Jurnal Analisa 8 (2) (2022) 91-106
http://journal.uinsgd.ac.id/index.php/analisa/index
p-ISSN : 2549-5135 e-ISSN : 2549-5143

Application of Group Resume Learning with Contextual Approach on Mathematical Problem Solving

Eritha Dewi Febrianty*, Agus Hikmat Syaf and Ida Nuraida
Pendidikan Matematika, Universitas Islam Negeri Sunan Gunung Djati,
Jl. Soekarno Hatta Cimencrang, Bandung, Indonesia
**erithadewifebrianty27@gmail.com*

Received: 16 Desember 2022 ; Accepted: 26 Desember 2022; Published: 30 Desember 2022

Doi: 10.15575/ja.v8i2.22231

Abstrak

Tujuan diadakannya penelitian ini untuk meningkatkan kemampuan pemecahan masalah matematis siswa menggunakan model pembelajaran *group resume* dengan pendekatan kontekstual. Penelitian ini dilakukan di kelas VIII salah satu sekolah di Cianjur. Metode penelitian yang dipilih yaitu kuasi eksperimen dengan *design* penelitian yaitu *nonequivalent control group design*. Instrumen yang digunakan yaitu instrumen tes kemampuan pemecahan masalah, lembar observsi dan lembar angket sikap siswa. Hasil penelitian diperoleh bahwa: 1) Keterlaksanaan proses pembelajaran guru dan siswa menggunakan model Pembelajaran *group resume* dengan pendekatan kontekstual berada pada kategori baik sekali; 2) Peningkatan kemampuan pemcahan masalah matematis siswa yang menggunakan model pembelajaran *group resume* dengan pendekatan kontekstual lebih baik secara signifikan daripada siswa yang menggunakan model pembelajaran konvensional; 3) Besar pengaruh model pembelajaran *group resume* dengan pendekatan kontekstual berada pada kategori sedang dengan persentase 73%; serta 4)Kebanyakan siswa memberikan sikap positif terhadap pembelajaran matematika menggunakan model pembelajaran *group resume* dengan pendekatan kontekstual.

Kata Kunci: Kemampuan Pemecahan Masalah Matematis, *Group Resume,* Pendekatan Kontekstual

Abstract

The purpose of this research was to improve students' mathematical problem solving abilities using the group resume learning model with a contextual approach. This research was conducted in class VIII one of the schools in Cianjur. The research method chosen was quasi-experimental with a nonequivalent control group design. The instruments used were problem solving ability test instruments, observation sheets and student attitude questionnaire sheets. The results of the study showed that: 1) The implementation of the teacher and student learning process using the group resume learning model with a contextual approach was in the very good category; 2) Increasing the mathematical problem solving abilities of students who use the group resume learning model with a contextual approach is significantly better than students who use conventional learning models; 3) The influence of the group resume learning model with a contextual approach is in the moderate category with a percentage of 73%; and 4) Most students give a positive attitude towards learning mathematics using the group resume learning model with a contextual approach.

Keywords: *Mathematical Problem Solving Ability, Group Resume, Contextual Approach*

1. INTRODUCTION

Mathematics has a very important position for human life because it is able to develop human thinking power, besides that mathematics plays an important role for other disciplines and forms the basis for the development of modern technology so that mathematics is referred to as a universal science that is needed by humans (Umamah et al., 2013: 45). Mathematics must be taught from the most basic level so that students are able to equip the skills needed to think analytically, logically, systematically, critically, creatively and collaboratively (Ginanjar, 2019: 122). One of the skills that must be possessed is mathematical problem solving ability.

According to Sumarmo (2000: 8) to be able to achieve the desired goals, a process is needed to solve the difficulties encountered, this is called problem solving. Problem solving ability is the main standard and is a very important ability in learning mathematics (Arwinsyah et al., 2019). This is contained in the Standards of the National Council of Teacher of Mathematics (NCTM) (2000). Maulyda (2019: 20) states that problem solving is a process in which students try to find solutions to the problems they face by applying all the knowledge, skills and understanding they have.

Mathematical problem solving abilities are very important for students to master, but the facts on the ground show that these abilities are still in an unsatisfactory category (Lestari & Rosdiana, 2018: 425). One of them is a class VIII student at SMP Plus Al-Ittihad, this was obtained from the results of an interview with one of the mathematics teachers, of whom she said that students still find it difficult if they are given problems that are different to the examples previously given, especially contextual questions, they find it difficult understand the existing problems. Another thing that often happens is that students can understand the problem and know the solution plan but they still experience difficulties in solving it, this is caused by the students' low arithmetic operations skills (Nufus et al., 2022: 247). So it appears that there is a problem in the development of students' mathematical problem solving abilities. One of the causes of this problem is because of the boredom felt by students towards conventional learning where there is no variation in learning (Kresma, 2014: 44). Therefore, new innovations are needed in the selection of learning models used.

Group resume is a cooperative learning model that is very simple and in practice involves all students because it is group learning so that students who experience difficulties can be helped and learning material that is difficult will be easily understood, trains students in fostering a sense of responsibility and forms cohesiveness in their groups and sharpens student collaboration in determining the solution to a problem (Mulyadin, 2018: 20). By using the resume group learning model, it is hoped that it will be able to make students actively involved and understand the material more easily and can improve mathematical problem solving abilities because it relies on the potential that exists in students.

The contextual approach is a learning approach that is structured so that students are able to relate learning material to everyday life so that students can better understand the material being studied and make it easier for students to solve a problem they face (Hasnawati, 2006: 56). The contextual approach has seven learning components that can help teachers connect the lessons learned with situations faced by students in real life, encouraging students to make connections between what they have learned and how it can be applied in their daily lives (Sulastri, 2016: 159).

2. METHOD

The method used in this research is quasi-experimental with the design chosen, namely the non-equivalent control group design (Sugiyono, 2016: 79). The illustration of the non-equivalent control group design research is outlined in Table 1.

