2005 tentang Guru dan Dosen (Presiden, 2005)).

The teacher as an educator has a vital role in the learning process of elementary school because the teacher holds the main control to achieve the success of students' educational goals. A competent teacher is required to be able to guide the class and its students to achieve the educational goals they aspire to. Besides that, the competent teacher has to do research and is able to master and apply various kinds of methods,

models and learning media that are good and in accordance with the conditions of the class. It is not enough for the teacher to give a lecture in front of the class delivering material for hours while the students just sit and listen silently, especially if students don't listen because they are bored and bored, monotonous, not interested, and not conducive. Teachers must involve students to think actively, creatively, innovatively and logically so that the atmosphere of the learning process in the classroom becomes interesting, effective, efficient, fun and conducive. Thus, educational interaction can be realized properly by involving two active actors, who are teachers and students (Fathurrohman and Sutikno, 2017).

In fact, based on the results of researchers' observations on April 8-9 2021, teaching and learning activities carried out at one of the public elementary schools in Segeran Kidul Juntinyuat Indramayu applied learning methods that tended to be boring and monotonous; there was no creativity and innovation in learning media; there was low motivation so that students look passive, not enthusiastic, not well motivated; teacher and student interaction was not communicative. The teacher explained a lot and students were not given the opportunity to discuss with their friends, learning media that was not available could also hinder the learning process so that students were less active, interested and felt bored in paying attention to the teacher delivering learning material. What cannot be tolerated in teaching and learning activities is the absence of interaction between teachers and students.

This certainly can affect the learning achievement of students who have an average score not far from the standard minimum completeness criteria (KKM) that has been determined by the school. This problem must be solved by the teacher. The solution is that teachers must read a lot and study good, creative, innovative, and fun learning methods and media. Learning methods that are able to place students as subjects in the learning process, no longer as objects. The learning model is a design that describes the process of detailing and creating environmental situations that allow students to

interact so that changes or developments occur in students (Amri, 2013).

Regarding the learning model, Shoimin revealed that the learning model is a framework which describes systematic procedures in organizing learning experiences to achieve certain learning goals, and serves as a guide for developers in planning teaching and learning activities (Shoimin, 2014). Various learning models (Amri, 2013) consist of: 1) Learning Seeks and Meaningful, 2) Integrated Learning, 3) Cooperative Learning, 4) Picture and Picture Learning and 5) Cooperative Integrated Reading and Composition (CIRC) Learning.

According to the statement, a cooperative learning method was developed. Cooperative Learning places students in small groups to work on certain tasks to achieve learning goals together. One of the unique characteristics of cooperative learning is grouping with heterogeneous characteristics and different abilities. Tasks structured in such a way can make each member responsible, not only for their own learning but also for their peers. According to (Isjoni, 2016)), cooperative learning is a learning model in which students' study and work in small groups whose members are 4-6 people with a heterogeneous group structure. In addition, cooperative learning is a way of approaching or a series strategy specifically designed to encourage students in order to work together in the learning process.

Based on the theories above, the observed problems in the teaching and learning activities carried out at one of the public elementary schools in Segeran Kidul Juntinyuat Indramayu are able to be solved well through the Numbered Head Together (NHT) model. In this way, the students are supported to learn and to work in group discussion. They can express their ideas to the others. Their communicative and social abilities can improve expressively. The students had many opportunities to communicate and interact with others from different backgrounds. Therefore, they are able to learn well, effectively, attractively, actively and happily through NHT model as one of Cooperative Learning Models.

Cooperative Learning can be defined as a structured group work/study system. There are five main elements in this structure: positive interdependence, individual responsibility, personal interaction, cooperative skills, and group processes (Masitoh dan Dewi, 2009). In cooperative learning strategies, students are directed to be able to work on self-development, and to be individually responsible. In addition, cooperative learning is a learning activity that uses student learning patterns in groups to establish cooperation and interdependence in the structure of tasks, goals and prizes (Rusman, 2012).

From the several definitions put forward by the experts above, it can be concluded that cooperative learning is a learning model that places students in small groups whose members are heterogeneous, consisting of students with high, medium and low achievements, women and men with different ethnic backgrounds to help each other and work together to learn the subject matter so that all members learn optimally.

