

The influence of the learning together learning model on Grade x students

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ABSTRACT

This study aims to determine the influence of the Learning Together (LT) learning model on the learning outcomes of grade X students at SMK N 2 Rambah. The research method carried out in this study is Quasi Experiment by looking for influences between X and Y. the population in this study is class X students of SMK Negeri 2 Rambah totaling 33 students with sampling techniques using saturated samples of all populations into samples. The method of data collection is carried out using tests. Test the validity of the test instrument using the product moment relationship technique The prerequisite test of analysis consists of a normality test and a homogeneity test. The results of the study provide that the Learning Together (LT) learning model has a very positive effect on the learning outcomes of students at SMK N 2 Rambah.

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INTRODUCTION

The development and changes that occur in the life of society, nation and state in Indonesia cannot be separated from global influences, the development of science and technology (IPTEK) and even art and culture. Continuous change must demand improvements in the national education system and in the field of employment. To face these challenges, highly qualified human resources are needed, who master science and technology, have noble ethics and have noble morals, it is necessary to improve the quality of national education. Indonesia and other countries in the 21st century have entered the era of industry 4.0 and society 5.0. 21st-century education focuses on several areas of expertise, namely creativity, critical thinking, communication, and collaboration (Nurhidayat, 2023).

One of the efforts to renew the world of education is to create a learning climate that activates students. Learning is the process of interaction between students and teachers and learning materials in the learning environment. This learning process exists throughout human life and can be applied anywhere and anytime. In terms of education, teachers teach so that students can learn and master

the content of subjects to achieve certain goals (intellectual aspects), and can influence changes in behavior (effective aspects) and skills (psychomotor aspects) of students. Teaching gives the impression that it is only a one-part job, that is, the teacher's job. There are two types of learning activities, namely physical activity and mental activity which are interrelated to support the learning process. In addition, learning activities are classified into two parts, namely active learning activities and passive learning activities. Active learning activity means that students are actively involved in the learning process. Passive learning activities indicate a teaching and learning system that focuses only on one direction or a teacher-centered learning system (Vhalery, 2019). This is because most schools are traditionally styled where the teacher is the center of attention and students only receive and listen. This causes students to become passive. As a result, students become lazy to study and become insecure. In fact, quality education is education that provides knowledge, educational values, and complements students' skills to be confident and proactive. The learning environment also involves interaction between teachers and students. Learning is an activity of a process to gain knowledge, improve skills, improve behavior, attitudes and strengthen personality (Anggriasari & Mardiana, 2020).

To improve student learning outcomes, teachers or educators follow different methods, strategies, and learning styles. The results of our monitoring at SMK Negeri 2 Rambah this year still have teachers who use learning-based learning methods to make students listen, pay attention and take notes. This makes students tired, so there is no rest, sleep and even lack of interest in them. The task of a teacher in conveying subject matter to students is not easy. Teachers must have various abilities that can support their duties so that educational goals can be achieved. One of the abilities that must be possessed by a teacher in improving his professional competence is the ability to develop learning models (Maimunah, 2021). One strategy that teachers can use to arouse and revive students' interest in learning is group learning or learning together. Learning outcomes are abilities possessed by students as a result of learning actions and can be observed through student performance (Wintari.N.N et al., 2019). The application of innovative and creative learning models will have a positive impact on student interest, motivation, and learning outcomes. The learning process will take place interesting and not boring so that students are more motivated in learning. The application of this learning model will also make students more active and their concentration more focused on the lesson. With the application of innovative and creative learning, it is hoped that it will also be able to overcome problems that arise due to poor learning processes (Khairun Nisak, Thamrin Kamaruddin, 2021). Meanwhile, learning together is a learning process by forming several groups of students in which one group consists of students with various characters and types in the class. This method includes the cooperative method, in which students are in heterogeneous groups consisting of four or five students to complete a task given by the teacher (Arahap & Makhromi, 2021).

