Educational Journal of Learning Technology
Vol. 3, No. 2, pp. 137-145, January 2026
https://10.58230/edutech.v3i2.72
Received November 11, 2025; Revised December 18, 2025; Accepted December 19, 2025

Implementation of the Student Teams Achievement Divisions Cooperative Learning Model in Improving Learning Outcomes in Islamic Religious Education Subjects in Junior High Schools

Rimah[1], and Mawardi[2]
[1,2]Universitas Negeri Islam Negeri Palopo
Agatis Street, Balandai, Bara District, Palopo City, South Sulawesi. Indonesia
Rimah496@gmail.com

Abstract. This research aims to improve student learning outcomes in Islamic Religious Education and Ethics at Satap To'Bakkun State Junior High School by applying the Student Teams Achievement Divisions (STAD) cooperative learning model. This study uses the Classroom Action Research method, consisting of planning, implementation, observation, and reflection stages across three cycles. The research subjects were grade VII A students, and data were collected through observation and learning outcome tests. The study found a significant increase in learning outcomes and student activities. The average value of learning outcomes increased from 61.91% in cycle I to 82.26% in cycle II and 87.43% in cycle III. Learning activities also increased from 58.10% in the pre-cycle to 87.92% in the third cycle. These findings suggest that the STAD model is efficacious in improving student learning outcomes and engagement.

Keywords: Application; Student Teams Achievement Divisions; Learning Outcomes

1. Introduction

Education is a long-term investment that determines the quality of future generations (Fadhilah & Dewi, 2025). Through education, students can develop the intellectual, emotional, social, and spiritual potential that exists within them. The educational process is not only about transferring knowledge, but also about building critical thinking skills, character, and readiness to face life's challenges (Arifin & Mu'id, 2024). Education is always closely related to the learning process in schools, where teachers have an essential role as facilitators to help students achieve optimal development (Peterson, 2020). In this context, education is a means to maintain, develop, and empower the potential of students so that they can be used as provisions for life in the future (Al Hamdany, 2022).

To improve the quality of education, teachers must be able to create innovative and varied learning experiences tailored to students' needs (Wahyuni & Haryanti, 2024). This is especially important in Islamic Religious Education and Ethics, where students are not only required to understand religious concepts but also to internalize moral values and apply them in daily life. Islamic Religious Education subjects include the Qur'an, Hadith, Fiqh, Moral Faith, and Islamic Cultural History, which require students' active engagement to understand and practice religious teachings (Rochim & Tolchah, 2024). Therefore, the right learning model is a key factor in the success

©Authors
This work is licensed under a Creative Commons Attribution 4.0 International License (CC BY 4.0).

of the learning process. An inappropriate learning model can make students passive, bored, and unmotivated, resulting in low learning achievement (Prijanto & De Kock, 2021).

Based on initial observations by researchers at Satap To'Bakkun State Junior High School, PAI learning remains centered on teachers, with a dominant lecture-based approach. This method cannot accommodate differences in students' abilities, making learning monotonous. Many students look less enthusiastic, have difficulty focusing, and do not actively participate during learning. Low-ability learners are increasingly falling behind, while high-ability students do not receive enough challenges to develop their potential. This condition shows that the learning process has not been effective and has not provided students with space to be actively involved.

In addition to finding problems in the learning process, the researcher also noted that the application of the Student Teams Achievement Divisions (STAD) type cooperative learning model that teachers have tried has not been optimal. This is due to improper group division, resulting in learning groups that are not heterogeneous in accordance with STAD's basic principles. Some groups consist of students with almost the same ability, whereas ideally, each group contains students with high, medium, and low ability. This inaccuracy in grouping prevents the full realization of the benefits of cooperative learning. As a result, group work becomes less effective and contributes only modestly to improving student learning outcomes.

Theoretically, the STAD-type cooperative learning model has great potential in improving learning outcomes because it provides opportunities for students to work together, discuss, and help each other in understanding the material (Aceany, 2021). Models developed by (Slavin, 1991) It emphasizes that studying in heterogeneous groups can increase students' motivation, responsibility, and academic achievement. In this model, students learn in small groups of 4–5 people to complete a joint task, then earn rewards based on group performance (Nugroho & Cendana, 2023). Many studies have proven the effectiveness of STAD as a learning model that increases student motivation, engagement, and learning achievement.