Several cooperative learning models that are commonly known (Sani, 2019) are: 1) Numbered Head Together (NHT), 2) Cooperative Script Type, 3) Think Pair Share, 4) Group Investigation Learning Model, 5) Team Assisted Individualization (TAI) Learning Model and 5) Two Stay-Two Stray Cooperative Learning Model. The characteristics of cooperative learning strategies according to (Masitoh dan Dewi, 2009) involve: 1) Study Together with Friends, 2) During the Learning Process Occurs Face to Face between Friends, 3) Listen to Each Other's Opinions among Group Members, 4) Learn from Friends Themselves in Groups, 5) Study in Small Groups, 6) Productive Talk or Express Opinions, 7) The Decision Depends on The Students Themselves and 8) Active Students. Besides, the advantages of cooperative learning (Shoimin, 2014) include: 1) Increase the Self-Esteem of Each Individual, 2) Acceptance of Greater Individual Differences so that Interpersonal Conflicts Are Reduced, 3) Decreased Apathy, 4) Increase Kindness, Sensitivity, and Tolerance, 5) Increase Motivation and Self-Esteem and 6) Adding to the

Pleasure of Being in a Place of Learning and Making Friends in his Happy Class.

Based on the problems of the learning process and the existence of the theory of learning methods, the researcher had a goal to improve the elementary school students' learning process through Number Head Together Method Implementation. Thus, the researcher tried to conduct a research under the title: 'The Implementation of the Number Head Together Method to Improve the Learning Process of Elementary School Students'.

REASERCH METHOD

The perspective of the research is a qualitative research. The reason is that the

collected data in terms words and sentences which is gained from observation sheets. The research method used is Classroom Action Research (CAR). The applied model is Kemmis and Mc. Taggart's model. This type of classroom action research was chosen because the problem to be solved comes from classroom learning practices as an effort to improve quality of the learning process (Sanjaya, 2015). The implementation of this research follows the model developed by Kemmis and Mc. Taggart in (Sudikin, 2010) which consists of 4 steps which include: (1) planning, (2) acting (implementation) and (3) observing (observation), and (4) reflecting (reflection). The steps of this research can be seen in the chart as follows (Sudikin, 2010):

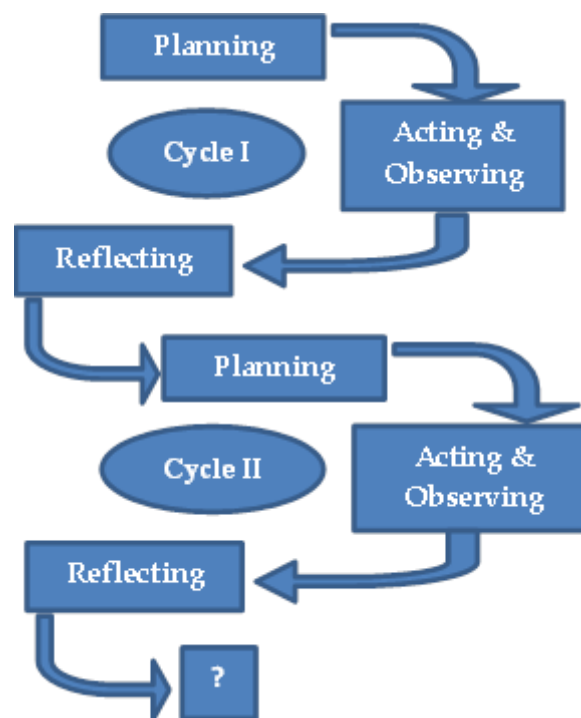


Figure 1. Kemmis and Mc. Taggart's Cycle Model

This research took place at SDN Segeran Kidul, Juntinyuat District, Indramayu Regency. The school was chosen because the Cooperative learning model of the Numbered Head Together type that has been studied has never been used by the Class IV teacher at the school. The subjects of

this study were 23 students in Class IV of the 148 students of SDN Segeran Kidul, Juntinyuat District, Indramayu Regency. The students had not yet received learning about Theme 3 Sub Chapter 2 "Diversity of Living Things in My Environment" (Anggari, 2015). This research was

carried out from April to October 2021 from observations to reports of research results.

