Effectiveness of Cooperative Scramble Learning Model on Improving Learning Outcomes

Sourbron Denis 1, Roy Lena 2, Käräjämäki Erkka 3
1 National Yang Ming Chiao Tung University, Taiwan
2 University of Geneva, Switzerland
3 University of Khartoum, Sudan

Corresponding Author: Sourbron Denis, E-mail; sourbrondenis@gmail.com

ABSTRACT

There are many effective learning models used in education, one of which is the cooperative scramble learning method. Cooperative scramble is a learning model where students learn in groups that help them solve learning problems given by the teacher. With that, this study aims to determine the benefits of the cooperative scramble learning model to increase learning effectiveness. Students are often bored because educators only use only the lecture method without any creativity to develop more effective and innovative learning models. The type of method used in this research is quantitative by conducting surveys and in-depth interviews. The results of this study explain that the cooperative scramble method is very effective for students. The conclusion of this research is that educators can utilize the cooperative scramble method to improve learning outcomes based on evidence of a student's learning achievement and interest in learning. The limitation of this study is that researchers only conduct research with the cooperative scramble learning model, researchers hope that further research uses other learning models so that student learning outcomes are maximized.

Keywords: Cooperative scramble, Effective Learning, Innovative learning

INTRODUCTION

The cooperative scramble learning model is very instrumental and influential on children's educational development. (Bone et al., 2022; Kido et al., 2019; Lesne et al., 2020). Which this model discusses students working together to solve a problem.
Teachers rarely pay attention to the problems faced by students. So this causes the atmosphere in the teaching and learning process to feel boring and reduce students' interest and learning skills and make them lazy to learn. Especially in difficult lessons that make it difficult for them to understand these lessons where they are told to read without the teacher explaining how. Even though these lessons are branches of other lessons such as mathematics, science and so on which have critical thinking skills using brain or neuroscience which is quite high. Children understand these lessons more easily if they are happy and together so that the difficult lessons feel easy. So that the problem of boredom and difficulty remembering and memorizing can be reduced.

The purpose of education or learning by using the cooperative scramble method is to facilitate students in the learning process, increase students' talents and interests so that they can distinguish good and bad things by being wise in solving a problem. Such as problems in learning math in general that use many formulas that make students' heads dizzy. These problems can be overcome if in learning the teacher uses the right and correct methods and methods and sees the talents, interests and skills of students in responding to these lessons, it is certain that students will be excited and interested in the learning process that takes place. The method can be done by students being divided into groups by the teacher and given tools such as toys so that learning feels fun. Teachers must be able to think critically and innovatively in combining media so that students are not bored and bored anymore in learning, and this can develop students' skills, talents and interests and be able to improve brain performance according to the cooperative scramble method that teachers can learn.

Along with that, the function of the cooperative scramble learning model is that students who have difficulty in remembering terms or lessons that are very difficult will feel less burdened. (Christodoulou et al., 2019; Gao et al., 2019; Zech et al., 2018). Then, students will be enthusiastic in participating in lessons and motivated in learning, as well as the establishment of strong cooperative relationships and being able to socialize. However, this is the problem experienced by teachers today where students are difficult to invite together to study in groups with many certain reasons such as students being lazy to do it and so on. Through the previous method, the teacher explains by reading only which makes learning ineffective. (Beck et al., 2020; Too et al., 2019), When it can be concluded that heavy lessons will feel light when done with the cooperative scramble method as described above. The cooperative scramble model also comes from students' interest in cooperating or discussing with friends in the teaching and learning process. (Aggarwal et al., 2019; Shaham et al., 2019; Tran et al., 2019; Yaseen et al., 2019).

The problem that occurs if it is not done with the cooperative scramble method at this time is that there is a gap for students where they do not understand what the teacher is saying. (Miyato et al., 2019). Therefore, teachers must improve their competence and professionalism to improve the quality of learning by using the cooperative scramble method. (Cheng et al., 2020; Chiari et al., 2022; Ghorbanzadeh et al., 2019; Khosravi et al., 2019; Murdoch et al., 2019), There are many things that must be improved including student curiosity with interesting methods, learning to do and act, learning to create
something new imagination and learning that sharpens students' brains so that they develop in a better direction. These problems are evidenced by internal criticism from students such as protesting to the teacher regarding the lessons he delivered in order to form a religious person and love science.