Table 1. Non Equivalent Control Group Design

Group	Experimental Class	Control Class
Pretest	Exist	Exist
Threatment	Exist	None
Posttest	Exist	Exist

In the Non-equivalent Control Group Design research design, the experimental class and the control class were given different treatments. The difference in treatment is in the learning model used. The experimental class was given learning using the group resume model with a contextual approach, while the control class used a conventional learning model, namely expository. Both sample classes will be given a test before (pretest) and after learning (posttest). The instruments for the pretest and posttest are identical. The test instrument used is a mathematical problem solving ability test instrument which is arranged based on its indicators.

The population in this study were all students of grade VIII at a school in Cianjur for the 2022/2023 academic year, which consisted of ten classes divided into 5 male classes and 5 female classes taught by four different mathematics teachers. The sample selection was carried out using Purposive Sampling technique. Sugiyono (2016: 85) explains that the Purposive Sampling technique is a sampling technique based on certain considerations. The considerations made in determining the sample in this study were based on suggestions from the previous mathematics teacher and the two classes selected were taught by the same mathematics teacher and had homogeneous abilities in terms of the average results of the previous exam scores and had relatively the same number of students. The sample that will be determined to be the experimental class is class VIII G and the class that will be determined as the control class is VIII H.

The research instruments used include test and non-test instruments. The test instrument in this study was a test of students' mathematical problem solving abilities consisting of pretest and posttest with the same form of descriptive and identical questions. Meanwhile, the non-test instruments used in this study were observation sheets and student attitude questionnaire sheets. The observation sheet aims to determine teacher and student activity during learning takes place, while the student attitude questionnaire sheet aims to determine student responses to the implementation of group resume learning with a contextual approach.

To determine the magnitude of the influence of applying the group resume learning model with a contextual approach to students' mathematical problem solving abilities using the Cohen's effect size formula, the interpretation can be seen (Nopriana, 2015: 89) in Table 2.

Table 2. Interpretation *Effect Size*

Interpretation	D	Percentage (%)
High	2,0	97,7
	1,9	97,1
	1,8	96,4
	1,7	95,5
	1,6	94,5
	1,5	93,3
	1,4	91,9
	1,3	90
	1,2	88
	1,1	86

Interpretation	D	Percentage (%)
	1	84
	0,9	82
	0,8	79
Medium	0,7	76
	0,6	73
	0,5	69
Small	0,4	66
	0,3	62
Very Small	0,2	58
	0,1	54
	0,0	50

3. RESULT AND DISCUSSION

A. Implementation of the Group Resume Learning Process with a Contextual Approach

The data obtained to determine the implementation of the group resume learning process with a contextual approach comes from observation sheets of teacher and student activities. The observation sheets for teacher and student activities were filled out by observers who were math teachers in the class used for the research class. The recapitulation of the results of the teacher activity observation sheet at each meeting is shown in Table 3.

Table 3. Recapitulation of the Implementation of Teacher Activities at Each Meeting

Meeting	Observation Result					Total	Max Score	Percentage	Description
	1	2	3	4	5				
First	0	0	3	7	10	87	100	87%	Very Good
Second	0	0	0	7	13	93	100	93%	Very Good
Third	0	0	0	5	15	95	100	95%	Very Good
Average						**91,6667**	**100**	**91,67%**	**Very Good**

Based on Table 3, it can be seen that the achievement of teacher activities at each meeting increases. The percentage of achievement at the first meeting reached 87% in the very good category with several notes written by the observer. At this first meeting the observer gave notes in the form of time arrangements that needed more attention. The learning process went well but was not conducive because several groups wanted to ask the teacher for help together, thus making the class a little noisy. This makes it a little difficult for the teacher to manage class conditions and time, resulting in an unfavorable result at the stage where the teacher does not have time to confirm the presentation of the group representatives presenting.

At the second meeting there was a significant increase of 6% to 93% in the very good category. At the second meeting the observer did not provide any notes on the implementation of the learning process. The class situation was more conducive and the timing was better so that the teacher did not experience the hassles of the first meeting. Students have adapted to the learning model used so that there are only 1-2 groups that still need direct guidance from the teacher. Because the timing is better, the teacher can provide detailed confirmation to the group representatives presenting the results of the group resumes and working on the evaluation sheet.
In the third meeting, the increase in the implementation of teacher activities obtained an achievement of 95% in the very good category, but the increase was not very significant. At the third meeting the implementation of learning is getting better. Students are getting used to the learning model used so that group work is getting better too. The enthusiasm of students to present the results

of their group resumes is also getting higher. The observer did not provide any comments on the learning process because it was felt that it was more in accordance with the lesson plans that had been designed and the implementation of the learning process was getting better from each meeting.

The following is a recapitulation of the implementation of student activities during the learning process using the group resume learning model with a contextual approach presented in Table 4.

Tabel 4. Recapitulation of the Implementation of Student Activities at Each Meeting

Meeting	Observation Result					Total	Max Score	Percentage	Description
	1	2	3	4	5				
First	0	0	3	10	4	69	85	81%	Very Good
Second	0	0	0	8	9	77	85	91%	Very Good
Third	0	0	0	5	12	80	85	94%	Very Good
Average						**75,33**	**85**	**88,63%**	**Very Good**

The achievement of the implementation of the first meeting obtained a percentage of 81% and was in the very good category and obtained notes written by the observer. At this first meeting, the observer gave notes in the form of responses to students who were still engrossed in their own activities without paying attention to other friends who were presenting in front of the class. This is because some groups have not completed their group resumes which should be completed before other group representatives present in the future. In addition, there were several groups in working on their group resumes that still relied on one person and the other members only paid attention without asking their friends to explain. This is due to adjustments that require a lot of time to use learning models that are not used to being used.