Data collection techniques used in this study include observation, documentation, and tests. The test instrument is in the form of a multiple-choice objective test with four alternative answers. The numbers of questions are as many as 20 questions. This test is used as a pretest and a post test. Then, the results are compared. If the value (average) of the final test results is greater than the value (average) of the pretest scores, then the improvement of the learning process and student learning outcomes is considered to have been achieved.

Before being used, the test instrument was first tested for its validity and reliability. To test the validity of the test, the researcher created an instrument grid containing indicators from the subject matter. In addition, the researcher also compared (to look for similarities) between the criteria in the instrument and the facts that occurred in the field (Sugiyono, 2016).

Researchers use point-biserial correlation to determine the validity of the test items (Azwar, 2011). The reliability of the test items needs to be tested before this test instrument is used on the research sample. This instrument is measured using the Kuder Richardson-20 formula (Azwar, 2011). An instrument can be said to have high reliability when the reliability coefficient value is more than 0.8500 (Nurgiyantoro, 2004). The researcher conducted a test using the ITEMAN application program (Depdikbud, 1997).

Data analysis used in this Classroom Action Research is descriptive data analysis. Besides that, the researcher also described the test result data in the form of numbers. The data obtained in this study were in the form of observational data about the learning process, the results of filling in the observation sheets for

teachers and students, documentation data and test results data.

Qualitative data analysis was carried out by researchers through three stages (Sugiyono, 2016), namely data collection, data reduction, data display and drawing conclusions. From the data analysis, student learning outcomes were obtained where student learning outcomes based on the instructions for implementing the teaching and learning process contained individual and classical completeness. The instructions are: 1) the student is said to have studied thoroughly if the student has achieved a minimum score of 75; 2) the indicator of success used by the researcher in classroom action research is an indicator of success in classical learning at least 75% of the number of students who achieve the standard minimum completeness criteria (KKM).

RESULTS AND DISCUSSION

The results of the pre-test showed that all 23 students in grade IV did not complete or did not pass the standard minimum completeness criteria (KKM 75) out of the overall score of students who took the pre-test with an average score of 46.73. This was carried out before the researcher applied the Numbered Head Together learning model in the teaching and learning activities. The results of the pre-test were still far below the KKM (75). Therefore, the researchers carried out class actions by applying the Numbered Head Together type of cooperative learning. Classroom action research was carried out by researchers on August 1 – September 1 2021. The research results are obtained from data on the process of increasing student learning activities with indicators: activeness, attention, discipline, and assignments. These results can be seen in detailed comparisons of improving student learning processes between Cycle I, Cycle II, and Cycle III:

Table 1. The process of increasing student learning activities

Indicators	Cycl e I			Cycl e II Meetings			Cycl e III		
Activeness:									
Students actively write the subject	3	3	3	3	3	3	3	3	3
Students actively ask questions				0	1	2	5	6	8
Students actively express ideas				0	0	2	5	7	
Students actively discuss						0	2	8	0
Attention:									
Be quiet, be calm	2	5	8	9	0	2	3	3	3
Focused on material					0	1	1	6	0
Enthusiastic				2	4	4	5	7	8
Orderly							0	2	9
Discipline:									
Attendance	3	3	3	3	3	3	3	3	3
Arriving on time	1	1	1	1	1	2	2	2	2
Getting home on time	3	3	3	3	3	3	3	3	3
Wearing uniform according to schedule	7	8	9	9	9	9	0	1	2
Assignments:									
Mengerjakan semua tugas		0	1	1	2	2	3	5	9
Ketepatan mengumpulkan tugas							1	3	5
Mengerjakan sesuai dengan perintah	3	3	3	3	3	3	3	3	3
Mengerjakan pekerjaan rumah				3	3	3	3	3	3
Percentage of the improvement of Learning Process			51 %			69,3 %		84,5 %	

After the end of the cycle, students are given a formative test to find out how far students understand the learning material of Theme 3 Sub Chapter 2 provided by the researcher. The following table summarizes the scores obtained

by students after taking the final test of Cycle I, final test of Cycle II, and final test of Cycle III, a description of student completeness and the percentage of students who passed and the percentage of students who did not pass.

