Asatiza : Jurnal Pendidikan
P-ISSN: 2721-0723 | E-ISSN: 2716-3202
https://ejournal.stai-tbh.ac.id/index.php/asatiza

Enhancing Cognitive and Collaborative Outcomes in Islamic Education: A Classroom Action Research on the STAD Method in Aqidah Akhlak Learning

***Elbina Mamla Saidah[1,a], Wahyuni Wahyuni [2,b]**
[1, 2]Department of Islam Education, STAI Hubbulwathan Duri, Bengkalis, Riau, Indonesia
Email: [a]elbina1987@gmail.com; [b]wahyuniduri0@gmail.com

DOI: https://doi.org/10.46963/asatiza.v7i1.3163

Cite this Article:
Saidah, E., M., & Wahyuni, W. (2026). Enhancing cognitive and collaborative outcomes in Islamic education: A classroom action research on the STAD method in aqidah akhlak learning. *Asatiza: Jurnal Pendidikan, 7*(1), 15-27. https://doi.org/10.46963/asatiza.v7i1.3163

Keywords
Student Teams Achievement Divisions (STAD); Classroom Action Research; Aqidah Akhlak Learning Outcomes

Article History
Submitted: 10/08/2025
Revised: 26/12/2025
Accepted: 13/01/2026
Published: 31/01/2026

***Corresponding Author**
elbina1987@gmail.com

ABSTRACT

This study examines the effectiveness of the Student Teams Achievement Divisions (STAD) cooperative learning method in improving students' learning outcomes in the "Beriman Kepada Malaikat Allah" (Faith in Allah's Angels) chapter of the Aqidah Akhlak subject at MTs Asy-Syuhada. Employing a Classroom Action Research (CAR) design based on the Kurt Lewin model, the study was conducted in two cycles comprising planning, action, observation, and reflection stages with 26 seventh-grade students of Class VII B during the 2024/2025 academic year. Data were collected through learning outcome tests, observation sheets of student and teacher activities, and field notes, and analyzed using both quantitative and qualitative approaches. The findings reveal a significant improvement in students' learning outcomes across cycles, with the average score increasing from 72.1 with 65.3% mastery in Cycle I to 80.4 with 88.4% mastery in Cycle II, surpassing the minimum mastery criterion of 75. In addition, students' engagement and cooperative learning behaviors improved, particularly in the frequency of peer explanation, where students actively explained concepts to their group members, fostering both understanding and collaboration. These results indicate that STAD is effective not only in enhancing cognitive achievement but also in promoting active collaboration through structured peer interaction. Based on the findings, STAD is a promising strategy for text-based or discussion-heavy subjects in Islamic education at the junior secondary level, especially in subjects like Aqidah Akhlak that require active participation and group cooperation.

INTRODUCTION

Education is a fundamental pillar for shaping a competitive, ethical, and contributive generation. According to the National Education System Law (Law No. 20 of 2003), the goals of national education are to develop the potential of students to become individuals who are faithful and devoted to God Almighty, possess noble character, are healthy, knowledgeable, capable, creative, independent, and responsible citizens. This

formulation reflects the philosophical foundations of national education rooted in Pancasila values and the Indonesian legal framework (Kasiono et al., 2022; Rukiyati, 2020). To achieve these goals, the teacher's role as a learning facilitator and classroom manager is crucial. Teachers are expected not only to transfer knowledge but also to create interactive learning environments, motivate students, and select appropriate instructional strategies to enhance learning outcomes (Tambak & Sukenti, 2024).

Learning outcomes are among the key indicators of the success of the learning process and are influenced by a variety of internal and external factors, including the teaching methods employed. Traditional or monotonous teaching methods tend to reduce students' motivation, engagement, and comprehension, which ultimately hinders competency achievement. Therefore, innovative and participatory learning approaches are needed to foster students' active involvement and understanding. One such approach is the *Student Teams Achievement Divisions* (STAD) cooperative learning model, developed by Slavin, which emphasizes teamwork, mutual responsibility, and equal opportunity for success.