At the second meeting there was a significant increase, seeing from the addition of a percentage of 10% to 91% with the acquisition of a very good category. These results were obtained from improving the notes previously written by the observer on the student observation sheet at the first meeting. At this second meeting the group resume process went well, group cooperation was increasingly visible even though there were still groups that had to be guided directly by the teacher, and every time there was a representative from another group presenting the results of their resumes the other groups paid close attention. At this stage of reflection, not a few students did not have the courage to come forward and were still shy, so they chose to remain silent while paying attention to other groups presenting in front of the class.

In the third meeting, the increase in the implementation of teacher activities obtained an achievement of 94% in the very good category. In this third meeting, the learning was getting better and the students' responses were getting better than before, the enthusiasm of the students to go to the front of the class was increasing. Group cooperation is increasingly being created and helping each other in their group members who are still experiencing difficulties. Seeing the improvement in the learning process, observers only provide input so that the class atmosphere is kept alive and students are always enthusiastic in filling out the LKPD and evaluation sheets that have been given in groups.

It can be concluded from the results of the analysis above that overall the implementation of teacher and student activities using the group resume learning model with a contextual approach achieved excellent success. The implementation of the teacher's activities as a researcher is categorized as very good with an average percentage of all meetings of 91.67%. The teacher's activity is categorized as very good at each meeting because of the observer's evaluation of the learning process at each meeting so that the teacher can improve the teacher's activities to be better according to the stages

contained in the observation sheet and lesson plans. In addition, the nature of the teacher is more relaxed in learning so as to make students participate in relaxing while learning, the teacher is able to master the class situation so that learning can be more conducive and the timer in learning is more regular and on time.
The implementation of student activities obtained an average percentage of 88.63% in the very good category. The excellent category for student activity was obtained from the evaluation written by the observer on the student observation sheet. In addition, the excellent category of student activity can be seen from the activity at each meeting, students are able to adjust to circumstances and get used to learning using the group resume learning model with a contextual approach, group cooperation is increasing, a sense of responsibility among group mates is increasingly being created, almost the entire group is able to complete the resume material well, and the enthusiasm of students to present the results of group resumes and work on evaluation sheets is getting higher.

This is supported by the opinion of Guspika & Alzaber (2020: 22) which states that the use of the group resume learning model causes improvements in the learning process. In addition, the opinion of Fazrien (2020: 113) suggests that the group resume type cooperative learning model increases student motivation and activity in the learning process.

B. Improvement of Mathematical Problem Solving Ability Between Students who Get Conventional Learning compared to Students who Get Group Resume Learning with a Contextual Approach

The data obtained to determine the difference in increase between the experimental class and the control class can be seen from the results of the pretest and posttest of the two classes. The following is a recapitulation of pretest and posttest data obtained by the two research classes in more detail presented in the diagram in Figure 1.

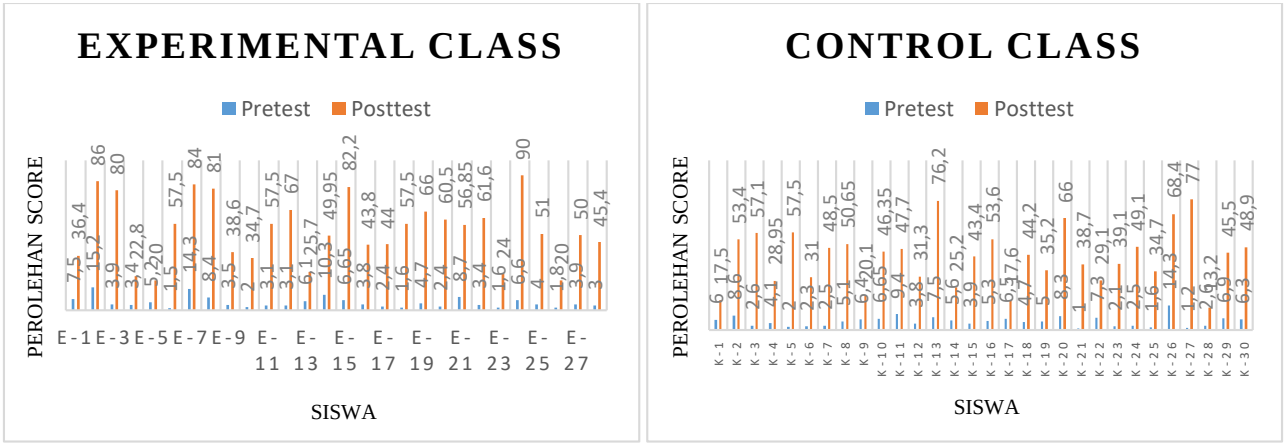

Figure 1. Diagram of Increasing Mathematical Problem Solving Ability of Experiment Class and Control Class Students

Figure 1 (left) is a recapitulation of the pretest and posttest score results from the experimental class with a total of 28 students. Figure 1 (right) is a recapitulation of the pretest and posttest score results from the control class with a total of 30 students. The acquisition of pretest results is indicated by the blue color on the bar chart while the orange color indicates the acquisition of post-test results.

Differences in improving students' mathematical problem solving skills between classes using the group resume learning model with a contextual approach and classes using conventional learning models, namely expository learning, can be determined by calculating the pretest and posttest score

data processed using the normalized N-Gain formula. To see the N-Gain data statistics presented in Table 5.

Table 5. Statistical Data N-Gain Students' Mathematical Problem Solving Ability

	N	Minimum	Maximum	Mean	Standard Deviation	*N-Gain Criterion*
Group Resume with a Contextual Approach	28	0,17	1	0,57	0,059769	Moderate
Conventional (Expository)	30	0,12	0,85	0,45	0,038021	Moderate

To determine the differences in the increase in students' mathematical problem-solving skills between students who use the group resume learning model with a contextual approach is better than students who use conventional learning, namely expository learning, can be calculated by carrying out a comparative test of two averages or known as the t-independent test. To carry out a comparative test, there are several assumptions that must be met, including the N-Gain data must be normally distributed and the variance of the N-Gain data must be homogeneous (K. E. Lestari & Yudhanegara, 2018). In order to fulfill these two assumptions, a normality test and a variance homogeneity test were carried out with the data used, namely the N-Gain score data.