Table 2. Results of student scores in the final test of the three cycles

Students' Numbers	Cycle I		Cycle II		Cycle III	
	Scores	Results	Scores	Results	Scores	Results
1	60	NP	75	P	90	P
2	60	NP	75	P	80	P
3	75	P	75	P	90	P
4	50	NP	65	NP	70	NP
5	75	P	80	P	90	P
6	65	NP	70	NP	85	P
7	50	NP	65	NP	70	NP
8	65	NP	75	P	80	P
9	65	NP	70	NP	85	P
10	75	P	80	P	90	P
11	75	P	80	P	90	P
12	55	NP	60	NP	80	P
13	75	P	85	P	95	P
14	55	NP	65	NP	70	NP
15	70	NP	75	P	85	P
16	55	NP	70	NP	80	P
17	50	NP	65	NP	70	NP
18	60	NP	70	NP	80	P
19	65	NP	75	P	80	P
20	60	NP	70	NP	85	P
21	60	NP	75	P	85	P
22	60	NP	70	NP	80	P
23	65	NP	70	NP	85	P
Total		1445		1660		1895
Average		62,82		72,17		82,39
(%) Students pass.		21,73%		47,82%		82,6%
(%) Students did not pass.		78,26%		52,17%		17,3%

Notes:

P : Pass

NP : Not Pass

DISCUSSION

Researchers carried out classroom action research (CAR) with three cycles. CAR was carried out to see an increase in the learning process of Class IV students at SDN Segeran Kidul by applying the Numbered Head Together (NHT) of Cooperative Learning Models. According to (Isjoni, 2016), cooperative learning is a learning model in which students' study and work in small groups whose members are 4-6 people with a heterogeneous group structure. In addition, cooperative learning is a way of approaching or a series strategy specifically designed to encourage students in order to work together in the learning process.

Based on the research result conducted by (Sari, 2020: 24), the NHT model could significantly improve learning outcomes of elementary school students because they are still interested in concrete and attractive things. In line with (Sari, 2020), (Prayekti et al., 2019: 232) said that the NHT model assisted with audio visual media on the material of story elements simultaneously influenced the students' learning outcomes. In addition, the NHT learning model was able to improve students' learning process and their learning outcomes because the students had many opportunities to communicate and interact with others from different backgrounds. Because of this, the social learning and cognitive-

ability delivery were also able to improve students' social abilities (Baskoro, 2020: 553).

Based on the theories and the research results above about the Numbered Head together method, the researcher did and proved his research by measuring learning processes of Class IV students at SDN Segeran Kidul with observation sheets and reinforced by tests given at the end of each cycle. Students worked on test questions in the form of multiple-choice questions of 20 questions with a minimum completeness score (KKM) of 75. Researchers used an indicator of success in student learning at a minimum of 75% of the number of students who achieved the KKM set by the school (75). Comparison details of improving student learning processes between Cycle I, Cycle II, and Cycle III based on Table 1 shows that the percentage improvement in student learning processes in Cycle I was 51%; in Cycle II it was 69.38% with an increase of 18.38% from Cycle I, and in Cycle III it was 84.5% with an increase of 15.12% from Cycle II.

In the indicator of activity in Cycle I at the first meeting based on Table 1, there were 4 students asking; at the second meeting: 7 students; at the third meeting: 8 students. At the fourth meeting of Cycle II, there were 10 students; at the fifth meeting: 11 students; at the sixth meeting: 12 students. In Cycle III, at the seventh meeting, there were 15 students; at the eighth meeting: 16 students. In the ninth meeting, there were 18 students who asked questions.

In the activeness indicator of Cycle I at the first meeting based on Table 1, there is no student who presents any ideas; at the second meeting, there were 3 students; at the third meeting: 5 students. In Cycle II of the fourth meeting, there were 7 students who submitted ideas; at the fifth meeting: 10 students, at the sixth meeting: 10 students. At the seventh meeting of Cycle III, there were 12 students who expressed ideas; at the eighth meeting, there are 15 students and in the sixth meeting, there are 17 students.

In the activeness indicator in Cycle I at the first meeting, there was 1 student actively discussing; at the second meeting: 4 students; at the third meeting: 6 students. In Cycle II of the fourth meeting, there were 8 active students in the discussion; at the fifth meeting: 9 students; at the

sixth meeting: 10 students. At the seventh meeting of Cycle III, there were 12 students who were active in discussions; At the fifth meeting, there were 18 students and; at the sixth meeting, there were 20 students.