Theoretically and empirically, the Student Teams Achievement Divisions (STAD) cooperative learning model is grounded in principles of active learning and social constructivism that emphasize meaningful student engagement through structured peer interaction. STAD promotes collaboration within heterogeneous groups by encouraging peer explanation, shared problem solving, and mutual academic support—processes that are essential for deep conceptual understanding. Research on cognitive engagement demonstrates that learning activities requiring students to explain ideas to peers, negotiate meaning, and collaboratively construct knowledge result in deeper and more durable learning outcomes compared to passive instructional approaches (Chi & Wylie, 2014). These theoretical perspectives are strongly supported by empirical evidence. Meta-analytic studies consistently report that cooperative learning approaches, including STAD, produce significant positive effects on students' academic achievement, engagement, and motivation across subjects and educational levels (Kyndt et al., 2013; Slavin, 1995; Springer et al., 1999). In addition, recent empirical studies confirm that STAD-based instruction enhances learning outcomes by fostering positive interdependence, equal participation, and shared responsibility within learning groups

(Yuliastuti Y et al., 2023). Empirically, numerous studies have documented the effectiveness of the STAD model in improving student learning outcomes across various subjects and educational contexts. Recent quasi-experimental studies report that STAD significantly improves academic achievement in general subjects such as Mathematics, Science, and Language learning (Anggraini et al., 2025; Elffani Alpina & Cut Misni Mulasiwi, 2025; Utama & Abidin, 2025). Large-scale reviews further confirm that students engaged in cooperative learning environments consistently outperform those in individualistic or traditional instructional settings, particularly in terms of achievement, engagement, and learning retention (Slavin, 1995; Springer et al., 1999).

However, preliminary observations at MTs Asy-Syuhada, particularly in Class VII B, indicate that students' learning outcomes in *Akidah Akhlak* remain below the expected standards. Out of 26 students, only five (19.2%) reached the Minimum Mastery Criteria (KKM) of 75, while the remaining 21 students (80.7%) did not achieve mastery. These learning difficulties are accompanied by low student motivation, limited peer interaction, and teacher-dominated instructional practices that result in one-way communication. Such conditions highlight the urgency of implementing instructional strategies that actively engage students and promote meaningful learning experiences.

Although previous studies have widely examined the effectiveness of the STAD model in general subjects, research focusing on its application in Islamic religious education remains limited. In particular, few studies have investigated the implementation of STAD in Akidah Akhlak instruction, a subject that emphasizes not only cognitive achievement but also affective and behavioral development. This lack of subject-specific empirical evidence indicates a clear research gap and underscores the need to explore how cooperative learning strategies such as STAD can be effectively implemented to improve learning outcomes in Akidah Akhlak at the junior Islamic secondary school (Madrasah Tsanawiyah) level.

Despite the extensive body of research demonstrating the effectiveness of the Student Teams Achievement Divisions (STAD) cooperative learning model in general subjects such as Mathematics, Science, and Language learning, empirical investigations within the context of Islamic religious education remain limited. Meta-analytic evidence consistently shows that cooperative learning models, including STAD, produce moderate

to strong positive effects on students' academic achievement across various subjects and educational levels (Kyndt et al., 2013; Slavin, 1995). Recent empirical studies further confirm that STAD significantly improves learning outcomes and collaborative skills in cognitively oriented subjects such as physics and mathematics (Prayogi et al., 2025). However, these studies predominantly focus on general and content-heavy disciplines and often overlook subjects that integrate cognitive, affective, and behavioral learning outcomes, such as Akidah Akhlak. Moreover, existing research on cooperative learning in Islamic education tends to emphasize conceptual or theoretical integration rather than documenting classroom-based instructional practices and their measurable impact on student learning outcomes. Consequently, there is a lack of empirical evidence explaining how STAD functions within Akidah Akhlak instruction, particularly at the junior Islamic secondary school level (Madrasah Tsanawiyah). This gap underscores the need for classroom-based action research that examines not only learning outcomes but also changes in student engagement during the implementation of STAD in Akidah Akhlak learning contexts.

Based on this rationale, this study seeks to address the following research question: How does the implementation of the Student Teams Achievement Divisions (STAD) cooperative learning method improve students' learning outcomes in Akidah Akhlak, and what changes occur in student engagement during the learning process among Class VII students at MTs Asy-Syuhada?

METHOD

This study employed a Classroom Action Research (CAR) approach based on the cyclical model of inquiry, which comprises planning, action implementation, observation, and reflection. CAR was selected because it is a *systematic, teacher-driven research design* that enables educators to identify instructional challenges, implement targeted interventions, and evaluate the effects of those interventions through structured reflection. In educational research, CAR has been recognized as an effective strategy for enhancing teacher professionalism and improving learning quality, as it encourages teachers to continuously reflect on and adjust their instructional practices in response to classroom dynamics (Syaridawati et al., 2025). The research was conducted at MTs Asy-Syuhada,

Duri XIII, Bathin Solapan Subdistrict, Bengkalis Regency, Riau Province, during the odd semester of the 2024/2025 academic year (January–March 2025).