The continuity of effective learning by using the cooperative scramble method can improve the child's nervous system or brain and discuss the child's awareness that education is important at this time. Thus, the application of methods in education can be concluded with students being given the ability to maximize and optimize the brain in order to use it to solve problems. Students are also able to find new ideas and ideas that innovate so that they benefit others. This is also related to learning at school where brain nerves are very important to apply in education so that children can easily understand it. The cooperative scramble method addresses brain awareness and sensitivity in terms of understanding learning. So, it can be interpreted that the commands received by the brain will activate the nerves that exist in it so that it can carry out activities as expected. This also increases students' passion in following the lesson.

The importance of the cooperative scramble method in education is that it really helps students who have difficulty in understanding learning will be reduced. Students are also motivated to follow every question given by the teacher and improve cooperation. (König, 2021; Seve et al., 2018; Shang & You, 2019; Sun & Ge, 2019; Winstone & Carless, 2019; Wu et al., 2019). The purpose of education using this method is to make it easier for students to make decisions in every aspect of life and to be able to organize and manage students' thinking patterns and express every human behavior in activities. So it can be concluded that the brain and human behavior are closely related and cannot be separated from one another so that the cooperative scramble method plays a very important role in this regard. Therefore, this will make it easier for students to understand lessons and improve the character of children facing problems that can distinguish between good and bad.

The learning process has an important aspect in education, namely creating a conducive atmosphere, not only the teacher must be improved, but also the students themselves. (Yan, 2020; Yu & Zhao, 2019). Therefore, to improve their skills in remembering students need to be active and diligent in learning, requiring great sacrifice to get the desired results. In this case, students will be stimulated to think critically and integrate knowledge and development in real life. Moreover, innovation for students by strengthening and linking ideas and facts in the process of analyzing, evaluating, and providing ideas and facts found. (Baturynska et al., 2018; Raissi et al., 2019). Students must understand, live, and practice the teachings that have been given so that later when an unexpected disaster occurs, students can overcome it well according to their ability and persistence in solving it.

Based on the description above, it can be concluded that the cooperative scramble learning method to improve student learning effectiveness is very important in improving learning abilities. Therefore, researchers are very interested in discussing this issue further and knowing the extent of the application of the cooperative scramble method.
The purpose of this research is to provide information related to the application of this method in schools and critical thinking and to find out why brain science is important. Researchers also provide information related to the benefits of cooperative scramble for students and teachers. The obstacle in the cooperative scramble method is that not everyone has the ability of this method, so critical thinking is used as a form of human character or action studied in depth, because critical thinking individuals have extraordinary brain abilities in solving a problem.

RESEARCH METHODOLOGY

The studies conducted research in quantitative form, which is a process of finding results using data in the form of numbers as a means of analyzing information about what you want to know in a problem. The goal is to know and analyze the results of observations made regarding the importance of the cooperative scramble method in learning. (Faculty of Mining, Geology and Petroleum Engineering et al., 2018). This research was conducted in one of the schools in Sungai Tarab sub-district in the middle of the odd semester in 2022/2023, this time was chosen because there were many assumptions that at school students were less interested because of their lack of ability to cooperate and remember lessons. The source of this research came from a student and teacher who studied and taught at the school concerned as well as the results of a survey conducted using a questionnaire. (Kropivšek & Grošelj, 2019; Sobko et al., 2019).

The results of an interview with one of the teachers who taught mathematics which was conducted online using existing social media, during the interview discussed how important, how much interest and enthusiasm students have in learning using the cooperative scramble method. The results of the study were obtained with questionnaire data conducted using google forms that researchers distributed to 31 people consisting of teachers, students and students. Then from these results, the researchers further analyzed with quantitative methods to find out how much the percentage of the benefits of the cooperative scramble method in learning. This makes it easier for researchers to take every step that researchers will face in the future. For example, in making other scientific articles that require a lot of research methods that drain energy and thoughts. Researchers will also not feel awkward with unexpected problems in the future.