In the attention indicator in Cycle I at the first meeting based on Table 1, there were 12 students who were quiet and calm; at the second meeting, there were 15 students; at the third meeting: 18 students. In Cycle II of the fourth meeting, there were 19 students silent and calm; at the fifth meeting: 20 students; at the sixth meeting: 23 students. In Cycle III, at the seventh, eighth, and ninth meetings, all (23) students were quiet and calm following the lesson.

In the attention indicator of Cycle I at the first meeting there were 6 students focused on material; at the second meeting, there were 6 students; at the third meeting, there were 8 students. In the fourth meeting of Cycle II, there were 8 students focused on the material; at the fifth meeting, there are 10 students; at the sixth meeting, there were 11 students. In Cycle III of the seventh meeting, there were 11 students focused on the material; at the eighth meeting, there are 16 students; at the ninth meeting there are 20 students.

In the indicator of enthusiasm in participating in learning based on Table 1, in the first cycle of the first meeting there was 1 student; at the second meeting, there were 6 students; at the third meeting, there were 8 students. At the fourth meeting of Cycle II, there were 12 students; at the fifth meeting, there were 14 students; at the sixth meeting, there were 14 students. In Cycle III, the seventh meeting, there were 15 students; at the eighth meeting, there were 17 students; in the ninth meeting there were 18 students.

In the discipline indicator at the first, the second and the third meetings of Cycle I, there were 21 students who came on time. In the fourth and the fifth meetings of Cycle II, there were 21 students; and at the sixth meeting, there were 22 students who came on time. At the seventh, eighth, and ninth meetings of Cycle III, there were 22 students came on time.

In the accuracy of going home in Cycle I, Cycle II, and Cycle III all students came home on time according to the schedule. In the discipline

indicator of wearing school uniforms in the Cycle I at the first meeting, there were 17 students wearing uniforms according to the schedule; at the second meeting, there were 18 students; at the third meeting, there were 19 students. At the fourth, the fifth, the sixth meetings of Cycle II, 19 of them wore uniforms according to the schedule. At the seventh meeting of Cycle III, there were 20 students; at the eighth meeting consisted of 21 students; At the ninth meeting, there were 22 students wearing uniforms according to the schedule.

In the assignment indicator at the first meeting of Cycle I, there were 6 students doing all the assignments; at the second meeting, there were 10 students; at the third meeting, there were 11 students. In the fourth meeting of Cycle II, there were 11 students doing all the assignments; at the fifth, the sixth meetings, there were 12 students doing all the assignments. At the seventh meeting of Cycle III, there were 13 students who did all the assignments; at the eighth meeting consists of 15 students who did the assignments; at the ninth meeting, there were 19 students doing all the assignments.

In the right indicator of collecting assignments, at the first meeting of Cycle I, there was 1 student submitting assignments on time; at the second meeting, there were 4 students; at the third meeting, there were 7 students. In the fourth meeting of Cycle II, there were 7 students submitting assignments on time; at the fifth meeting contained 8 students; at the sixth meeting, there were 9 students. In the seventh Meeting of Cycle III, there were 11 students submitting assignments on time; at the eighth meeting, there were 13 students; at the ninth meeting, there were 15 students submitting the assignments.

In the indicators of doing according to orders of Cycle I, Cycle II and Cycle III, all students carried out assignments according to the instructions of the researcher. After the end of the cycle, students are given a formative test to find out how far students understand the learning material Theme 3 Sub Chapter 2 provided by the researcher. Based on the results of formative tests, student learning outcomes in each cycle have increased. This can be seen from the learning

completeness of students who have reached the minimum completeness criteria (KKM) or students who have completed Cycle I of 21.73% with an average score of 62.82 for all students. Judging from this percentage, there has not been an increase in learning and has not reached the specified success indicator (75%), therefore the researcher carries out Cycle II.

In Cycle II, the percentage of students who had achieved the minimum completeness criteria (KKM) or students who had completed it was 47.82% with an average score of 72.17 for all students. Judging from this percentage, there has been an increase of 26% from the previous cycle (comparison between Cycle I and Cycle II). However, this percentage has not yet reached the specified success indicator (75%). Therefore, researchers are still continuing learning through Cycle III so that indicators of success can be achieved.