The normality test chosen in this study is the Kolmogorov Smirnov test. The normality test uses the SPSS version 29 calculation. The guideline for the test criteria is a significance value > 0.05, then the data is normally distributed, if the significance value is ≤ 0.05, then the data is not normally distributed. Presentation of data normality test results using SPSS 29 software can be seen in Table 6.

Table 6. Data Normality Test Results with SPSS 29

Tests Of Normality

		Kolmogorov-Smirnov			Shapiro-Wilk		
N-Gain Resultf	Research Class	Statistic	df	Sig.	Statistic	df	Sig.
	Experimental	.112	28	.200*	.956	28	.281
	Control	.086	30	.200*	.972	30	.608

In Table 6 it can be seen that the value of Sig. in the experimental class (0.200) > 0.05 means that the N-Gain data for the experimental class are normally distributed. For the value of Sig. the control class obtains (0.200) > 0.05, then the N-Gain data in the control class is also normally distributed. From the two calculations of the N-Gain data it can be concluded that H_0 is accepted, meaning that the N-Gain data from the experimental class is the group resume learning model with a contextual approach and the control class is using the conventional learning model, namely the expository normal distribution.

Homogeneity testing of variance was carried out using Fisher's test assisted by SPSS 29 software. This is guided by the homogeneity test criteria in SPSS 29 software, namely, if the significance value is > 0.05, then the variance is homogeneous, if the significance value is ≤ 0.05, then the data variance is not homogeneous.

Table 7. Variance Homogeneity Test Results with SPSS 29

Test of Homogenety of Variance

	Levene Statistic	df1	df2	Sig.
Based on Mean	2.036	1	56	.159

N-Gain Results	Based on Median	2.121	1	56	.151
	Based on Median and with adjusted df	2.121	1	55.333	.151
	Based on trimmed mean	2.000	1	56	.163

The results of the SPSS 29 software-assisted homogeneity of variance testing are presented in Table 7. Based on the results of testing the normality of the data and the homogeneity of the variance of the N-Gain data that has been carried out, it can be concluded that the two data from the research class have normally distributed data and have a homogeneous variance. Because both assumptions were met, then an independent t-test was carried out to determine the comparison of the increase in students' mathematical problem solving abilities between the control class and the experimental class.

The calculation results of the t-independent test using SPSS 29 software, the calculation results of which are presented in Table 8. The decision-making criteria are, if the Significance value <0.05, then H_0 is rejected and if the Significance value≥0.05 then H_0 accepted.

Table 8. N-Gain Data Independent T-Test Results SPSS 29

Independent Samples Test

		t	df	Significance	
				One-Sided p	Two-Sided p
N-Gain Results	Equal Variances Assumed	2.135	56	0.019	0.037
	Equal Variances Not Assumed	2.118	51.633	0.019	0.039

Based on the results of comparative test calculations using SPSS 29 software in Table 7, the Sig. (Two-Sided p) of 0.037 <0.05 then H_0 is rejected, meaning that the mean N-Gain score of students' mathematical problem solving abilities using the group resume learning model with a contextual approach is significantly higher than the average N-Gain score of students using the model conventional learning (expository).

This is in line with research conducted by Guspika & Alzaber (2020: 23) which suggests that the application of the group resume strategy in cooperative learning can improve learning outcomes and improve the learning process. In addition, it is also supported by the opinion put forward by Mulyadin (2018: 21) that the influence of the group resume learning model can improve mastery of learning material and improve student learning outcomes.

C. The Great Effect of Applying the Group Resume Learning Model with a Contextual Approach on Students' Mathematical Problem Solving Ability

The measurement of the effect of applying the group resume learning model with a contextual approach to students' mathematical problem solving abilities is calculated using Cohen's effect size formula (Cahyani et al., 2020: 365). The data taken to calculate the influence is from the results of the students' pretest and posttest which have been processed into N-Gain data for the two research classes.

Based on the results of the calculation analysis using the Cohen's effect size formula, it was obtained that the influence of the application of the resume group learning model with a contextual approach to students' mathematical problem solving abilities was 0.561035 ≈0.6. Therefore, it can be concluded that the effect of applying the group resume learning model with a contextual approach to students' mathematical problem solving abilities has a moderate effect with a percentage of 73%.

The causes of the large influence obtained were in the moderate category, including because most students enjoyed learning with the group resume model with a contextual approach, increased enthusiasm for learning in groups, students who were previously quiet and did not dare to argue thanks to group learning became bold enough to express their opinions. This also fosters good collaboration skills between students and fosters concern among friends because if there are friends who do not understand the material, they are given direct understanding by their group mates. In addition, students were enthusiastic in presenting group resumes and evaluation sheets that had been worked on in their groups, students who usually only relied on friends began to try to be actively involved in learning.

This is in line with research conducted by Hadi & Umi Kasum (2015: 65) which states that with cooperative learning students have freedom of expression, freedom of opinion to teachers and friends, doing exercises to be able to socialize in their respective groups so as to foster a spirit of learning that is tall. Z. Hasanah (2021: 11) also states that cooperative learning can foster interaction between students to share their knowledge in solving a problem given by the teacher so that all students will be able to understand various concepts of learning material easily.

However, besides the positive causes for the effect of the group resume learning model with a contextual approach there are still negative causes, including some students who are not used to learning by using group learning, students feel less enthusiastic when studying in groups, there are still students who are indifferent to learning, student responsibility towards the group is still low. In addition, there are also students who still don't understand the learning material but don't have the courage and are embarrassed to ask friends or the teacher so that it causes them to be unable to solve the problems given, students who are lazy to learn rely on their proficient group mates. Another factor that causes a large influence on the group resume learning model with a medium category contextual approach is limited time in learning.