There are many methods of teaching and learning, of them, group learning is important because group learning has been a subject of interest to many researchers and at the secondary school level, there is a substantial body of literature supporting the idea that students can attain higher (Hobri et al., 2018). One way to streamline the teaching and learning process is to use cooperative learning. Cooperative learning is an instruction using small groups of students who work together to maximize student learning both in groups and individually. (Hayat, 2017) states that cooperative learning is an educational process through speaking, listening, writing. In this process, students are asked to use skills to cooperatively with others. One of the efforts to improve student achievement is to use cooperative learning type Learning Together (*LT*).

Learning Together is a cooperative learning model that emphasizes learning model with a group discussion to find and apply the concepts in solving the problems (Ulfa et al., 2017). This *cooperative* learning model of learning *together* type can be used as an alternative so that learning takes place pleasantly (Subaidi et al., 2018). Because in the *cooperative* learning model type learning together, students can work together with each other in each group. So that students are

not bored and find it difficult because they can exchange ideas with their group members. With the cooperative learning model type Learning Together, the ability to think critically, creatively and socially possessed by students is increasing. Some research results show that Learning Together is good to apply. Learning Together (LT) is a cooperative learning model that uses heterogeneous learning and face-to-face interaction, as well as individual and small group responsibilities for learning success. Learning achievement is an assessment of learning activities that have been carried out and is a form of final formulation given by the teacher to see to what extent the student's abilities are expressed in the form of symbols, numbers, letters and sentences that reflect the results that have been achieved. Learning achievement is the result that has been achieved (from that which has been implemented and done). Learning Together is a learning model that is expected to increase student motivation in participating in learning so that the results achieved are also maximum (Latifah Dini Istiani, 2016). With this method, it can make students more active and critical thinking patterns in determining learning outcomes in conducting group methods. Learning Together or studying together can be interpreted as student learning activities together to help each other in solving problems or problems, in this case related to learning in class (Sari et al., 2014).

developed the Learning Together intervention which aimed to modify the school environment by using all three of these approaches to reduce bullying and aggression, and promote student health and wellbeing across various domains (Bonell et al., 2018). Cooperative learning is an example of cooperative learning using different learning groups that emphasize positive interactions (a sense of community), face-to-face interactions that support each other, help and respect, and human relationships with each other. less responsibility for learning success. With this group learning, teachers can form study groups for their students in an effort to improve student learning outcomes. The cooperative learning together model can be applied repeatedly on condition that students must have the same opportunity in their groups, so that each student can make the same contribution maximally to the group. There are several factors that influence students in groups, namely: the intelligence level of group members, the relationship between group members, the experience of group members regarding the problems they face, the motivation of group members in completing tasks, the size of group members, the ability of group leaders to lead their members, and skills and active group members in solving problems (Nilakusmawati et al., 2021).

Learning Together (LT) is a collaborative learning process using different learning groups that emphasize positive relationships (a sense of community), face-to-face interactions that support each other, mutual help, mutual respect, and each person's group responsibility. . . The LT (Learning Together) model is that students are grouped into teams of four to five people per team and heterogeneous abilities. Students work as a group to complete a group product, ideas, and help each other with answers, and ask for help from other friends before asking the teacher, and the teacher rewards the group based on group performance.

Small groups in Learning Together (LT) make it easy to distribute activities to each student during group work, so that all students can participate in group discussions. By applying learning methods, cooperative learning has obvious advantages and disadvantages, the advantages are: 1. provide opportunities for students to use their skills in asking and discussing problems, 2. to provide opportunities for students to research more complex cases, 3. to develop leadership skills and teach communication skills, 4. help students focus as individuals on their learning needs, 5. Students are more involved in teaching, 6. Provide opportunities for students to develop respect and dignity for others. But the disadvantages include: 1. learning together only involves talented students, 2. The success of this process depends on the ability of students to support the group, 3. It is very difficult to form a group that will work together individually, 4. Fostering team spirit.

