Biodik: Jurnal Ilmiah Pendidikan Biologi
ISSN 2580-0922 (*online*), ISSN 2460-2612 (*print*)
Volume 10, Nomor 03, Tahun 2024, Hal. 441-448
Available online at:
https://online-journal.unja.ac.id/biodik

Research Article

OPEN ACCESS

Implementation of the STAD Cooperative Learning Model on Student Learning Activities

(Implementasi Model Pembelajaran Kooperatif STAD Terhadap Aktivitas Belajar Siswa)

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Informasi Artikel
Submit: 23 – 04 – 2024
Diterima: 26 – 07 – 2024
Dipublikasikan: 29 – 09 – 2024

Penerbit
Program Studi Pendidikan Biologi
FKIP Universitas Jambi,
Jambi- Indonesia

ABSTRACT

The learning that occurs at SMP Negeri 1 Tinondo is still not student-centered so that many students are still passive when learning takes place. Therefore, it is necessary to apply a learning model that can increase student learning activities and student participation in learning, one of which is the STAD cooperative learning model. This research aims to determine the influence of the Student Team Achievement Division (STAD) learning model on the activities and science learning outcomes of Class VIII students at SMP Negeri 1 Tinondo. The type of research used in this research is Quasy Experimental research. The total population in this study was 48 class VIII students at SMP Negeri 1 Tinondo. The sample used in this research consisted of two classes, namely: experimental class (Class VIII A with 24 students), and control class (Class VIII B with 24 students). With a Control Group Pretest-Posttest Design research design. The instrument used was an observation sheet on the implementation of syntax and student learning activities. The research results showed that, from 48 class VIII students at SMP Negeri 1 Tinondo for learning activities, the average score for the experimental class was 65.05 in the fair category, while for the control class it was 53.24 in the not good category. Based on the research results, it can be concluded that the Student Team Achievement Division (STAD) learning model can influence science learning activities and outcomes at SMP Negeri 1 Tinondo.

Key words: *STAD; Cooperative Learning Model; Learning activity*

ABSTRAK

Pembelajaran yang terjadi di SMP Negeri 1 Tinondo masih belum berpusat pada siswa sehingga masih banyak siswa yang pasif ketika pembelajaran berlangsug. Oleh karena itu prlu diterapkan model pembelajaran yang dapat meningkatkan aktivitas belajar siswa dan partisipasi siswa dalam pembelajaran salah satunya yaitu model pembelajaran kooperatif STAD. Penelitian ini bertujuan untuk mengetahui Pengaruh Model Pembelajaran Student Team Achievement Division (STAD) Terhadap Aktivitas Dan Hasil Belajar IPA Siswa Kelas VIII SMP Negeri 1 Tinondo. Jenis penelitian yang digunakan dalam penelitian ini adalah jenis penelitian Quasy Eksperimen. Jumlah populasi dalam penelitian ini sebanyak 48 siswa kelas VIII di SMP Negeri1 Tinondo. Adapun sampel yang digunakan dalam penelitian ini terdiri dari dua kelas, yaitu: kelas eksperimen (Kelas VIII A Sebanyak 24 Siswa), dan kelas kontrol (Kelas VIII B Sebanyak 24 Siswa). Dengan desain penelitian Control Group Pretest-Posttest Design. Instrument

yang digunakan berupa lembar observasi keterlaksanaan sintaks dan aktivitas belajar siswa. Hasil penelitian menunjukan bahwa, dari 48 siswa kelas VIII Di SMP Negeri 1 Tinondo untuk aktivitas belajar diperoleh nilai rata-rata kelas eksperimen sebesar 65,05 dengan kategori cukup sedangkan untuk kelas kontrol sebesar 53,24 dengan kategori kuran baik. Berdasarkan hasil penelitian dapat disimpulkan model pembelajaran Student Team Achievment Division (STAD) dapat berpengaruh terhadap aktivitas dan hasil belajar IPA di SMP Negeri 1 Tinondo.