Recent research also supports the effectiveness of the STAD model in learning. (Tahariah, 2025) Found that applying STAD in Islamic Religious Education significantly increased students' average scores and their ability to work together. Research (Mubadillah & Sa'adah, 2025) Shows that the STAD model can increase students' motivation to learn and confidence by making them feel more comfortable learning in groups. Moreover (Gemilang, 2021) Revealed that the STAD model can improve students' critical thinking skills, mastery of concepts, and communication skills in religious subjects. The results of these studies indicate that STAD is effective in enhancing learning quality across diverse educational contexts.

However, there is a gap between the results of previous research and the empirical conditions at Satap To'Bakkun State Junior High School. Empirically, STAD has not been implemented in accordance with basic principles, especially regarding student grouping, so it has not led to optimal learning. Theoretically, previous studies have not examined the implementation of STAD in integrated schools in resource-limited settings, such as Satap To'Bakkun Junior High School. The limited number of learning facilities, the large number of students, and the heterogeneity of students' abilities pose challenges of their own that differ from those in other research contexts. In addition, some previous research has emphasized learning outcomes without examining in depth the dynamics of learning activities, motivation, and group interaction, which are essential aspects in the success of STAD.

Therefore, this research is essential for addressing this gap by examining how the STAD learning model can be effectively applied to improve learning outcomes and student engagement in Islamic Religious Education subjects. Based on the analysis of empirical problems and theoretical

gaps, this study is directed to answer two main questions: first, how to apply the STAD learning model in improving student learning outcomes in PAI subjects at SMP Negeri Satap To'Bakkun; second, how to increase student learning activities after the implementation of the STAD learning model during three cycles of classroom action.

The purpose of this study is to describe the implementation of the STAD learning model in improving student learning outcomes and to show an increase in student learning activities after the application of the model. This research is expected to help teachers choose the right learning model, improve the quality of PAI learning, and serve as a reference for schools in implementing more effective cooperative learning.

2. Method

This study uses the Classroom Action Research design to describe the application of the Student Teams Achievement Divisions (STAD) cooperative learning model to increase interest and learning outcomes in Islamic Religious Education subjects at Satap To'Bakkun State Junior High School. The class action research model used refers to Kurt Lewin's concept, which explains that the action research process takes place in a continuous cycle consisting of four stages, namely planning, action, observation, and reflection (Sanjaya, 2016). Through this cycle, actions can be continuously corrected based on the findings from each round.

The design of PTK in this study refers to the steps proposed (Lewin, 1946; Adelman, 1993), starting from the planning stage, which involves preparing improvement programs based on the researcher's initial ideas. The implementation stage is an action carried out in accordance with the STAD model learning plan. Furthermore, the observation stage assesses the effectiveness of actions and identifies weaknesses during the learning process. The last stage is reflection, which analyzes observation data to produce program improvements for the next cycle. This research is designed in three cycles, each carried out in a single meeting, as is usual in classroom action research.

The subject of the study is a class VIII A student at SMP Negeri Satap To'Bakkun in the even semester. All students in the class were included in the study because it aimed to assess the effectiveness of the STAD model across the classroom as a whole. The object of the study is the implementation of cooperative learning activities of the Student Teams Achievement Divisions (STAD) type in Islamic Religious Education subjects, including the dynamics of group work, student activity, and the achievement of learning outcomes.

The data collection techniques in this study include observation, written tests, and documentation. Observations were systematically conducted to record symptoms that emerged during the learning process, especially those related to the application of the STAD model. Observation focused on the learning activities of grade VIII A students during PAI (Student Teams Achievement Division) learning. Written tests are used to measure students' cognitive abilities and their mastery of the material. Tests are administered at the end of each cycle as a posttest to determine whether the STAD model improves student learning outcomes. Documentation is used as a complement, including photos of activities, field notes, grade lists, and other relevant archives.

Once all the data is collected, the next step is to analyze it and draw conclusions from the research results. The analysis of test results was carried out using the average formula (Sudijono, 2018), which is the total score divided by the number of students. Percentage analysis is also used to determine the completeness of student learning, using the formula $P = F/N \times 100\%$, where F is the number of students who complete and N is the total number of students. The analysis of learning activities was conducted by converting observation scores to percentages to assess increases in activity from the pre-cycle to the third cycle.