This cooperative scramble method has benefits for both teachers and students. For teachers, the benefits are getting direct experience in implementing learning, as a motivation to improve skills to choose varied learning strategies that can improve the learning system so as to provide the best service for students. As for learners who have difficulty in remembering difficult terms, their burden will be reduced. Learners are more motivated to learn and improve their ability to cooperate and socialize. This research also provides benefits to the motor development of students so that their skills develop in a better direction as expected so as to avoid misunderstandings in understanding lessons.

This research provides weaknesses and advantages to the cooperative scramble learning method. The advantages are In the scramble learning model, there are no students or group members who are passive or just silent, this is because each group member has
Effectiveness of Cooperative Scramble Learning Model on Improving Learning Outcomes

A responsibility for the success of his group. The scramble learning model makes students more creative in learning and thinking, learning material more relaxed and without pressure because the scramble learning model allows students to learn while playing. The scramble learning model can foster a sense of solidarity among members of the group. The material provided becomes memorable and is always remembered by students. The scramble learning model also encourages students to be more competitive and eager to advance.

Disadvantages are that this learning model is difficult in terms of planning because it is not used to students' habits in learning. Another disadvantage is that it requires a long time to implement, so it is difficult for the teacher to adjust the time that has been set. This learning model is difficult to implement.

RESULT AND DISCUSSION

The research conducted by researchers is to use quantitative methods that are presented in the form of mathematical calculation results. The results in this study are considered as confirmed facts. The validity of this research is largely determined by the validity and reliability of the instruments used. Quantitative data is a type of data that can be measured directly as numbers or numbers. Research conducted by means of observation, interviews and data analysis techniques. The reason researchers use this quantitative method is to find out the effect of a treatment that will be tested hypothesis. This type of method requires large amounts of numerical data and can also be calculated using statistical formulas. This quantitative method can be used to estimate and predict. The results of data analysis can be obtained accurately according to the rules. This method is also used to measure the interaction of the relationship between two or more variables that can be interpreted by statistical analysis.

The quantitative method referred to by the researcher is a systematic scientific study of charts and phenomena and the relationship between the two. This research provides great benefits to the interviewees because of the validity of the data as it should be. This quantitative method contains a field diagram consisting of four sections. The four parts are strongly agree, agree, disagree and disagree. In this discussion, it consists of ten questions asked to the interviewed objects regarding this cooperative scramble method. After being filled in via google form, then the researcher explains it through a graph as seen below. The results of the observation were presented by the researcher after the diagram was about the problem in question. In the end, the solution is sought on how to solve the problem so that it can be used as a reference in conducting further research.

The purpose of this quantitative method is to provide a deep understanding and can be understood by the reader so that there is no confusion in each table described by the researcher. This method is easier than qualitative methods because it is only in the form of responses from several parties who provide data in the form of data. Qualitative research is more difficult because it must be observed directly to the place that is the object of research. The interviewee must also be met where it is clear that his face, physical body and others are clear about the ins and outs of the statement that will be
Effectiveness of Cooperative Scramble Learning Model on Improving Learning Outcomes

given to the audience. Both quantitative and qualitative methods both provide very many benefits to the development of student education where the results can be seen. This makes researchers ponder the future fate of how education in Indonesia is coordinated and directed and has a positive impact in a much more favorable future.

Based on the questionnaire, the researcher has conducted a quantitative method which is based on a questionnaire that above states that 10 people strongly agree with this method 17 people stated that they agree that the cooperative scramble method is good for teachers. 1 person disagreed with the use of this method and 2 people disagreed. This method is very useful for teachers and students to involve students in following the learning of a group. This method is also able to make students understand learning even though only a small proportion apply it not entirely. Therefore, it can be concluded that most of the surveys conducted by researchers agree that this method is good to use for teachers even though we expect many to strongly agree with it. Hopefully then we can apply this method for the common benefit of learning.