This is supported by the statement of Astriyani et al. (2011: 101) which states that the possibility of discrepancies in the results of research using this cooperative learning model is because students do not participate actively and are not enthusiastic about participating in teaching and learning activities so that students' understanding of the material presented is in the less category.

D. Students' Attitudes towards Group Resume Learning with a Contextual Approach

Data from the student attitude questionnaire that has been tested on the average student attitude. The student attitude questionnaire was composed of 26 questions which were divided into positive and negative types of questions and each numbered 13 statements. The 26 statements are divided into three aspects of student attitudes that are measured. The first aspect of student attitudes is analyzed regarding attitudes towards learning mathematics. The results of the analysis on this first attitude aspect are listed in Table 9.

Table 9. Distribution of Students' Attitudes Towards Learning Mathematics

Attitude Scale	Indicator	Statement		Response				Neutral Score		Student Attitude Score	
		No	Type	SA	A	DA	SDA	Item	Average	Items	Average
Towards Mathematics Learning	Shows interest in mathematics	1	Positive	4	19	3	2	2,5	2,5	2,9	3
			Score	4	3	2	1				
		2	Positive	13	14	0	1	2,5		3,4	
			Score	4	3	2	1				
		3	Negative	1	7	20	0	2,5		2,7	
			Score	1	2	3	4				
		4	Negative	1	13	13	1	2,5		2,5	
			Score	1	2	3	4				
		5	Positive	10	15	3	0				

Attitude Scale	Indicator	Statement		Response				Neutral Score		Student Attitude Score	
		No	Type	SA	A	DA	SDA	Item	Average	Items	Average
	Demonstrate seriousness in following the lesson	6	Score	4	3	2	1	2,5		3,3	
			Negative	2	11	11	4				
			Score	1	2	3	4	2,5		2,6	
	Benefits of studying mathematics	7	Positive	9	17	1	1	2,5		3,2	
			Score	4	3	2	1				
		8	Negative	1	5	14	8	2,5		3	
			Score	1	2	3	4				

Based on Table 9, it can be seen that the average result of students' attitudes towards the aspect of attitudes toward learning mathematics obtains a value of 3. The average size of a neutral score is 2.5 (Juariah, 2012) so that 3> 2.5 means that the average attitude of students towards learning mathematics has an attitude positive. To find out the percentage of positive and negative attitudes towards learning mathematics can be seen in Table 10.

Table 10. Percentage of Students' Attitudes Towards Learning Mathematics

Attitude Scale	Statement		Response				Total Score		Percentage	
	No	Type	SA	A	DA	SDA	Attitude Positive	Attitude Negative	Attitude Positive	Attitude Negative
Towards learning mathematics	1	Positive	4	19	3	2	23	5	82%	18%
	2	Positive	13	14	0	1	27	1	96%	4%
	3	Negative	1	7	20	0	20	8	71%	29%
	4	Negative	1	13	13	1	14	14	50%	50%
	5	Positive	10	15	3	0	25	3	89%	11%
	6	Negative	2	11	11	4	15	13	54%	46%
	7	Positive	9	17	1	1	26	2	93%	7%
	8	Negative	1	5	14	8	22	6	79%	21%
	Average								**77%**	**23%**

Indicators of student interest in mathematics are stated in statements number 1,2,3 and 4. In the first statement, most students (82%) gave a positive attitude. In statement number 2 most students give a positive attitude (96%) towards the benefits of mathematics for the future. Statement number 3 most students give a positive attitude (71%). In statement number 4 students gave the same attitude with the percentage of positive and negative attitudes respectively (50%). Half of the students think that mathematics contains a lot of formulas and is difficult to understand, but the other half of the students don't think so.

The next indicator regarding the seriousness of students in participating in the learning process is contained in statements number 5 and 6. From Table 10, most students gave a positive attitude (89%) to statement number 5 while for statement number 6 only some students gave a positive attitude (54%). The final indicator for assessing students' attitudes towards learning mathematics is regarding the benefits of learning mathematics which is arranged in statements number 7 and 8 with the attitude given by students, namely that most students give a positive attitude (93% and 79%) towards the benefits of learning mathematics.

The next analysis concerns aspects of student attitudes towards the group resume learning model with a contextual approach. To see the details of the results of the answers to students' attitudes regarding these aspects can be seen in Table 10.

Table 11. Distribution of Students' Attitudes towards Mathematics Group Resume Learning with a Contextual Approach

Attitude Scale	Indicator	Statement		Response				Neutral Score		Student Attitude Score	
		No	Type	SA	A	TS	STS	Item	Average	Items	Average
Towards mathematics resume group learning with a contextual approach	Demonstrates liking and interest in the process of group resume mathematics learning with a contextual approach	9	Positive	9	14	5	0	2,5	2,5	3,1	3
			Score	4	3	2	1				
		10	Positive	8	17	3	0	2,5		3,2	
			Score	4	3	2	1				
		11	Positive	8	16	4	0	2,5		3,1	
			Score	4	3	2	1				
		12	Negative	0	5	18	5	2,5		3	
			Score	1	2	3	4				
		13	Negative	1	5	20	2	2,5		2,8	
			Score	1	2	3	4				
	Demonstrate the expected benefits of students in group learning resume mathematics with a contextual approach	14	Positive	5	19	4	0	2,5		3	
			Score	4	3	2	1				
		15	Positive	4	22	2	0	2,5		3,1	
			Score	4	3	2	1				
		16	Negative	1	5	18	4	2,5		2,9	
			Score	1	2	3	4				
		17	Negative	1	4	18	5	2,5		3	
			Score	1	2	3	4				
		18	Negative	0	11	15	2	2,5		2,7	
			Score	1	2	3	4				

Based on Table 11, it can be seen that the results of the average student attitude in the attitude aspect towards mathematics resume group learning with a contextual approach obtained a value of 3. The average score size is neutral, namely 2.5 so that 3> 2.5 means that the average student attitude towards learning mathematics acquires a positive attitude. To find out the percentage of positive and negative attitudes towards mathematics resume group learning with a contextual approach can be seen in Table 12.