Kata kunci: *STAD; Model Pembelajaran Kooperatif; Aktivitas Belajar*

PENDAHULUAN

Essentially education is an effort to guide, train and guide humans to reach the peak level of their cognitive, affective and psychomotor potential. The main aim is to prevent them from ignorance and enable effective adaptation to the environment, preparing them to face developments over time. Education plays a crucial role in determining the direction of social change towards progress and improving the quality of life. The essence of education can be identified as a learning process. (Indriana, 2011).

The learning process can be defined as the process of transferring information or messages that are planned, designed, implemented and evaluated systematically from educators to students, both in the school environment and outside the school, involving interaction between the two. Learning can be seen from two perspectives. First, as a system consisting of various organized components, such as learning objectives, learning materials, learning strategies and methods, learning media, and learning follow-up (remedial and enrichment). Second, learning is understood as a process, so it includes a series of efforts or activities from educators to encourage students to learn (Cahyaningrum & Abidin, 2022).

In the learning process, there are two main components that play a role, namely students and teachers. Students are individuals who receive educational services according to their talents, interests and abilities, with the aim of being able to grow and develop optimally and feel satisfaction in receiving learning from their educators. The role of students is very important in the learning process, making learning not only depend on the role of the teacher alone. Meanwhile, the teacher acts as a facilitator, providing facilities or convenience in the learning process. Teachers can choose an appropriate learning model to create an atmosphere for effective and efficient teaching and learning activities. Thus, interaction between students and teachers is crucial in achieving learning goals (Asmara et al., 2022).

It is important to recognize that learning models have a significant impact on the success of the learning process. Using inappropriate learning models can affect activities and learning outcomes in the classroom. In reality, the learning process in class is often faced with various problems that are unique and vary between students. Some common problems that often arise include low levels of student activity and learning outcomes. One example of a problem faced by students is low activity and learning outcomes, which can be caused by factors such as limited speaking ability and lack of self-confidence. Due to the variety of problems students face, it is important to adopt appropriate learning models. This is done with the aim of increasing student activity and learning outcomes, so that each student can overcome their challenges and achieve optimal learning potential. (Wulandari, 2022).

A similar problem also occurred at SMP Negeri 1 Tinondo, where based on the results of observations made at SMP Negeri 1 Tinondo, it was found that the learning process implemented was still conventional, dominated by teachers in learning activities. This learning tends to be passive so that active involvement of students and teachers in the learning process is still lacking. In order for learning objectives to be achieved, there needs to be student activity in the classroom learning process. Student activity can be increased by using a learning model that can make students more active and enthusiastic in carrying out the learning process in class. Increased student learning activities are expected to improve student learning outcomes.

As a result of the use of conventional learning models in the learning process that occurs at SMP Negeri 1 Tinondo, students become less active. In the teaching and learning activities that take place, 70% of students in class VIII are just silent without taking part in the learning process that occurs, so that only the teacher is active in learning. Whereas the learning process that is expected at this time is learning that involves students, students who are active in seeking information, and all are centered on students.

Based on research conducted by Pandley, Bretzh, and Novak (1994), the results show that students generally tend to learn by memorizing rather than building a deep understanding of the concepts being studied. A low level of understanding in concept mastery can have a negative impact on student learning outcomes and student learning activity. One factor that can influence this is the teaching methods applied by teachers, especially the use of conventional learning models. This learning model can cause a lack of interaction between teachers and students, as well as between students and each other. The impact is the low level of activity. Therefore, it is important to consider learning methods that are more interactive and oriented towards understanding concepts to improve student learning activity. (Khauro et al., 2020).

With the aim of overcoming various existing problems, researchers look for solutions to overcome the obstacles that occur. In response to this challenge, researchers decided to adopt a learning model that can improve student activity. One of the models taken is a cooperative learning model with the Student Team Achievement Division (STAD) type. The choice of this learning model was motivated by its ability to increase student engagement and learning outcomes. The STAD learning model has the advantage of making students responsible for themselves and their group members. In this model, there is active interaction between students, including the exchange of ideas and collaboration within groups. This is expected to have a positive impact on increasing activities and learning outcomes effectively and efficiently. (Andany & Wiyogo, 2020).