Is cooperative scramble good for students
Based on the questionnaire, the researcher conducted quantitative research. In the diagram above 10 people strongly agree that the cooperative scramble method is good for students, 19 other people agree with this method. The remaining 2 people disagree with this method. This method is very beneficial for students because it solves a problem together in a fun way and increases their enthusiasm. From some of the students surveyed answered that with this method they were able to understand learning with a better understanding and be useful in education. This is because judging from the function alone, it shows how good cooperative scramble is in education. However, the assessment obtained for answers that consider this method is not good and is usually applied and is not able to make the lesson better.

Does cooperative scramble make it easier for students to understand learning?

Based on quantitative research conducted by researchers, in the diagram above there are 10 people who strongly agree that this method makes it easier for students to understand learning. There were 17 people who agreed, 2 people who disagreed and 1 person who disagreed. According to the opinions of several students, this method is very entertaining because the teacher is humorous in providing material so that it can be understood carefully. Researchers hope that in the future students can understand lessons with this method and with others not only with lectures that make the atmosphere in the classroom feel boring. Although a small part of the data above there are those who disagree and disagree at least we can realize it in every task given by educators so that it leads to a better direction.
Is cooperative scramble effective in learning

Based on quantitative research conducted by researchers in the diagram above, there are 10 people who strongly agree that this method is effective in learning difficult material. There are 9 people who agree and there is 1 person who disagrees with this. Effective is an activity that is more directed towards the expected goal without spending a lot of capital or sacrifice. It can also be said that work that feels heavy will feel light when done with interesting methods in groups. Researchers hope that in the future besides this cooperative scramble there are other methods that are more effective. Therefore, let us together provide positive input and understanding so as to improve the achievements of students in the field of education.

Is cooperative scramble good for
Based on the quantitative research conducted by researchers in the diagram above, we can see that there are 9 people who strongly agree that cooperative scramble is good for use in schools. There are 15 people who agree, 5 people who disagree and 1 person who disagrees. Junior high school is one of the schools in which there are religious lessons compared to other secondary schools. Based on an interview conducted by the researcher to a teacher, he said that in the school there should be other supporting methods besides the coooperative scramble such as discussion, exchanging ideas and so on. According to him, this method can also be applied to elementary and high schools with more students than the junior high school.

Based on the quantitative research diagram conducted by the researcher above, there are 7 people who strongly agree that cooperative scramble is bad for student development. There are 13 people who agree with this, 8 people who disagree and 3 people who disagree. The development referred to in this discussion is the development of students’ brain thinking power which leads to critical and logical thinking. Some argue that this method is not bad for student development but the opposite. In the diagram above, it is not as expected and is inversely proportional to the previous expectations. Researchers hope that in the future this method will have a good impact on the development of students and for educators in general who provide knowledge, especially knowledge about Islam.
Does cooperative scramble improve students' public speaking?

Based on the quantitative research in the diagram above, there are 10 people who strongly agree that cooperative scramble improves the way students speak in public. There are 16 people who agree, 3 people who disagree and 2 people who disagree. This method actually improves students to speak in front of a large audience, because it is done in groups by exchanging ideas between one another to solve a problem. Based on the survey conducted by the researcher, this is very much in line with what is expected in the diagram above. The researcher hopes that with this method, students in taking education to a higher level will be more courageous in speaking in front of the class, for example, because they have been trained by the teacher using the cooperative scramble method as described.

Is cooperative scramble useful for learners
Based on quantitative research conducted by researchers in the diagram above, many agree that cooperative scramble is beneficial for students, namely 24 people. The rest are 4 people who strongly agree and 3 people who disagree. This method, if we understand it, actually has many benefits for these students. The benefit for learners is to increase motivation and creativity because the implementation is actively involved in the process of solving the problems faced. As we hope, this method has many benefits in guiding students to a better path from an understanding that leads to bad directions, for example learning is boring and futile because it will not get a job after school. In fact, school is used to increase this knowledge.

Is cooperative scramble good in a classroom setting?