Table 12. Percentage of Students' Attitudes Towards Mathematics Group Resume Learning with a Contextual Approach

Attitude Scale	Statement		Response				Total Score		Persentase	
	No	Type	SA	A	DA	SDA	Attitude Positive	Attitude Negative	Attitude Positive	Attitude Negative
Towards mathematics resume group learning with a contextual approach	9	Positive	9	14	5	0	23	5	82%	18%
	10	Positive	8	17	3	0	25	3	89%	11%
	11	Positive	8	16	4	0	24	4	86%	14%
	12	Negative	0	5	18	5	23	5	82%	18%
	13	Negative	1	5	20	2	22	6	79%	21%
	14	Positive	5	19	4	0	24	4	86%	14%
	15	Positive	4	22	2	0	26	2	93%	7%
	16	Negative	1	5	18	4	22	6	79%	21%
	17	Negative	1	4	18	5	23	5	82%	18%
	18	Negative	0	11	15	2	17	11	61%	39%
	Average								**82%**	**18%**

Indicators of liking and interest in the mathematics resume group learning process with a contextual approach are shown in statements numbers 9 to 13 in Table 11. In statements numbers 9 to 13 most students give a positive attitude of 82%, 89%, 86%, 82% and 79 %. This means that most students give a positive attitude towards indicators of likes and interests using the mathematics resume group learning model with a contextual approach to indicators.

The next indicator is showing the expected benefits of students in learning mathematics resume groups with a contextual approach with statements arranged in numbers 14 to 18. Most students gave a positive attitude to statements number 14 to 17 with a large percentage of 86%, 93%, 79% and 82%. Statement number 18 most of the students gave a positive attitude (61%).

The next aspect that will be analyzed is students' attitudes towards mathematical problem-solving abilities. The results of student answers can be seen in Table 13 which has been presented.

Table 13. Distribution of Students' Attitudes on Mathematical Problem Solving Ability Questions

Attitude Scale	Indicator	Statement		Response				Neutral Score		Student Attitude Score	
		No	Type	SA	A	TS	STS	Item	Average	Items	Average
Towards the problems of mathematical problem solving ability given	The benefits of questions about mathematical problem solving abilities	19	Positive	5	20	3	0	2,5	2,5	3,1	3
			Score	4	3	2	1				
		20	Positive	9	17	2	0	2,5		3,3	
			Score	4	3	2	1				
		21	Negative	0	3	18	7	2,5		3,1	
			Score	1	2	3	4				
		22	Negative	1	8	16	3	2,5		2,8	
			Score	1	2	3	4				
	Student responses to questions about mathematical problem solving abilities	23	Positive	5	14	9	0	2,5		2,9	
			Score	4	3	2	1				
		24	Positive	5	14	8	1	2,5		2,8	
			Score	4	3	2	1				
		25	Negative	1	9	16	2	2,5		2,7	
			Score	1	2	3	4				
		26	Negative	1	3	15	9	2,5		3,1	
			Score	1	2	3	4				

Based on Table 13, it can be seen that the results of the average student attitude in the attitude aspect towards mathematical problem solving ability questions obtained an average of 3. The mean score size is neutral, namely 2.5 so that 3> 2.5 means that the average student attitude towards problem solving ability questions Mathematical problems have a positive attitude. To find out the percentage of positive and negative attitudes towards the questions given, it can be seen in Table 14.

Table 14. Percentage of Student Attitudes Towards Mathematical Problem Solving Ability Questions

Attitude Scale	Statement		Response				Total Score		Persentase	
	No	Type	SA	A	DA	SDA	Attitude Positive	Attitude Negative	Attitude Positive	Attitude Negative
Towards the problems of mathematical problem solving ability given	19	Positive	5	20	3	0	25	3	89%	11%
	20	Positive	9	17	2	0	26	2	93%	7%
	21	Negative	0	3	18	7	25	3	89%	11%
	22	Negative	1	8	16	3	19	9	68%	32%
	23	Positive	5	14	9	0	19	9	68%	32%
	24	Positive	5	14	8	1	19	9	68%	32%
	25	Negative	1	9	16	2	18	10	64%	36%
	26	Negative	1	3	15	9	24	4	86%	14%

Attitude Scale	Statement		Response				Total Score		Persentase	
	No	Type	SA	A	DA	SDA	Attitude Positive	Attitude Negative	Attitude Positive	Attitude Negative
	Rata-Rata								78%	22%

Indicators regarding the benefits of mathematical problem solving ability questions are contained in Table 14 with statement numbers, namely numbers 19 to 22. In statements numbers 19 to 21 most students gave a positive attitude towards questions of mathematical problem solving ability with an attitude percentage of 89%, 93 % and 89%. In statement number 22 most students (68%) gave a positive attitude, but the rest, namely almost half of the students gave a negative attitude (32%), students felt that the questions given encouraged students to look at their friends' work.

The next indicator is regarding students' responses to questions about mathematical problem solving ability in statements number 23 to 26. In statements 23 and 24 most of the students gave a positive attitude (68%). In statement number 25 most of the students gave a positive attitude (64%) but almost half of the students gave a negative attitude (36%) because they thought that the questions being tested were very difficult. In the last statement or number 26 most students gave a positive attitude (86%) while a small number of students gave a negative attitude (14%). For students who give a negative attitude, the questions being tested are not in accordance with the material taught by the teacher, but in reality students still do not understand the concept of the material being studied.

It can be concluded that the overall attitude of students towards learning mathematics using the group resume learning model with a contextual approach shows a positive attitude for all aspects studied including aspects of students' attitudes towards learning mathematics, towards group learning resume mathematics with a contextual approach and questions of mathematical problem solving ability student.