Not only on learning outcomes, the STAD type cooperative learning model also has an effect on increasing student learning activities. This is in line with research conducted by Suparmini and also research conducted by Rahma et al. which shows the influence or increase in student learning activities when using the STAD type cooperative model. In using STAD type cooperative learning, it can provide opportunities for students to discuss with each other in their groups, motivate students to help each other in solving problems. The STAD model cooperative learning model is one of the learning models that is useful for fostering the ability to cooperate, be creative, think critically and have the ability to help friends. (Rahmah et al., 2019; Suparmini, 2021)

Based on research conducted by Tongato (2017), it was found that the application of the Student Team Achievement Division (STAD) learning model had a positive impact, especially on students with low learning outcomes. The learning process using the STAD model tends to guide students who have

higher abilities to help students who have lower abilities. This allows less able students to be actively involved in group discussions, both from a social and cognitive perspective. As a result, these students can improve their understanding. Furthermore, research by Kusumawardani (2018) also confirms that the use of the Student Team Achievement Division (STAD) type cooperative learning model can improve student learning outcomes. This occurs through developing patterns of interaction with teachers and classmates, stimulating the thinking of students involved in learning, and producing more productive activities and efforts from these students. (Kusumawardani et al., 2018).

This research is based on the results of field observations which revealed that teachers at SMP Negeri 1 Tinondo had never previously implemented the Student Team Achievement Division (STAD) type cooperative learning model. This fact gave the researcher encouragement to choose a research title related to the influence of the application of the STAD learning model on the activities and science learning outcomes of class VIII students at SMP Negeri 1 Tinondo. Thus, this research aims to examine the impact of implementing the STAD learning model on student involvement in the learning process and their learning outcomes in science subjects.

METODE PENELITIAN

This research is a type of Quasi Experiment research which involves two classes providing different learning models. The experimental class was given the Student Team Achievement Division (STAD) learning model, while the control class used the conventional learning model. The research design applied was a Control Group Pretest-Posttest Design.

This research was carried out at SMP Negeri 1 Tinondo in the Odd Semester of the 2022/2023 Academic Year. The population in this study consisted of all class VIII students at SMP Negeri 1 Tinondo, with a total of 48 students. In selecting the sample, the research used a total sampling technique, namely taking all class VIII students at SMP Negeri 1 Tinondo, so the total sample was 48 students. The sample was divided into two groups, where the control class consisted of 24 students and the experimental class also consisted of 24 students. The selection of the control class and experimental class was done randomly because the control class and experimental class had the same abilities. The total sampling technique ensured that all members of the class VIII population at SMP Negeri 1 Tinondo were part of this research.

Data collection was carried out through observation sheets of learning activities, which included criteria such as listening to teacher explanations, reading lesson material, working on student worksheets, answering teacher questions, actively asking questions, and participating in group discussions. The results of the collected data will then be analyzed using an independent t-test, after previously carrying out normality and homogeneity tests. This approach allows researchers to evaluate the differences between two groups, namely the experimental group that applies the STAD model and the control group that uses conventional methods.

HASIL PENELITIAN DAN PEMBAHASAN

The student activity assessment sheet is used to see student activity during the learning process. The results of the data analysis are presented in the following table, then the complete results of student activities can be seen as follows:

Table 1. Results of Class VIII Student Activities at SMP Negeri 1 Tinondo

Number of samples	Experimental Group		Control Group	
24	Maximum	86	Maximum	72
24	Minimum	42	Minimum	34
24	Average	65.05	Average	53.24
24	Median	66.67	Median	53.47

*Ukuran judul tabel dan isi tabel adalah 10 pt dan spasi 0 pt

From the analysis results in Table 1, it can be seen that the average percentage value of student activity in the learning process using the Student Team Achievement Division (STAD) learning model is 65.05, while the average student activity value in the learning process using conventional methods is 53.24 . Thus, student activity in the experimental class which applies the Student Team Achievement Division (STAD) learning model can be categorized as sufficient. Meanwhile, in the control class which uses conventional learning methods, student activity can be categorized as poor.