- Based on the quantitative research conducted by the researcher, in the diagram above there are 7 people who stated that cooperative scramble is good to do in the classroom. There are 18 people who agree, 4 people who disagree and 2 people who disagree. Learning conducted in the classroom has its good and bad points. The good impact is that students are safe from various threats that occur compared to learning outside the classroom. Learning in the classroom will have a good impact because students are more serious about understanding every material that the teacher gives to students. This is also good for students who find it difficult to learn outdoors. Researchers hope that wherever and whenever we do it should lead to a good direction so that it can be realized in every aspect of life. For example, in the classroom, we jointly solve a case that prioritizes the public interest compared to personal interests.
Based on quantitative research conducted by researchers in the diagram above, there are 7 people who strongly agree that cooperative scramble is good outside the classroom. There are 22 people who agree and 2 people who disagree. Actually, learning in the classroom is fun because it opens students' horizons in learning. In learning outside the classroom there is the name of the environmental method. The environmental method is a method that brings students to learn to add an insight in the teaching and learning process where this environment is used as a learning resource for students and teachers to understand material that is closely related to everyday life, often used as an environmental approach. Researchers hope that any method and way of delivering material should direct students in a direction that is more advanced than others. For example, outside the classroom, students are invited to tour the park or other beautiful places so that they learn without the heavy burden they carry.

In this quantitative research, it can be concluded that many parties agree to the questions submitted by the researcher compared to strongly agree. This proves that the cooperative scramble method is good to use in improving student effectiveness as the research given to the researcher. In this data, there are those who assume that there are those who strongly agree that this method has a bad impact on the educational development of students, even though the assumptions of many people are inversely proportional to the reality that occurs. Therefore, it provides a very deep wisdom that every thing that is considered good is not necessarily good in the eyes of others. In the end, you must always do good because you don't know which one will help in God's court. Another wisdom is that evil people are not evil in their hearts, but there is unexpected goodness.

The diagram above illustrates the entirety of the solved problems studied. First, regarding cooperative scramble is good for teachers, where many parties agree to the question. Teachers as teachers and educators who provide direction to students to be
inspired and imitated, should use this method well. Second, regarding cooperative scramble is good for students, many parties agree with the statement. Students as those who gain knowledge that is useful for life feel helped by this method because it makes it easier to understand lessons. Third, regarding this cooperative scramble makes it easier for students to understand learning, many parties agree with the statement. Fourth, regarding this method is effective in learning. Many parties agree with this because an effective learning system stimulates students’ psychomotor development. Fifth, regarding this method is good to use, many parties agree with the statement.

CONCLUSION

Over time, education in this world has undergone many changes and developments in various aspects of cognitive, knowledge and psychomotor. For example, the cooperative scramble method to improve student learning outcomes. The cooperative scramble method is a method of solving a problem by doing it together. This is an ability which requires extraordinary ability to the importance of brain management to develop the brain power of an individual. This does not only apply to students and teachers but applies and is beneficial to every individual because it has an extraordinary goal of producing a good and extraordinary person who produces a critical mindset that makes it easier to solve any problems that occur both in the school environment, namely in the teaching and learning process which is very important in creating an effective and efficient one.

ACKNOWLEDGEMENT

The researcher expressed his gratitude to the teacher who was willing to interview with the researcher, with the students themselves, students and other parties to help the observations that the researcher made so that it provided benefits for all.

REFERENCES


Effectiveness of Cooperative Scramble Learning Model on Improving Learning Outcomes


Faculty of Mining, Geology and Petroleum Engineering, 10000 Zagreb, Croatia, Associate Professor, Kurević, T., Macenić, M., Faculty of Mining, Geology and Petroleum Engineering; 10000 Zagreb, Croatia; Researching Assistant, Strpić, K., & Faculty of Mining, Geology and Petroleum Engineering; 10000 Zagreb, Croatia; Researching Assistant. (2018). STEADY-STATE HEAT REJECTION RATES FOR A COAXIAL BOREHOLE HEAT EXCHANGER DURING PASSIVE AND ACTIVE COOLING DETERMINED WITH THE NOVEL STEP THERMAL RESPONSE TEST METHOD. *Rudarsko-Geološko-Naftni Zbornik, 33*(2), 61–71. https://doi.org/10.17794/rzn.2018.2.6


51


Copyright Holder: © Sourbron Denis et al. (2023).

First Publication Right: © World Psychology

This article is under: [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](https://creativecommons.org/licenses/by-nc-nd/4.0/)