The research subjects consisted of 26 students from Class VII B, including 9 female and 17 male students. This class was purposively selected due to its low average learning outcomes in Akidah Akhlak and the observed passive participation of students during previous lessons, as indicated by minimal peer interaction and teacher-dominated instructional practices. Classroom actions were implemented collaboratively by the Akidah Akhlak subject teacher, while the researcher acted as an observer who documented the instructional process and student responses throughout the intervention. The research was conducted in two cycles, each comprising two meetings. Each cycle followed four stages: (1) planning, which involved designing lesson plans and instructional materials based on the STAD cooperative learning model; (2) action, which involved implementing STAD procedures in classroom instruction; (3) observation, which focused on monitoring student engagement and learning activities; and (4) reflection, which involved analyzing the results to inform improvements in the subsequent cycle. Cycle I emphasized strengthening students' basic conceptual understanding through heterogeneous group formation, while Cycle II focused on refining instructional strategies based on challenges identified during Cycle I.

Data were collected through observation, interviews, and learning outcome tests. Observations were conducted to document student engagement, collaborative behaviors, and teacher instructional practices during the learning process. Semi-structured interviews were conducted with the homeroom teacher and a sample of five students after each cycle to obtain in-depth feedback on students' collaborative learning experiences, perceived challenges, and responses to the implementation of the STAD method. Learning outcome tests were administered at the end of each cycle to measure students' cognitive achievement in Akidah Akhlak. The test instruments were developed based on the learning objectives of the topic *Belief in Angels of Allah* and were validated by two subject matter experts to ensure content validity. Instrument reliability was tested through a pilot administration, resulting in a Cronbach's Alpha coefficient of 0.78, indicating acceptable reliability. Data analysis employed both qualitative and quantitative techniques. Qualitative analysis was used to describe instructional implementation,

emerging challenges, and changes in student engagement, while quantitative analysis focused on calculating mean scores and mastery percentages. The intervention was considered successful if at least 75% of students achieved a minimum score of 75, in accordance with the Minimum Mastery Criteria (KKM) for the Akidah Akhlak subject.

RESULT AND DISCUSSION

Results

The study was conducted in two cycles, with each cycle consisting of two meetings. The improvement in the learning outcomes of Class VII students in the subject of *Akidah Akhlak* at MTs Asy-Syuhada through the implementation of the Student Teams Achievement Divisions (STAD) cooperative learning method was measured using post-tests administered at the end of each cycle.

Cycle I was conducted on Tuesday, January 21, 2025, at MTs Asy-Syuhada, Duri XIII. The activities carried out during this cycle followed the four phases of classroom action research: planning, action implementation, observation, and reflection. In the planning stage, the researcher prepared all the necessary tools and steps for conducting the study, including learning materials, a teaching module aligned with the topic *Faith in Allah's Angels*, student worksheets (named LKPD in Merdeka Curriculum), and a post-test to assess learning outcomes. These preparations were discussed collaboratively with the *Akidah Akhlak* subject teacher.

The teacher then implemented the lesson based on the STAD cooperative learning method. The instructional process was divided into three phases: introduction, main activities, and closing, all of which were aligned with the pre-prepared teaching module.

During the introduction, the teacher greeted the students, led a prayer, checked attendance, introduced the topic, and connected it to students' daily lives. The teacher also explained the learning objectives and competencies to be achieved through the STAD method.

The main learning activities were implemented following the standard Student Teams Achievement Divisions (STAD) cooperative learning procedure. First, during the class presentation stage, the teacher introduced the learning objectives and presented the

core material on *Belief in Angels of Allah* through guided explanation and examples aligned with the prepared teaching module and student worksheets (LKPD).

Second, students were organized into heterogeneous teams of five to six members for the team study stage. Within their groups, students discussed the learning material, worked collaboratively on the LKPD tasks, and engaged in peer explanation to ensure that all group members understood the concepts. The teacher facilitated group discussions and provided guidance when necessary.