The interpretation of the level of student learning outcomes in this study refers to the categorization put forward by (Ed & Syah, 2019)., which divides the achievement of values into the categories of excellent, good, adequate, lack, and fail. This category helps researchers understand the patterns of change in students' learning outcomes, including the development of actions, attitudes, understanding, and skills during the learning process. Thus, this data analysis can provide a clear picture of the STAD model's effectiveness in improving student learning outcomes and activities.

Table 1. Categorization of Learning Outcomes

Number	Category
80-100	Excellent
70-79	Good
60-69	Enough
50-59	Less
0-49	Fail

3. Results

The results of the research were obtained through observation analysis and learning outcome tests conducted before the action and in cycles I, II, and III. Initial observations indicate that the learning activity of grade VIII A students at Satap To'Bakkun State Junior High School remains low. Learning takes place in one direction; students are less enthusiastic, and teacher-student interaction is minimal. Some students sit idle, chatting with friends, while only a few at the front of the class are active. This condition indicates that the learning process has not run optimally, so a more cooperative learning model is needed.

After the action using the Student Teams Achievement Divisions (STAD) model was implemented in cycle I, there was an increase in learning activities, though it was not sustained. Students are beginning to understand the flow of group work, but some remain passive, confused, and lack confidence. Learning activities increased from 58.10% in the pre-cycle to 73.42% in the first cycle. The results of the comprehension test in the first cycle showed an average score of 61.91%, which was in the "adequate" category.

In cycle II, the implementation of actions showed greater progress than in the previous cycle. Students begin to participate actively in discussions, their courage to ask questions increases, and cooperation among group members improves. Learning activities increased to 83.03%, while the average learning outcomes score increased to 82.26%. However, some students still look less confident, and some groups are not fully solid.

The peak of the increase occurred in cycle III, when activities and learning outcomes reached the outstanding category. Students are more focused, actively respond, and present the results of group work with confidence. Learning activities increased to 87.92%, and the average learning outcomes score reached 87.43%. Based on the reflection results, all indicators of learning success have been met, so there is no need for a follow-up cycle.

The following presents complete data on learning activities from pre-cycle to cycle III:

Table 2. Cumulative Data on Learning Activities of Students in Class VIII A

No.	Student Learning Activities	Pre-Cycle	Cycle I	Cycle II	Cycle III
1.	Students enter class on time	49,5	100	100	100
2.	Students answer greetings and prepare to receive lessons by praying	58	100	100	100

3.	Students respond politely when names are called	62,5	100	100	100
4.	Students are enthusiastic about taking lessons	60,5	62,17	78	86,5
5.	Students answer questions from educators	68,5	63,04	73,5	84
6.	Students pay attention to the explanation	75,5	68,67	73,5	88,5
7.	Students are active in learning	58,5	66,28	78	86,5
8.	Students take notes	49,5	60	69	75,5
9.	Students listen to instructions	60	59,76	82	82
10.	Students focus on learning materials	51,5	62,15	71	84
11.	Students respond to instructions	58	57,58	82	86,5
12.	Students conclude the learning material	56	73	75,5	75,5
13.	Students read the results of group discussions	49,5	55,26	80	82
14.	Students greet each other	56	100	100	100
Sum		813,5	1.027,91	1.162,50	1.231
Percentage		**58,1**	**73,42**	**83,03**	**87,92**

The results of the student comprehension test also show an increase in each cycle, as seen in the following table:

Table 3. Student Learning Comprehension Test Results

No.	Cycle	Discussion Points	Average Score
1.	Cycle I	Names & attributes of Allah's apostles	61,91
2.	Cycle II	Privileges of Rasul Ulul Azmi	82,26
3.	Cycle III	Benefits of believing in prophets and messengers	87,43

Overall, the increases in the value of learning activities from 58.10% to 87.92% and in the value of learning outcomes from 61.91% to 87.43% indicated that the implementation of the STAD model was highly effective. Changes in student learning behavior can also be seen from increased attention, cooperation, courage to ask questions, and the ability to conclude material. Thus, the STAD model has been proven to improve learning outcomes and the quality of learning activities in the Islamic Religious Education class VIII A at SMP Negeri Satap To'Bakkun.