The hypothesis test used in this research is the independent sample t test which was carried out to see the effect of the STAD learning model. The results of the hypothesis test calculations can be seen in table 2.

Table 2. Uji-t Independent Result

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		f	sig	t	Df	Sig(2tailed)	Mean diference	Std. Eror diference
aktivitas belajar	Equal variances assumed	.596	.444	3.131	46	.003	.58458	.18670
	Equal variances not assumed			3,131	45.717	.003	.58458	.18670

Based on the table above, it is known that the t count is 3.131 with a significance of 0.003. The ttable obtained from df=46 at the 5% significance level is 2.018. So the calculated t value > t table. So there can be significant differences in student learning activities in the experimental class and the control class.

From the results of the research conducted, it was found that student learning activities using the STAD learning model were better than student learning activities using the conventional model. In the experimental class, students are encouraged to be more active according to the STAD stages, and from these stages, students appear to be more active in the learning process. This finding is in line with Whipple's view stated in Hamalik (2009), where student active learning is a learning process that emphasizes student involvement physically, mentally, intellectually and emotionally.

Collaboration in teams in class can increase student activity in the learning process. This opinion is in line with the view of Eva S. (2017), who states that team collaboration involves a group of people working together to achieve the same goal, and this goal can be achieved more effectively through team collaboration than through individual efforts. Giving awards to the team with the best average points can also be a motivation for students to be more active in learning. This perspective is in accordance with the

ideas of Rusman (2012), who suggests that team achievement awards can take the form of assessing student work results by giving a number in the range 0-100 after carrying out a quiz. This award does not always have to be material, but can also be in the form of additional value or a form of non-material appreciation .

The use of the STAD cooperative learning model has an impact on student activities because in its useit can provide opportunities for students to discuss with each other in their groups, motivate students to help each other in solving problems. The STAD model cooperative learning model is one of the learning models that is useful for fostering the ability to cooperate, be creative, think critically and have the ability to help friends (Rahmah et al., 2019; Suparmini, 2021). In the STAD cooperative learning model, students are asked to discuss with fellow group members and are given prizes as a form of appreciation for student work. This can help students to be more enthusiastic in participating in learning and actively participate in the learning process.

The opinion expressed by Slavin (2016) is in line with the findings in this research, where the STAD learning model has advantages, including, encouraging students to work together to achieve goals, activating student participation in helping and motivating each other, and increasing interaction between students. students as their ability to think increases. In contrast, in the control class which uses a conventional learning model, it appears that there is nothing in the learning stages that encourages students to be active. This causes a lack of enthusiasm among students in asking questions and answering questions posed by the teacher. (Pakpahan, 2019; Sekarini, 2022)(Pakpahan, 2019; Sekarini, 2022).

The findings of this research are in accordance with Suparmini's view, which states that the STAD type cooperative learning model can increase student learning activities. This increase was caused by collaboration in groups, where students became more enthusiastic and active in asking questions during the learning process. Thus, the results of this study support this view and demonstrate the effectiveness of the STAD learning model in increasing student engagement and participation. (Suparmini, 2021)

SIMPULAN

From the results of research at SMP Negeri 1 Tinondo, it appears that the Student Team Achievement Division (STAD) learning model has a significant influence on student learning activities. A significance value of 0.003, which is smaller than the significance level of 0.05, indicates that there is a significant difference in student learning activity scores between the experimental class and the control class. In other words, the application of the STAD learning model can have a real positive influence on student learning activities. based on the research results obtained, the STAD type cooperative learning model can be one of the learning models used by teachers in the learning process in the classroom that is effective in increasing student activity. In addition, for further researchers, they can measure the influence of the STAD learning model with skills or other variables, or they can combine this STAD learning model with other learning models to improve the quality of the learning process.

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