RESEARCH METHODOLOGY

In this study using a type of experimental research, namely Quasi experiment *design* (pseudo-experiment). *Quasi Experiment Design* has a control group, but cannot fully function to control outside variables that affect the implementation of experiments (Sugiyono, 2018).

This study used the type of research design *One Group pretest and posttest*. The research design is as follows:

$$\mathbf{O1\ X\ O2} \quad (1)$$

Source, (Sugiyono, 2018)

Information:

O_1 : *Pretest*

X : Treatment

O_2 : *Posttest*

Population is a generalization area consisting of: objects / subjects that have certain qualities and characteristics that are applied by researchers to be studied and then drawn conclusions (Sugiyono, 2018).

The sample and origin of the data used in this study were grade X students of SMK N 2 Rambah with a total of 33 students. The sample selection technique in this study is a form of *Total Sampling*. *Total Sampling* is a sampling technique when all members of the population are used as samples (Sugiyono, 2018).

The data collection technique used is by providing *pre-tests and post-tests* that students must do with learning that uses the Learning Together (*LT*) type cooperative learning model or those using the direct learning model.

The test used is multiple choice. The written test in this study was used to measure student learning outcomes in the cognitive realm. Before being given to students, the instrument was asked for advice from subject teachers at SMK N 2 Rambah to be tested for feasibility as a tool in research, for the scores used were in Table 2 of the following Likert scale scores:

Table 1.
Likert scale score

Qualitative Assessment	Value Weighting	Quantitative Assessment
Sangat setuju	5	100% - 85%
Setuju	4	84% - 69%
Cukup setuju	3	68% - 53%
Cukup tidak setuju	2	52% - 37%
Sangat tidak setuju	1	36% - 21%

To analyze the problem fruit, analysis is needed using the data analysis used, namely normality, homogeneity and hypothetical tests.

RESULTS AND DISCUSSIONS

The results of this study are divided into 2 discussions, namely a description of the implementation of the research and a description of the research data.

Here's a breakdown of both:

1. Description of Research Implementation

a. Research Preparation. Researchers conducted observations on grade X students of SMK N 2 Rambah consisting of 33 students. Then the researcher prepares learning tools and test questions

b. Research Implementation

1) Implementation of Pre-tset Measurement.

Pretest is given to determine the initial ability of learning outcomes in students. The pre-test is carried out by students doing question sheets that have been prepared by researchers with a total of 24 questions. Therresults of doing the problem are then used as data to continue the research.

2) Provision of Treatment.

Treatment or treatmentusing the Learning Together (LT) learning model is used by teachers to help students understand the material. Students follow learning by actively using Learning Together (LT) machines.

3) Post-test implementation.

Post-tests are given to grade X students of SMK N 2 Rambah with the aim of knowing the learning outcomes of students. After being treated with the learning together learning model. Post-test is carried out in the form of the same activity as during the pre-test by doing 24 questions with the number of each question randomized by the researcher again so that the answers given by students are not the same during the pre-test.

2. Description of Research Data

The value of student learning outcomes is known from the *pre-test and post-test* results. *The pre-test* is given at the beginning of the meeting, then the class is treated using the Learning Together (LT) learning model. Then the next is the implementation of *the post-test*. *The post-test* is given at the end of the meeting. The results of the post-test are to determine the effect of using the Learning Together (LT) learning model. The following are student learning outcomes using the Learning Together (LT) learning model.

Table 2.

Interval	Category	Student learning outcomes	
		<i>Pre-test</i>	<i>Post-test</i>
100 - 90	Excellent	3	8
89 - 76	Good	7	8
75 - 61	Enough	4	4
60 - 41	Less	8	7
<41	Very less	9	6
	Lowest Value	18,00	40,00
	Top Rated	100	100
	Average	60,00	66,00

Based on table 2, it can be seen that the average value of learning outcomes of students using the model directly compared to using the Learning Together (LT) learning model is for pre-test 60.00 and post-test 66.00. Learners who obtain the highest score for the pre-test is 100 and for the post-test 100. The lowest score for the pre-test was 18.00 and the post-test was 40.00. The data on student learning outcomes is then presented in the form of a combo diagram as follows:

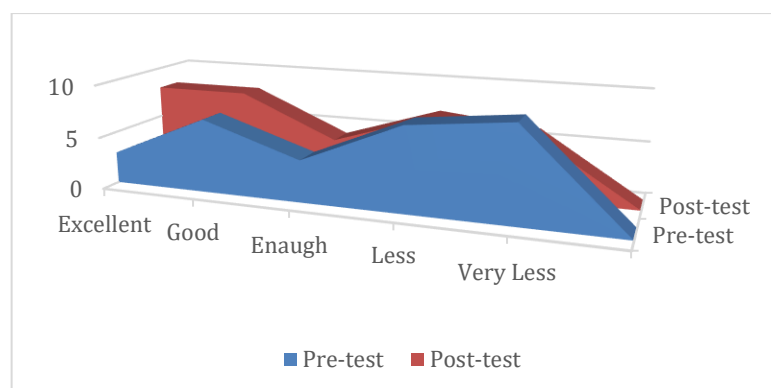


Figure 2. Student learning outcomes combo diagram

3. Test Analysis Prerequisites

a. Normality Test.

Normality tests are performed on *pre-test* and *post-test* data. The normality test aims to determine whether the pre-test and *pre-test* data are normally distributed or not.

Table 3.

Normality Test Results			
	Statistics	Df	Sig
<i>Pre-test</i>	1,180	33	0,75
<i>Post-test</i>	1.150	33	0,86

Based on the table of normality test results, it can be explained that the pre-test normality test results are 0.024 and *post-test* 0.086. *Pre-test* data $0.75 < 0.5$ and *post-test* $0.086 < 0.5$ as a result of which pre-test data are normally distributed while and *post-test* data are normally distributed.

b. Homogeneity Test

The decision-making criterion in the homogeneity test is if the significance of < 0.05 means that the variance is homogeneous (H_0 is accepted), while if the signification of < 0.05 means that the variance is heterogeneous (H_a is rejected).

Table 4.

Homogeneity Test Results				
	Levene Statistic	Sig.		
<i>Pre-test</i>	0,020	0,880	Sig. > 0.05	Homogeneous
<i>Post-test</i>	0,005	0,950	Sig. > 0.05	Homogeneous

Based on the results of the homogeneity test using the levene statistical test, it is known that the value of sig. The pre-test data was 0.880 and the post-test data was 0.950. The pre-test data is $0.880 > 0.05$ so that the *pre-test* data is stated to have the same or homogeneous variant. *Post-test* data is $0.950 > 0.05$ so that the data on the *post-test* also has the same or homogeneous variant.

c. Test the Hypothesis

Data analysis was carried out using non-parametric statistics. The use of non-parametric statistics is based on the fact that the data obtained do not meet one of the assumptions of parametric statistics, namely the selection of subjects that are not random, the results of the prerequisite test data of the normality test part of the *pre-test* data are not normal

so that they do not meet one of the parametric statistical assumptions. The hypotheses in this study are:

H₀ : there is an influence of *the* Learning Together learning model on student learning outcomes in class X SMK N 2 Rambah.

H₁ : there is no influence on the learning together learning model on *learning* outcomes in class X SMK N 2 Rambah.

Discussions

This study aims to determine the effect of using the Learning Together (LT) learning model on the learning outcomes of grade X students of SMK N 2 Rambah. Basically, learning outcomes mean evidence of a success that has been achieved by students during the learning process. Understanding and reasoning of students in mastering learning material is needed so that learning outcomes increase.

Learning Together is a cooperative learning model that involves students with heterogeneous groups of four or five people in handling a task. The cooperative learning model of the learning together type emphasizes face-to-face interaction, individual responsibility and cooperation, and interpersonal skills in heterogeneous small groups (4-6 students), given one working paper that must be studied and completed together (Hakim & I, 2018). Reaffirmed by (Mardiana Br Barus, 2021) said "The learning model is a plan or pattern that can be used to shape the curriculum, design instructional materials and guide the learning process in the classroom". So, the selection of learning modeling that is in accordance with the subject matter is very important.