4. Discussion

The study found that the application of the Student Teams Achievement Divisions (STAD) type cooperative learning model resulted in significant changes in the activities and learning outcomes of grade VIII A students at SMP Negeri Satap To'Bakkun. Before action is taken, learning tends to be one-way, dominated by lecture methods, and minimal interaction is allowed. Students seem less enthusiastic, have difficulty understanding the material, and do not show adequate involvement in the learning process. These preliminary findings suggest that previously used learning models are not yet suitable for accommodating students' diverse learning needs.

The implementation of actions in the first cycle showed an initial increase, although it was not optimal. Some students are starting to adapt to the STAD model, but others still feel confused, awkward, and lack confidence when working in groups. Learning outcomes in the first cycle averaged 61.91%, while learning activities averaged 73.42%, indicating a good category. The obstacles that arise are mainly related to unstable group dynamics, such as commotion during group division and a lack of student cooperation. This is natural because new students are adjusting to the latest learning model.

In cycle II, the improvement is more pronounced. Students show greater participation in group discussions, increased confidence in asking questions, and a better understanding of STAD workflows. The average score for learning outcomes increased to 82.26%, while learning activities reached 83.03%, already in the outstanding category. However, there are still a small number of passive students and some groups that have not worked together optimally. These findings indicate the need to strengthen teachers' supervisory roles to ensure that each group works in a balanced manner.

Cycle III showed the most significant improvement among all cycles. Students are more orderly, focused, and able to work well together in groups. The discussion was practical; students were able to present the results of their group work, and interaction between students increased. The value of learning activities reached 87.92%, and the average learning outcome reached 87.43%, indicating an outstanding category. This achievement demonstrates that the STAD model has improved learning outcomes and created a more active, collaborative, and conducive classroom atmosphere. With all success indicators met, the action was stopped in cycle III.

The findings of this study are in line with the research (Ramli, 2018) This shows that STAD improves students' ability to discuss and facilitates understanding of the material through group exchanges of ideas. Students say they enjoy learning more because they can work together and help each other understand the material. Research (Rahmawida, 2019) Also, reinforcing these results by showing that STAD significantly increases students' motivation, engagement, and learning value in PAI learning. The results of this study are consistent with its findings, especially in improving students' confidence in asking and answering questions.

Research (Parapat, 2018) Revealed that STAD is effective in helping students build knowledge through structured tasks, from information search to material conclusion. These findings are relevant to the learning dynamics in this study, in which students show improvement in collaborative and analytical skills across cycles. In addition, the research (Jayantika et al., 2024) Found that STAD can improve learning outcomes through strengthening social interaction and healthy competition between groups. This aligns with the conditions in this research class, where students are more excited when their group has the opportunity to present their learning results.

Research (Amrulloh et al., 2025) Also confirms that STAD can improve students' learning by providing space for equitable participation in groups. In addition, the research (Luthfiyani et al., 2025) Show that STAD improves students' critical thinking skills and confidence when they are allowed to explain and defend their opinions in a group. The similarity of the results of this study with those of the study further strengthens the view that the STAD model is highly effective in the context of Islamic Religious Education.

In practice, this study shows that the STAD model can be an effective alternative learning strategy for increasing student engagement, motivation, and learning outcomes. Teachers can leverage STAD to overcome learning saturation and facilitate more participatory learning. Heterogeneous group management, providing constructive feedback, and strengthening the role of teachers as facilitators are key to the successful implementation of this model (Firmansyah et al., 2025). In addition, STAD can be applied to a variety of subjects that require cooperation and an in-depth understanding of concepts.

From the theoretical side, this research contributes to the development of cooperative learning theory (Lewis & Williams, 1994), especially in the context of Islamic Religious Education. The study's results show that social interactions fostered through group work can improve students' cognitive and affective abilities while promoting mutual respect for friends' opinions and appreciation of their

perspectives. These findings reinforce the constructivist view that knowledge can be more powerfully constructed through interaction with the social environment.

Overall, this study shows that the STAD model is efficacious in improving student learning activities and outcomes, as well as significantly improving the quality of PAI learning. The increase observed in each cycle demonstrates that cooperative learning has a real impact on student learning behavior. This model deserves to be considered as one of the main approaches in classroom learning with heterogeneous student characteristics.