From the results of the conclusions above, the first analysis regarding aspects of students' attitudes towards learning mathematics obtained an average percentage of 77% meaning that most students gave a positive attitude, while the remaining 23% meant a small number of students gave a negative attitude. The percentage of students' attitudes towards this aspect is greater in positive attitudes because most students show their interest in learning mathematics such as liking mathematics, feeling that mathematics is fun and feeling interested in learning mathematics. In addition, students are also serious in learning mathematics and enthusiastic when learning takes place. Students can also feel the benefits of mathematics for their daily lives and for other exact sciences. For a small number of students who give a negative attitude they do not show interest in learning mathematics such as feeling that mathematics is a hassle, do not like mathematics, every mathematics lesson they are reluctant to follow the learning properly and think that mathematics is not useful for their lives. The positive attitude of students towards learning mathematics is supported by the opinion of Hasanah & Purwasih (2022: 155) which states that students feel happy and motivated in learning mathematics. According to (Kristia et al., 2021: 39) students who have a positive attitude towards learning mathematics are able to achieve learning achievements and build high curiosity.

The results of the subsequent analysis regarding aspects of students' attitudes towards mathematics resume group learning with a contextual approach obtained an average percentage of 82%, which means that most students give a positive attitude, while a small number of students give a negative attitude with a percentage of 18%. The percentage of attitudes obtained is greater towards students' positive attitudes, this is because most students show an interest in group resume mathematics learning with a contextual approach as they like group resume mathematics learning with a contextual approach, making it easier for students to understand the material being studied because the learning is student-centered and students who are embarrassed to ask the teacher are more free to ask questions and discuss with their friends, students who like to discuss with friends feel more enthusiastic in group learning resume mathematics with a contextual approach and students'

understanding of the material studied is more in-depth because of the results of what they find themselves so can make students remember longer the material they are learning and gain additional understanding from teacher confirmation during the learning process. A small number of students gave negative attitudes, including students who did not like group learning, students felt that only smart students worked, it was difficult to understand the material being studied because they had to find their own understanding, even though the teacher usually explained it in detail. The positive attitude of students in group resume mathematics learning with a contextual approach is in accordance with Sugesti's(2016: 13) statement which states that giving questions in the learning process using the group resume method can make students challenged and excited to establish discussions among friends.

The results of the last analysis are on aspects of students' attitudes towards the questions given to students' mathematical problem-solving abilities. In this aspect, the percentage gain for a positive attitude reached 78%, meaning that most students gave a positive attitude, while a small number of students gave a negative attitude with a percentage gain of 12%. The attitude of students towards this last aspect is dominated by a positive attitude because most students feel that the questions given make them enthusiastic in solving them because the questions presented are in accordance with what has been learned, the questions presented are also questions of description that are found in everyday life, although The questions presented are difficult but students feel challenged to solve them. The negative attitude given by a small number of students because they felt that the questions given were very difficult and not in accordance with what was being taught. It is possible that a small proportion of these students have not mastered the concept of the material given even though the questions given are questions that are in accordance with what is being taught. The positive attitude of students in this aspect is in accordance with research conducted by Lutfianto & Sari (2017: 116) stating that students show a positive attitude towards the math problems given even though they are classified as difficult but students are motivated and eager to solve these problems. The negative attitude towards math problems given is in accordance with the research of Utari et al., (2019: 535) which states that students' difficulties in solving math problems are often experienced in story problems or contextual problems because they are unable to understand the intent of the problems presented and confusion when determining concepts and arithmetic operations that will be used in solving problems.

4. CONCLUSION

Based on the results and discussion of research regarding the application of the group resume learning model with a contextual approach to students' mathematical problem solving abilities conducted in class VIII one of the schools in Cianjur, in general, several conclusions can be drawn. The implementation of the learning process of students who received learning using the group resume learning model with a contextual approach was in the very good category, as well as the teacher's activities during group resume learning with a contextual approach which was in the very good category. The increase in the mathematical problem solving ability of students who use the group resume learning model with a contextual approach is significantly better than students who use conventional learning, namely expository learning. This can be seen based on the average N-Gain score on the test of students' mathematical problem solving abilities in the two research classes, so that it can be concluded that the application of the group resume learning model with a contextual approach can improve students' mathematical problem solving abilities. The influence of the application of the group resume learning model with a contextual approach to students' mathematical problem solving abilities calculated using Cohen's effect size is in the medium category. Then, the generally obtained student attitudes show that most students give a positive attitude towards learning mathematics using the group resume learning model with a contextual approach, although there are still some students who feel tense while studying, do not feel there is a difference between the group resume learning model with a contextual approach and the other

learning model and find it difficult to solve questions about students' mathematical problem solving abilities.

References

Arwinsyah, D., Karnasih, I., & Rajagukguk, W. (2019). Perbedaan peningkatan kemampuan pemecahan masalah dan motivasi belajar matematika pada pembelajaran PBL berbantuan geogebra dengan tanpa berbantuan geogebra. *PARADIKMA Jurnal Pendidikan Matematika*, *12*, 83–92.

Astriyani, A., Roswitha, M., & Riyadi. (2011). Efektivitas model pembelajaran kooperatif tipe concept mapping group resume (CMGR) dan concept mapping (CM) ditinjau dari. *2010*, 92–102.