After the researchers conducted Cycle III, the percentage of students who achieved KKM or students who completed this cycle was 82.6% with an average score of 82.39. Thus, there is an increase in student learning outcomes in Cycle III of 34.8% from Cycle II. This shows the achievement of predetermined success indicators. Based on the increase in student learning outcomes and the indicators of success determined by the researcher, the research stopped the treatments at Cycle III.

The explanation above can be strengthened by looking at the comparison between the results of the pre-test and post-test scores which state that the post test scores are higher than the pretest values. This shows that the Numbered Head Together learning method is able to improve the student learning process well, that is the percentage increase in student learning processes in Cycle I is 51%; in Cycle II, it is 69.38% with an increase of 18.38% from Cycle I; in Cycle III, it is 84.5% with an increase of 15.12% from Cycle II.

According to the learning process which is strengthened by student learning outcomes which continue to increase and have achieved the specified success indicators, it can be concluded that learning process through the Numbered Head Together (NHT) of cooperative learning models

through three cycles can be said to be successful. Therefore, the Numbered Head Together learning method is one of attractive and pleasant method that can improve elementary school students' learning process. The proved research result in line with (Aditya et al., 2022: 92-93) in which his research result proved that the NHT can support an increase in the effectiveness of teaching and learn in primary schools because the students could interact with others students and were able to develop the ability to think creatively. Besides, (Solikhin, 2021: 89) did research of which the result explained that the NHT model had an increase in student activity in the online learning process and students' learning outcomes. Involving students in group discussions could be a suitable method so that the students were more active and were able to express their opinions freely. In addition, (Wilanda & Iman, 2017: 13) also proved their research about the Numbered Head Together model. Their research findings showed that there was a significant improvement on the students' reading comprehension who were taught by using NHT technique; and there was a significant difference between the students reading comprehension who were taught by using NHT and those who were not. Furthermore, there were a research result conducted by (Widyastuti, 2021: 77). Her research stated there was an influence between students receiving the NHT treatment and students receiving the direct learning model on mathematical problem-solving abilities.

CONCLUSIONS AND RECOMMENDATION

Based on the results of the research and discussion that have been described previously, the results of the research can be concluded as follows:

1. The Learning Process of Grade IV Students at SDN Segeran Kidul Indramayu

The application of the Numbered Head Together (NHT) of cooperative learning models can improve the student learning process through three cycles which are carried out on August 1 - September 1 2021 in Class IV of SDN Segeran Kidul Indramayu. It can be seen that the percentage increase in the learning process from the indicators that the researcher has made can

improve the student learning process in each cycle. In Cycle I, students fulfilled the learning process indicator by 51%. In Cycle II, students get the learning process indicator of 69.38% with an increase of 18.38% from Cycle I. And in Cycle III, students reach the learning process indicator of 84.5% with an increase of 15.12% from Cycle II.

2. Learning Outcomes of Grade IV Students at SDN Segeran Kidul Indramayu

The application of the NHT type of Cooperative learning models can improve the learning outcomes of fourth grade students at SDN Segeran Kidul Indramayu. These results can be proven by increasing student learning completeness and achieving indicators of success determined by the researcher from the end of the cycle test. The percentage of students who have achieved the minimum completeness criteria (KKM) or students who have completed Cycle I is 21.73%; Cycle II of 47.82%; Cycle III of 82.60%. This has achieved the specified success indicators, which is a minimum of 75% of the number of students who achieve the specified the minimum completeness criteria.

Based on the research results, the Number Head Together (NHT) of cooperative learning models can improve the learning process well. Therefore, elementary school teachers can try and apply this learning model on Theme 3 of Sub Chapter 2 on 'Diversity of Living Things in My Environment' or to other themes in different semesters and different classes. In addition, teachers at a higher level can also try and apply the NHT learning method by studying and understanding the steps from the references so that the learning process can run well, effectively and efficiently; and the most important thing is that students feel happy in the learning process.

Because of this research, the authors invite and motivate teachers to try and to carry out a research by applying various learning methods in accordance with existing problems in their class in order to improve and enhance active, innovative, creative, effective, efficient and fun learning processes. Thus, teachers will learn a lot, read, dig up information about how to improve the learning process in their class for the better.