5. Conclusion

The results of this study show that the application of the Student Teams Achievement Divisions (STAD) cooperative learning model had a significant positive impact on students' learning outcomes in Islamic Religious Education and Ethics at SMP Negeri Satap To'Bakkun. Students became more active, enthusiastic, and engaged during the learning process, which contributed to the steady increase in their comprehension test scores across the three cycles: 61.91% in cycle I, 82.26% in cycle II, and 87.43% in cycle III. This improvement was supported by consistent growth in learning activity scores, rising from 58.10% in the pre-cycle to 73.42% in cycle I, 83.03% in cycle II, and 87.92% in cycle III. Students also demonstrated increased motivation, improved participation in asking and answering questions, and a stronger critical attitude, which helped them collaborate more effectively and solve problems during learning.

Based on these findings, the STAD model can be considered a practical and effective instructional approach for improving learning outcomes in Islamic Religious Education. Teachers are encouraged to adopt and further develop STAD-based learning strategies to enhance student engagement and foster cooperative learning skills. Future researchers are advised to explore the implementation of STAD in broader contexts and across different Islamic Religious Education materials to deepen the understanding of its effectiveness and to produce more comprehensive findings that contribute to the development of innovative learning models.

6. References

Adelman, C. (1993). Kurt Lewin and the Origins of Action Research. *Educational Action Research*, *1*(1), 7–24. https://doi.org/10.1080/0965079930010102

Al Hamdany, M. Z. (2022). Utilization of WhatsApp in English for Islamic Education Learning as a Media of Communication between Lecturers and Students. *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature*, *10*(1), 1027–1040. https://doi.org/10.24256/ideas.v10i1.2900

Amrulloh, M. S., Kurniawan, K., & Sajjad, A. M. (2025). Implementasi Model Kooperatif STAD dalam Pembelajaran IPS. *Dirasah : Jurnal Studi Ilmu Dan Manajemen Pendidikan Islam*, *8*(2), 676–688.

Arifin, B., & Mu'id, A. (2024). Pengembangan Kurikulum Berbasis Keterampilan Dalam Menghadapi Tuntutan Kompetensi Abad 21. *DAARUS TSAQOFAH Jurnal Pendidikan Pascasarjana Universitas Qomaruddin*, *1*(2), 118–128. https://doi.org/10.62740/jppuqg.v1i2.23

Aseany, L. K. A. (2021). Model pembelajaran kooperatif tipe STAD sebagai upaya meningkatkan prestasi belajar biologi. *Indonesian Journal of Educational Development (IJED)*, *2*(3), 450–460. https://doi.org/10.5281/zenodo.5681260

Ed, M., & Syah, M. (2019). Psikologi belajar. *Jakarta: Rajawali Pres*.

Fadhilah, R. A., & Dewi, F. A. (2025). Pendidikan Sebagai Investasi Jangka Panjang: Analisis Kebijakan Publik dan Pembiayaan Pendidikan di Indonesia. *Journal of Information Systems and Management (JISMA)*, *4*(3), 33–39. https://doi.org/10.4444/jisma.v4i3.1188

Firmansyah, Hayuani, & Hadijah, S. (2025). Implementasi Model Cooperative Learning Tipe STAD dalam Meningkatkan Hasil Belajar IPA di SDN 08 Lubuk Dalam. *EduSpirit : Jurnal Pendidikan Kolaboratif*, *2*(1), 218–222.

Gemilang, M. (2021). Implementasi Pembelajaran Kooperative Tipe Students Team Achievement Division (STAD) untuk Meningkatkan Kemampuan Berpikir Kritis dan Pemahaman Konsep. *Jurnal Kualita Pendidikan*, *2*(1), 1–10. https://doi.org/10.51651/jkp.v2i1.25

Jayantika, I. G. A. N. T., Kadek, M. P. N., & Made, A. S. N. (2024). Penerapan Model Pembelajaran Kooperatif Tipe STAD Untuk Meningkatkan Hasil Belajar Matematika Siswa. *Emasains : Jurnal Edukasi Matematika Dan Sains*, *13*(2), 10–18. https://doi.org/10.59672/emasains.v13i2.3606

Lewin, K. (1946). Action Research and Minority Problems. *Journal of Social Issues*, *2*(4), 34–46. https://doi.org/10.1111/j.1540-4560.1946.tb02295.x

Lewis, L. H., & Williams, C. J. (1994). Experiential Learning: Past and Present. *New Directions for Adult and Continuing Education*.