Cahyani, N. putu M., Dantes, N., & Rati, N. W. (2020). Efektifitas model pembelajaran kooperatif tipe TPS terhadap hasil belajar IPS. *Jurnal Penelitian Dan Pengembangan Pendidikan*, *4*(3), 362. https://doi.org/10.23887/jppp.v4i3.27410

Fazrien, J. (2020). Penerapan strategi belajar kooperatif tipe group resume pada siswa kelas XI SMAN 1 Balai Riam dalam peningkatan keterampilan menulis karya ilmiah. *Meretas: Jurnal Ilmu Pendidikan*, *7*(1). https://jurnal.upgriplk.ac.id/index.php/meretas/article/view/209

Ginanjar, A. Y. (2019). Pentingnya penguasaan konsep matematika dalam pemecahan masalah matematika di SD. *Jurnal Pendidikan UNIGA*, *13*(1), 121–129. www.jurnal.uniga.ac.id

Guspika, C. D., & Alzaber. (2020). Strategi group resume dalam kooperatif untuk meningkatkan hasil belajar matematika di kelas VII-3 SMP N 6 Siak Hulu. *Pendidikan Matematika*, *8*(3).

Hadi, S., & Umi Kasum, M. (2015). Pemahaman konsep matematika siswa SMP melalui penerapan model pembelajaran kooperatif tipe memeriksa berpasangan (pair checks). *EDU-MAT: Jurnal Pendidikan Matematika*, *3*(1), 59–66. https://doi.org/10.20527/edumat.v3i1.630

Hasanah, N., & Purwasih, R. (2022). Respon siswa terhadap pembelajaran matematika dengan kemampuan matematik habits of mind. *JPMI (Jurnal Pembelajaran Matematika Inovatif)*, *5*(1), 149–158. https://doi.org/10.22460/jpmi.v5i1.149-158

Hasanah, Z. (2021). Model pembelajaran kooperatif dalam menumbuhkan keaktifan belajar siswa. *Studi Kemahasiswaan*, *1*(1), 1–13.

Hasnawati. (2006). Pendekatan contextual teaching learning hubungan dengan evaluasi pembelajaran. *Jurnal Ekonomi & Pendidikan*, *3*, 53–62.

Juariah, D. (2012). Peningkatan kemampuan penalaran matematik siswa melalui pendekatan keterampilan proses matematika. *Pasundan Journal of Mathematics Education : Jurnal Pendidikan Matematika*, *Vol 2 No. 1*. https://doi.org/10.23969/pjme.v2i1.2460

Kresma, E. N. (2014). Perbandingan pembelajaran konvensional dan pembelajaran berbasis masalah terhadap titik jenuh siswa maupun hasil belajar siswa dalam pembelajaran matematika. *RespositoryWidyamandala*, *8*(33), 44.

Kristia, D., Habibi, M., Fidya, Y., & Putra, A. (2021). Analisis sikap dan konsep diri siswa terhadap matematika (studi survei pada siswa MTs Se-Kabupaten Kerinci). *Jurnal Pendidikan Matematika Raflesia*, *06*(03), 32–46.

Lestari, K. E., & Yudhanegara, M. R. (2018). Penelitian pendidikan matematika (Anna (ed.); 3rd ed.). *Refika Aditama*.

Lestari, P., & Rosdiana, R. (2018). Kemampuan pemecahan masalah matematis siswa melalui model pembelajaran learning cycle 7E dan problem based learning. *Mosharafa: Jurnal Pendidikan Matematika*, *7*(September), 425–432.

Lutfianto, M., & Sari, A. F. (2017). Respon siswa terhadap soal matematika mirip PISA dengan konteks berintegrasi nilai islam. *Jurnal Elemen*, *3*(2), 108–117. https://doi.org/10.29408/jel.v3i2.342

Maulyda, M. A. (2019). Paradigma pembelajaran matematika berbasis NCTM (Issue 16 Januari 2020).

Mulyadin, E. (2018). Pengaruh model pembelajaran kooperatif tipe GR (Group Resume) terhadap hasil belajar siswa kelas X pada pokok pembahasan nilai mutlak. *Jurnal Edukasi Matematika Dan Sains*, *6*(1), 19. https://doi.org/10.25273/jems.v6i1.5315

Nopriana, T. (2015). Disposisi matematis siswa melalui model pembelajaran geometri Van Hiele. *FIBONACCI Jurnal Pendidikan Matematika & Matematika*, *1*(2), 80–94.

Nufus, H., Prayitno, S., Baidowi, & Turmuzi. (2022). Analisis kesulitan siswa dalam menyelesaikan soal matematika materi perbandingan ditinjau dari tingkat kemampuan siswa kelas VII SMP Negeri 1 Maluk tahun pelajaran 2020/2021. *Griya Journal of Mathematics Education and Application*, *2*(1), 246–259. https://doi.org/10.29303/griya.v2i1.133

Sugesti, D. A. (2016). Peningkatan kemampuan kerjasama menggunakan metode group resume pada mata pelajaran PKN kelas V di SDN Jaranan. *Jurnal Teknologi Pendidikan*.

Sugiyono. (2016). Metode penelitian kuantitatif, kualitatid dan R&D. *Alfabeta*.

Sulastri, A. (2016). Penerapan pendekatan kontekstual dalam pembelajaran matematika untuk meningkatkan pemahaman konsep matematis siswa sekolah dasar. *Pedagogi: Jurnal Ilmu Pendidikan*, *13*(2), 113. https://doi.org/10.24036/pedagogi.v13i2.4288

Sumarmo, U. (2000). Pengembangan model pembelajaran matematika untuk meningkatkan kemampuan intelektual tingkat tinggi siswa sekolah dasar. *Laporan Penelitian FMIPA IKIP Bandung. Bandung: Tidak Diterbitkan.*

Umamah, N. N., Sunardi, & Sugiarti, T. (2013). Analisis soal ujian nasional (UN) matematika SMK tahun ajaran 2011/2012 berdasarkan Taksonomi Solo. *Pancaran*, *2*(1), 45.

Utari, D. R., Wardana, M. Y. S., & Damayani, A. T. (2019). Analisis kesulitas belajar matematika dalam menyelesaikan soal cerita. *Jurnal Ilmiah Sekolah Dasar*, *3*. https://doi.org/10.31943/mathline.v5i2.16243/mathline.v5i2.162