REFERENCES

- Aditya, B. R., Jannah, F., & Nurhas, I. (2022). Problem-based numbered head together learning approach for a successful teaching strategy. *JINoP (Jurnal Inovasi Pembelajaran)*, 8(1), 84–94.
- Aka, K. A. (2016). Model Quantum Teaching dengan Pendekatan Cooperative Learning untuk Meningkatkan Kualitas Pembelajaran PKn. *Jurnal Pedagogia*, 5(1), 35–46.
- Amri, S. (2013). *Pengembangan dan Model Pembelajaran dalam Kurikulum 2013*. PT. Prestasi Pustakarya.
- Anggari, A. (2015). *Tema 3 Peduli Terhadap Makhluk Hidup*. Balitbang Kemendikbud.
- Azwar, S. (2011). *Reliabilitas dan Validitas*. Pustaka Pelajar.
- Baskoro, R. A. (2020). The Comparison of Numbered Head Together Learning Models and Think Pair Share in terms of Elementary School Mathematics Learning Outcomes. *International Journal of Elementary Education*, 4(4), 550–557.
- Bloom, B. S. (1956). *Taxonomy of Educational Objectives: The Classification of Educational Goals, Handbook I Cognitive Domain*. Longmans, Green and Co.
- Depdikbud. (1997). *Manual Item and Test Analysis*. Depdikbud: Pusat Penelitian dan Pengembangan Sistem Pengujian.
- Fathurrohman and Sutikno. (2017). *Strategi Belajar Mengajar melalui Penanaman Konsep Umum & Konsep Islam*. PT. Refika Aditama.
- Isjoni. (2016). *Cooperative Learning*. CV. Alfabeta.
- Masitoh dan Dewi. (2009). *Strategi Pembelajaran*. Departemen Agama RI.
- Nurgiyantoro, B. (2004). *Statistik terapan untuk Penelitian Ilmu-Ilmu Sosial*. Gajah Mada University Press.
- Prayekti, H., Haryadi, & Utomo, U. (2019). The Effect of Numbered Heads Together (NHT) Model Assisted with Audio Visual Media On The Learning Outcomes of Identifying Story Elements of Students Grade V. *Journal of Primary Education*, 8(2), 232–237.
- Presiden. (2005). *Undang-Undang Republik Indonesia Nomor 14 Tahun 2005 tentang Guru dan Dosen*. Presiden Republik Indonesia.
- Rusman. (2012). *Model–Model Pembelajaran Mengembangkan Profesionalisme Guru*. PT. Raja Grafindo Persada.
- Sani, R. A. (2019). *Strategi Belajar Mengajar*. PT. Raja Grafindo Persada.
- Sanjaya, W. (2015). *Penelitian Tindakan kelas*. Prenadamedia Group.
- Sari, A. Y. (2020). Improving Civics Learning Outcomes Through Numbered Heads Together Class II Elementary School Learning Model. *Social, Humanities, and Education Studies (SHEs): Conference Series*, 3(4), 19–25.
- Shoimin, A. (2014). *68 Model Pembelajaran Inovatif dalam Kurikulum 2013*. Ar-Ruzz Media.
- Solikhin, F. , S. W. I. , D. K. (2021). The Application of Numbered Heads Together (NHT) in Online Learning. *International Journal of Chemistry Education Research*, 5(2), 84–90.
- Sudikin. (2010). *Manajemen Penelitian Tindakan Kelas*. Insan Cendekia.
- Sugiyono. (2016). *Metode Penelitian Pendidikan: Pendekatan Kuantitatif, Kualitatif, dan R&D*. CV. Alfabeta.
- Widyastuti, R. (2021). Mathematical problem-solving ability: The effect of numbered head together (NHT) model and mathematical prior knowledge. *Journal of Advanced Sciences and Mathematics Education*, 1(2), 73–78.
- Wilanda, T. F., & Iman, J. N. (2017). The Use of Numbered Head Together (NHT) Technique with Descriptive Text to Improve the Tenth Grade Students Reading Comprehension of SMA Muhammadiyah 1 Palembang. *Global Expert Jurnal Bahasa Dan Sastra*, 6(1), 13–18.