Luthfiyani, N. A., Hidayat, A., Agusta, A. R., & Sari, D. D. (2025). Meningkatkan Kemampuan Berpikir Kritis Dan Hasil Belajar Siswa Menggunakan Model Pelangi. *Jurnal Teknologi Pendidikan Dan Pembelajaran | E-ISSN : 3026-6629*, *3*(1), 72–83.

Mubadillah, R., & Sa'adah, F. M. (2025). Strategi Pembelajaran Kooperatif Tipe STAD Sebagai Solusi Alternatif Dalam Meningkatkan Motivasi Belajar Siswa. *SEUNEUBOK LADA: Jurnal ilmu-ilmu Sejarah, Sosial, Budaya dan Pendidikan*, *12*(2), 440–458. https://doi.org/10.33059/jsnbl.v12i2.12749

Nugroho, W. S., & Cendana, W. (2023). Model pengkajian kolaboratif tipe STAD (divisi pencapaian tim siswa) di sekolah dasar. *COLLASE (Creative of Learning Students Elementary Education)*, *6*(4), 649–653. https://doi.org/10.22460/collase.v6i4.17539

Parapat, I. K. (2018). *Meningkatkan Hasil Belajar Siswa Melalui Penerapan Pembelajaran Melalui Metode Student Teams Achievement Divisions (STAD) Pada Mata Pelajaran Akidah Akhlak Di Kelas VIII MTs Al Hasanah Medan*. http://repository.uinsu.ac.id/id/eprint/7768

Pitaloka, A. (2020). Untuk Apa Aku Mengenal Pendidikan. *Jakarta: Guepedia*.

Prijanto, J. H., & De Kock, F. (2021). Peran guru dalam upaya meningkatkan keaktifan siswa dengan menerapkan metode tanya jawab pada pembelajaran online. *Scholaria: Jurnal Pendidikan Dan Kebudayaan*, *11*(3), 238–251.

Rahmawida, R. (2019). *Penerapan Model Pembelajaran Kooperatif Tipe Student Teams Achievement Division (STAD) dalam Meningkatkan Hasil Belajar Pendidikan Agama Islam Peserta Didik Kelas VIII. 3 SMP Negeri 3 Mallusetasi Kabupaten Barru*. https://repository.iainpare.ac.id/id/eprint/1320

Ramli, R. (2018). Penerapan Model Pembelajaran Kooperatif Tipe Student Teams Achievement Division (Stad) Untuk Meningkatkan Hasil Belajar Pendidikan Agama Islam. *Jurnal Al-Ibrah*, *7*(2).

Rochim, M. F., & Tolchah, M. (2024). Ruang Lingkup Materi Pendidikan Agama Islam dalam Al Quran. *Risâlah Jurnal Pendidikan Dan Studi Islam*, *10*(3), 1228–1241. https://doi.org/10.31943/jurnal_risalah.v10i3.1128

Sanjaya, D. H. W. (2016). *Penelitian tindakan kelas*. Prenada Media.

Slavin, R. E. (1991). *Student Team Learning: A Practical Guide to Cooperative Learning. Third Edition*. National Education Association Professional Library, P. https://eric.ed.gov/?id=ED339518

Sudijono, A. (2018). Pengantar statistik pendidikan. *Jakarta: Rajawali Pres*.

Tahariah, T. (2025). Studi Strategi Pembelajaran Kooperatif Tipe STAD untuk Peningkatan Hasil Belajar PAI. *Analysis*, *3*(1), 104–110.

Wahyuni, S., & Haryanti, N. (2024). Optimalisasi Kompetensi Guru Dalam Pengembangan Pembelajaran Berdiferensiasi Berbasis Media Digital. *Wahana Dedikasi: Jurnal PkM Ilmu Kependidikan*, *7*(1), 142–154. https://doi.org/10.31851/dedikasi.v7i1.15974