Third, students completed an individual quiz at the end of the lesson without assistance from their peers. The quiz aimed to measure each student's individual understanding of the learning material. Students' quiz scores were then compared with their previous performance to calculate individual improvement scores, which emphasized personal progress rather than absolute achievement.

Finally, team recognition was conducted by awarding groups whose members demonstrated the highest average improvement scores. This recognition served to strengthen positive interdependence, motivate students to support one another's learning, and encourage active participation throughout the learning process. In the closing phase, the teacher and students reviewed the material, provided moral takeaways, and concluded the lesson with a closing greeting.

Cycle I was conducted in two meetings following the implementation of the Student Teams Achievement Divisions (STAD) cooperative learning model in Akidah Akhlak instruction, focusing on the topic of Belief in Angels of Allah (*Beriman Kepada Malaikat Allah*). Students' learning outcomes were measured using a post-test administered at the end of the cycle to assess their cognitive achievement related to this topic.

The results of Cycle I are presented in Table 1, which summarizes students' average scores and mastery percentages. The data indicate an improvement in the average learning scores from the first to the second meeting of Cycle I. Nevertheless, the proportion of students who achieved the Minimum Mastery Criteria (KKM ≥75) had not yet reached the predetermined success threshold of 75% of the class.

Table 1. *Students' Learning Outcomes in Cycle 1*

Meeting	Number of Students	Average Score	Mastery Percentage
I	26	72.1	42%
II	26	77.4	65.3%

Classroom observations revealed that during discussions on the concept and roles of angels in Islamic belief, several students remained hesitant to articulate their understanding and tended to rely on more dominant group members. Limited peer explanation and uneven participation within groups reduced the effectiveness of collaborative learning, indicating the need for instructional refinement in the subsequent cycle.

Based on the data analysis, there was an improvement in both the average score and the percentage of mastery from the first to the second meeting in Cycle I. This indicates that by the end of Cycle I, 17 students had achieved the mastery level with scores above 75 (the Minimum Mastery Criteria/KKM), while 9 students had not yet reached the required standard. This result reflects a positive trend in students' learning progress, although further improvement is still needed to achieve the expected level of completeness in the following cycle.

The learning outcomes obtained in Cycle I have not yet reached an optimal level. Based on the results of observation and reflection conducted by the researcher together with the teacher, several problems were identified as follows:

1. Some students were still not punctual in attending class, and several others were not yet active during the learning process, such as being reluctant to ask questions or express their opinions.
2. At the beginning of the meeting, during the formation of groups, some students were unwilling to join their assigned groups, resulting in a less conducive classroom atmosphere.
3. There were also students who did not complete their learning tasks on time.

Based on these reflections, several improvement actions were planned for Cycle II. The teacher would direct students to pay more attention during material explanation, provide guidance and motivation for students to work cooperatively and orderly within their groups, and maintain classroom discipline. The teacher would also emphasize the material more deeply and encourage students to actively ask questions about content they

did not yet understand. In addition, the teacher would give warnings and closer supervision to students who were inactive, talking among themselves, daydreaming, or playing, and strive to create a more enjoyable and interactive learning atmosphere.

Furthermore, the students' learning outcomes in Cycle II during the first and second meetings can be seen in the following table.

Table 2. *Students' Learning Outcomes in Cycle II*

Meeting	Number of Students	Average Score	Mastery Percentage
I	26	77,4	80.7%
II	26	80,4	88.4%

Based on the data obtained in Cycle II, the second meeting showed that 88.4% or 23 out of 26 students achieved learning mastery. The substantial increase in mastery learning from 65.3% in Cycle I to 88.4% in Cycle II indicates that the STAD cooperative learning model was particularly effective within the context of Aqidah Akhlak instruction. This subject requires students not only to memorize doctrinal concepts but also to internalize abstract moral and theological values, such as belief in angels and their roles in Islamic teachings. Peer discussion within heterogeneous groups enabled students to articulate their understanding, clarify misconceptions, and negotiate meaning collaboratively. Such social interaction is crucial in Aqidah Akhlak learning, where values are better internalized through dialogue, reflection, and shared interpretation rather than through one-way transmission of information.

The improvement in learning outcomes and student participation in Cycle II was closely related to the instructional refinements implemented based on the reflection of Cycle I. The teacher's strategy of providing closer supervision**,** more equitable guidance to all group members**,** and positive reinforcement during group discussions directly addressed the issues of passive participation and group domination observed in the previous cycle. As a result, students became more willing to contribute ideas, ask questions, and complete tasks collaboratively. This more balanced participation within groups corresponded with the higher average scores and mastery percentages achieved in Cycle II, demonstrating a clear cause–effect relationship between the planned interventions and learning outcomes.