In cooperative learning, the Learning Together Model has a special characteristic, namely a group formed from high, medium, and low ability students. Other characteristics are face-to-face interaction (students work in groups), positive interaction (students work together in achieving learning goals), individual responsibility (students show individually have mastered the material), and interpersonal skills and small groups (Chairunnisa, 2019). In cooperative learning the Learning Together (LT) type can change the usual learning concept (Lecture) which is only teacher-centered to be students as the center and the teacher still directs, by dividing students into several groups, each group is expected to be able to build and assess their own performance their group. Each group must be able to show that their group is a cohesive group both in terms of discussion and in terms of working on questions, each group member must be responsible for the results they get. If these results are not optimal or lower than other groups, they must improve their group performance, (Anisa, 2022).

Learning Together (LT) type learning objectives each group is expected to build and assess their own group performance. Each group must be able to show that their group is a compact group both in terms of discussion and in terms of working on problems. Each member of the group is also responsible for the results they obtain. If these results are not maximized or lower than other groups, then they must improve their group performance (Anggriasari & Mardiana, 2020). learning together learning method, students are divided into several groups consisting of five to six people in one group. Students choose learning materials determined by the teacher, then students discuss with their friends to complete the task. After the learning process is complete, students analyze after the learning implementation process is complete, students analyze and present it (Siti Nurhaliza Juliana, 2022). Learning Together (LT) has a learning process that involves the responsibility of each student which is consistent in showing a significant positive effect. In the cooperative learning process the Learning Together (LT) type is proven to produce a more effective learning process compared to the individualistic learning model (Nuriana, 2020).

The Learning Together (LT) learning model is one way to validate students' thinking skills which are built through group and team cooperation and can be useful for maximizing student

learning outcomes. Evidence that the Learning Together (LT) learning model can improve student learning outcomes marked using pre-test and post-test results of students who have increased completion are given treatment, where the average pre-test is 60.00 while the average for post-test is 66.00.

In line with research conducted by (Wintari.N.N et al., 2019) with the title "The Effect of the Learning Together Model to Improve Student Motivation and Learning Outcomes in Basic Food Learning (SMK PGRI 3 Denpasar)". With the results of the study, the first cycle data obtained an average percentage of 55.43% in the "sufficient" category, while in the second cycle obtained an average percentage of 80.35% in the "good" category. This shows that there has been an increase in student learning motivation in cycle II, an average increase of 24.92% while student learning outcomes have increased by 11.06%, this is obtained from the total learning outcomes of cycle I of 70.12% to 81.18% in cycle II. And there is an increase in classical completeness can be seen from the first cycle obtaining an average percentage of 46.81% being in the "less" category while in the second cycle obtaining an average percentage of 100% being in the "very good" category. This shows that there has been an increase in classical completeness of students in cycle II, an average increase of 53.19%.

The achievement of learning objectives is influenced by many factors such as student motivation, the approach used, interaction in the learning process (Anggriasari & Mardiana, 2020). Therefore, not only using learning models to deliver material but also using learning media as tools in the learning process. The word media is the plural form of the word medium. Medium can be defined as an intermediary or receiver of communication from sender to receiver. Media is one component of communication, namely as a messenger from communicator to communicant. Based on this definition, it can be said that learning media is a communication process.

Student learning outcomes are influenced by two main factors, namely factors from within students and factors that come from outside students or environmental factors. Factors that influence learning outcomes are; 1. From within the student (internal) consisting of physiology (physical condition and condition of the five senses), and psychology (talent, interest, intelligence, interest, and cognitive ability). 2. From outside the student (external) consisting of the environment (natural and social) and instrumental (curriculum / learning materials, teachers / teachers, facilities / facilities, and administration / management), (Erita, 2017).