The test results obtained from Cycles I and II showed an improvement through the implementation of the Cooperative Learning Method of the STAD type. This can be seen from the data presented in Tables 1 and 2, which indicate a 23% increase in scores from the second meeting of Cycle I to the second meeting of Cycle II.

Discussion

Therefore, this study demonstrates an improvement in learning outcomes in the *Aqidah Akhlak* subject through the application of the Cooperative Learning Method of the STAD type. The findings of this research align with empirical evidence showing that cooperative learning models such as STAD significantly improve students' academic achievement by fostering collaboration and individual responsibility in structured group activities. Research indicates that cooperative learning strategies—characterized by the formation of heterogeneous groups, collaborative problem-solving, shared goals, and individual accountability—are associated with meaningful improvements in student learning outcomes compared to traditional instructional methods (Kilpeläinen-Pettersson et al., 2025). Furthermore, meta-analytic evidence demonstrates that cooperative learning approaches yield positive effects on academic performance and student engagement across various educational contexts and subject areas, with moderate to substantial effect sizes (Boke et al., 2025). These outcomes support the notion that STAD and similar cooperative strategies enhance both cognitive achievement and social interaction, confirming that structured peer support and group interdependence contribute to improved motivation and academic success. These findings reinforce the present study's results, which show a marked improvement in mastery learning and student engagement following the structured implementation of STAD in Aqidah Akhlak classrooms.

Empirical studies have demonstrated that the application of the Student Teams Achievement Divisions (STAD) cooperative learning model contributes to the development of students' critical thinking skills and strengthens collaborative values in classroom learning. Research on cooperative learning indicates that structured group interaction and positive interdependence within STAD encourage higher-order thinking and meaningful peer collaboration (Gillies, 2016). Moreover, recent meta-analytic evidence shows that cooperative learning approaches, including STAD, are effective in

enhancing students' intrinsic motivation, particularly when teachers provide autonomy-supportive feedback and positive reinforcement during group discussions (Liu & Lipowski, 2021).

In the context of *Aqidah Akhlak* learning, this model allows students to exchange perspectives and strengthen their understanding of religious concepts. Thus, the application of the STAD method in *Aqidah Akhlak* instruction can serve as an effective strategy to improve learning outcomes while simultaneously developing students' social skills.

CONCLUSION

The implementation of the Student Teams Achievement Divisions (STAD) cooperative learning method proved effective in improving the learning outcomes of seventh-grade students in the Aqidah Akhlak subject at MTs Asy-Syuhada. This effectiveness is evidenced by the successful attainment of the study's success criterion, in which 88.4% of students achieved scores above the Minimum Mastery Criteria (KKM ≥ 75) in Cycle II, indicating a substantial improvement compared to Cycle I. The classroom action research conducted in two cycles demonstrated a consistent increase in both average scores and mastery percentages, confirming the positive impact of STAD on students' academic achievement.

Beyond cognitive improvement, the application of the STAD method also resulted in observable positive changes in students' learning behavior. This improvement was reflected in a clear shift from passive learning patterns in Cycle I—characterized by limited peer interaction and reliance on dominant group members—toward active peer explanation, more balanced participation within groups, and increased responsibility for individual learning tasks in Cycle II. The structured stages of STAD, including heterogeneous group work, individual accountability through quizzes, and team recognition, fostered positive interdependence and encouraged students to actively engage in collaborative learning processes. These findings indicate that STAD is not only effective in enhancing learning outcomes but also particularly relevant for Aqidah Akhlak instruction, which emphasizes both conceptual understanding and the internalization of social and moral values.

Based on these results, the STAD cooperative learning method can be recommended as an effective alternative instructional strategy for Aqidah Akhlak learning at the madrasah level, particularly at the junior secondary (Madrasah Tsanawiyah) level. Given that this study was limited to one subject, one class, and a short-term classroom action research design, future studies are encouraged to apply and examine the STAD model in other Islamic religious education subjects, such as Fiqh or Quranic Studies, which similarly involve conceptual understanding and value internalization. In addition, further research employing longer-term or quasi-experimental designs is recommended to assess the sustainability of learning outcomes and to explore the retention of both cognitive and affective dimensions of learning resulting from STAD implementation.