Based on the results of the analysis, it shows that after students receive learning using the Learning Together (LT) learning model, it can improve student learning outcomes because they can be more active in. hone their own thinking skills to acquire knowledge through exchanging group or group ideas.

CONCLUSION

The results of the study provide that there is an influence of the use of the Learning Together (LT) learning model on student learning outcomes. The learning outcomes in question are the process of changing student behavior in the cognitive realm. Learning Together (LT) means a set of learning models that seek to develop students' thinking through individual responsibility. A method used in learning by centralizing most learning activities through collaboration between teams. Students make a problem-solving effort through collaboration between teams to find knowledge so that the knowledge gained will be stored long in memory. Researchers hope that this learning technique can be continued by teachers to support learning and the effectiveness of a lesson so that all students take part in learning and do not use the teacher's system to speak in front of students anymore. Research limitations are, at the simplest level, research weaknesses, factor after factor that are often beyond your control as the researcher. These factors can include things like time, access to resources, equipment, data or participants. It is hoped that other researchers or future researchers can continue this research, by looking at other variables related to learning together.

References

- Anggriasari, G., & Mardiana, T. (2020). *The Effect of Learning Together (LT) Model Assisted by Media Monopoly on Mathematics Learning Outcomes The Influence of Learning Together (LT) Model Assisted Monopoly Media toward Mathematic Learning Outcomes*. *Jurnal Penelitian Pendidikan*, 20(2), 243–253.
- Anisa, A. (2022). *The Influence of Cooperative Learning with the Learning Together (Lt) Learning Method in Skiing Learning at Stai Al-Jami*. *Religion: Jurnal Agama, Sosial, Dan Budaya*, 1–6. <https://maryamsejahtera.com/index.php/Religion/article/view/6>
- Arahap, R., & Makhromi, M. (2021). *Analysis of the Effectiveness of the Use of the Learning Together Cooperative Method in PAI Learning at SMP Al Mahrusiyah Ngampel Kediri*. *Jurnal Intelektual: Jurnal Pendidikan Dan Studi Keislaman*, 10(3), 364–375. <https://doi.org/10.33367/ji.v10i3.1384>
- Bonell, C., Allen, E., Warren, E., McGowan, J., Bevilacqua, L., Jamal, F., Legood, R., Wiggins, M., Opondo, C., Mathiot, A., Sturgess, J., Fletcher, A., Sadique, Z., Elbourne, D., Christie, D., Bond, L., Scott, S., & Viner, R. M. (2018). *Effects of the Learning Together intervention on bullying and aggression in English secondary schools (INCLUSIVE): a cluster randomised controlled trial*. *The Lancet*, 392(10163), 2452–2464. [https://doi.org/10.1016/S0140-6736\(18\)31782-3](https://doi.org/10.1016/S0140-6736(18)31782-3).
- Chairunnisa, H. (2019). *The Influence of the Learning Together Model in Understanding Written Discourse in Class XI SMA RK Deli Murni Delitua*. *Jurnal Pendidikan Bahasa dan Sastra Indonesia Jurnal Pendidikan Bahasa dan Sastra Indonesia* 256 4(1).
- Erita. (2017). *The Effect of Numbered Head Together (NHT) Type Cooperative Learning Strategy and Learning Interest on Accounting Learning Outcomes of Class XII Students of SMK Nusatama Padang Erita*. *ECONOMICA Journal of Economic and Economic Education*, 6(1), 72–86.
- Hakim, A., & I, W. (2018). *Application of the Learning Together Cooperative Learning Model to Improve Cooperation and Student Learning Achievement (Study on Social Studies Subjects for Class VII MTs Qaryatul Jihad Bengkulu Tengah)*. In *Jurnal As-Salam* (Vol. 2, Issue 1).
- Hayat, T. (2017). *Application of Learning Together-Based Cooperative Learning Methods in Pkn Subjects to Students of SMA Negeri 10 Ternate City*. *EDUKASI-Jurnal Pendidikan*, 15(2), 215–229.
- Hobri, Dafik, & Hossain, A. (2018). *The implementation of learning together in improving students' mathematical performance*. *International Journal of Instruction*, 11(2), 483–496. <https://doi.org/10.12973/iji.2018.11233a>
- Khairun Nisak, Thamrin Kamaruddin, A. W. A. (2021). *Application of the Learning Together Cooperative Learning Model Using Animation Media to Improve Integrated IPS Learning Outcomes for Students of SMP Negeri 3 Want Jaya*. *Jurnal Ilmiah Mahasiswa Pendidikan Geografi FKIP USK*, 6(1), 40–48.
- Latifah Dini Istiani. (2016). *The Effect of Learning Together Learning Model Using Crossword Puzzles (TTS) on Student Learning Motivation (Case Study of Learning Physics Material Tech Class VIII MTS Ma'arif Jatilawang Academic Year 2013/2014)*.
- Maimunah, M. (2021). *Improving English Learning Outcomes Through Learning Together Type Cooperative Learning Model*. *Jurnal Global Edukasi*, 3(6), 285–290. <http://jurnal.goretanpena.com/index.php/JGE/article/view/511>
- Nilakusmawati, D. P. E., Suprpti, N. W. S., Darmawan, I. D. M. B. A., & Raharja, M. A. (2021). *Analysis of student interaction with learning objects on blended learning course applying cooperative learning together method on Moodle learning management system*. *Journal of Physics: Conference Series*, 1722(1), 1–8. <https://doi.org/10.1088/1742-6596/1722/1/012107>
- Nurhidayat, A. (2023). *The Relevance of Numbered Heads Together Learning Model to Students' Mathematical Communication Ability Based on Vygotsky's Theory*. *Jurnal Pendidikan Indonesia*, 1(2), 35–40.
- Nuriana, N. F. (2020). *Analysis of the Application of Cooperative Learning Models Types of Teams Games Tournament (TGT) and Learning Together*. *Buana Pendidikan*, 16(30), 113–124.
- Sari, V. E. R., Astutik, S., & Mahardika, I. K. (2014). *Cooperative Learning Model Learning Together Type Accompanied by Concept Mapping Techniques in Science Learning in Junior High Schools*. *Jurnal Pembelajaran ...*, 3(3), 209–215.
- Siti Nurhaliza Juliana, A. F. (2022). *The Effect of Learning Together-Based Outdoor Learning Methods on Science Learning Outcomes of Grade IV Students at SDN Johar Baru 09 Pagi*. *Jurnal Pendidikan Dan Konseling*, 4(4), 1899–1907.
- Sri Mardiana Br. Barus, Ali, R. (2021). *The Effect of the Learning Together Model in Understanding Written Discourse in Class XI SMA RK Deli Murni Delitua*. *Jurnal Bahasa & Sastra*. 1(1), 4-8.

- Subaidi, A., Hasanah, I., & Holidi, N. D. (2018). *The Effect of Learning Together Cooperative Learning Model on Students' Mathematics Learning Achievement in Polynomial Subjects*. *Mathematics Education National Seminar*, 1(1), 7-10.
- Sugiyono, S. (2018). *Quantitative Qualitative Research Methodology and R&D*. In Bandung: Cv. Alfabeta.
- Ulfa, A. M., Sugiyarto, K. H., & Ikhsan, J. (2017). *The effect of the use of android-based application in learning together to improve students' academic performance*. *AIP Conference Proceedings*, 1847(January 2021). <https://doi.org/10.1063/1.4983910>
- Vhalery, R. (2019). Comparison of the Gallery Walk Cooperative Learning Model with the Learning Together Type in Student Learning Activities at SMA Tri Dharma Palembang. *Journal of Economic Education Innovation*, 9(1), 01. <https://doi.org/10.24036/011044950>
- Wintari.N.N, Ketut.S.I, & Sontosa.P.P. (2019). *The Effect of the Learning Together Model to Increase Student Motivation and Learning Outcomes in Basic Food Learning (SMK PGRI 3 Denpasar)*. 20(1), 269-281.