REFERENCES

Anggraini, D. A., Mashfufah, A., Rahayuningsih, S., Kuswandi, D., & Ramli, M. (2025). The effectiveness of the stad type cooperative learning model on student learning outcomes: Systematic literature review (SLR) with the PRISMA protocol. *Eduvest - Journal of Universal Studies*, *5*(4 SE-Articles), 4744–4761. https://doi.org/10.59188/eduvest.v5i4.50011

Chi, M. T. H., & Wylie, R. (2014). The ICAP framework: Linking cognitive engagement to active learning outcomes. *Educational Psychologist*, *49*(4), 219–243. https://doi.org/10.1080/00461520.2014.965823

Elffani Alpina, & Cut Misni Mulasiwi. (2025). The effect of student team achievement division (STAD) cooperative learning model on social attitudes and economic learning outcomes. *Jurnal Profesi Keguruan*, *11*(1), 1–24. https://doi.org/10.15294/jpk.v11i1.25418

Gillies, R. M. (2016). Cooperative learning: Review of research and practice. *Australian Journal of Teacher Education*, *41*(3), 39–54. https://doi.org/10.14221/ajte.2016v41n3.3

Kasiono, Bahaking Rama, & Muhammad Rusdi Rasyid. (2022). Nuansa pendidikan Islam dalam UU RI no. 20 tahun 2003 tentang sisdiknas: Peran dan tujuan pendidikan nasional. *PIJAR: Jurnal Pendidikan dan Pengajaran* , *1*(1 SE-Articles), 93–100. https://doi.org/10.58540/pijar.v1i1.133

Kilpeläinen-Pettersson, J., Koskinen, P., Lehtinen, A., & Mäntylä, T. (2025). Cooperative learning in higher education physics–A systematic literature review. *International Journal of Science and Mathematics Education*, *23*(7), 2707–2729. https://doi.org/10.1007/s10763-024-10538-3

Kyndt, E., Raes, E., Lismont, B., Timmers, F., Cascallar, E., & Dochy, F. (2013). A meta-analysis of the effects of face-to-face cooperative learning. Do recent studies falsify

or verify earlier findings? *Educational Research Review*, *10*, 133–149. https://doi.org/https://doi.org/10.1016/j.edurev.2013.02.002

Liu, T., & Lipowski, M. (2021). Influence of cooperative learning intervention on the intrinsic motivation of physical education students—a meta-analysis within a limited range. *International Journal of Environmental Research and Public Health*, *18*(6), 1–11. https://doi.org/10.3390/ijerph18062989

Rukiyati, R. (2020). Tujuan pendidikan nasional dalam perspektif Pancasila. *Humanika: Kajian Ilmiah Mata Kuliah Umum*, *19*(1 SE-Articles), 56–69. https://doi.org/10.21831/hum.v19i1.30160

Slavin, R. E. (1995). Cooperative learning: Theory, research, and practice. *Allyn and Bacon*.

Springer, Leonard, Stanne, Mary Elizabeth, & Donovan, Samuel S. (1999). Effects of small-group learning on undergraduates in science, mathematics, engineering, and technology: a meta-analysis. *Review of Educational Research*, *69*(1), 21–51. https://doi.org/10.3102/00346543069001021

Syaridawati, Ondeng, S., & Mustami, K. (2025). Improving teacher professionalism through classroom action research to achieve better national education quality. *Golden Ratio of Data in Summary*, *5*(4), 117–126. https://doi.org/10.52970/grdis.v5i4.980

Tambak, S., & Sukenti, D. (2024). Islamic professional madrasa teachers and motivation for continuous development: A phenomenological approach. *EduLearn*, *19*(1), 81–90. https://doi.org/https://doi.org/10.11591/edulearn.v19i1.21301

Utama, P. P., & Abidin, M. (2025). Effectiveness of STAD (Student Team Achievement Division) Cooperative learning method to improve students' cognitive learning outcomes. *Al-Irfan : Journal of Arabic Literature and Islamic Studies*, *8*(1 SE-Articles), 233–247. https://doi.org/10.58223/al-irfan.v8i1.306

Yuliastuti Y, Degeng I, & Leksono I. (2023). The influence of cooperative learning model student team achievement division (STAD) and learning motivation on learning outcomes. *EDUCATIO: Journal of Education*, *8*(1), 431–443. https://doi.org/10.29138/educatio.v8i1.1390*a*