

IMPLEMENTATION OF THE TWO STAY TWO STRAY LEARNING MODEL IN IMPROVING STUDENTS' LEARNING OUTCOMES IN THE PAI SUBJECT (CLASSROOM ACTION RESEARCH AT SDS BUDI HARAPAN EAST JAKARTA)

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Abstract

Islamic Religious Education (PAI) learning on the element of Islamic Cultural History in elementary schools is often faced with low learning outcomes due to the use of monotonous conventional methods. This study aims to analyze the application of the Two Stay Two Stray learning model in improving PAI learning outcomes and measuring the effectiveness of its performance at SDS Budi Harapan East Jakarta. The methodology used is Classroom Action Research (CAR) model Kemmis and McTaggart which was implemented in three cycles on 19 students in grade 5. Data were collected through observation, interviews, evaluation tests, and documentation, then analyzed qualitatively and quantitatively descriptively. The results showed an increase in the average class value from 71.42 in the pre-action to 77.32 in cycle I, 81.95 in cycle II, and 89.32 in cycle III, with the percentage of classical completeness jumping from 31.58% to 95.00%. The conclusion of the study states that the application of the Two Stay Two Stray model is very effective in improving learning outcomes and student activeness. The novelty of this research lies in the modification of the Two Stay Two Stray structure which combines interaction between groups with intensive scaffolding assistance from the teacher to explain complex material concepts.

Keywords: Classroom Action, Islamic Education, Learning Outcomes



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INTRODUCTION

National education aims to create a planned learning environment that actively develops students' potential. Islamic Religious Education (PAI) plays a crucial role in shaping the character, piety, and moral values of elementary school students. Educators are responsible for packaging the material so that it can be absorbed meaningfully by students (Manik, 2023).

According to Coales, (2022), learning models serve as a means to increase student engagement, develop critical thinking skills, and facilitate competency achievement. This theoretical basis emphasizes the importance of selecting a student-centered learning model to create a conducive classroom atmosphere.

The use of cooperative learning strategies has been proven to foster positive group dynamics and communication between students. Interaction between students facilitates a more meaningful understanding of the material. Small group activities also foster social responsibility and the active involvement of all class members (Cacaj, 2025).

Islamic Religious Education (PAI) learning encompasses various elements of material, including Islamic Cultural History (SKI), which requires mastery of facts, role models, and an understanding of historical values. Budi Harapan Private Elementary School (SDS) in East Jakarta implements routine religious habituation activities to strengthen the quality of religious learning. The supportive school environment provides space for the implementation of learning innovations (Ismail, 2022).

The Two Stay Two Stray type of cooperative learning model provides a systematic group work structure, allowing students to share information between groups in turns.(Frost, 2025). The implementation of this model has been proven in various previous studies to optimize student enthusiasm in learning activities. Mastery of material concepts becomes more solid through repeated discussion processes (Herbst, 2022).

The reality of Islamic Religious Education (PAI) learning in fifth-grade students at Budi Harapan Elementary School in East Jakarta is less than ideal. Initial observations revealed that 13 out of 19 students scored below the Minimum Completion Criteria (KKM) of 75, with a class average of only 71.42. This low level of learning completion indicates serious obstacles to students' understanding of the material.

Saber, (2025) states that the use of monotonous conventional methods can reduce learning motivation and cause students to become passive. This theoretical perspective is reflected in the SKI learning process at Budi Harapan Elementary School, which still relies on one-way lectures. The teacher's dominant role limits students' active participation in the classroom.

Learning Islamic Cultural History is often perceived as boring material and full of memorizing years and names of figures (Sholeh, 2024). Students receive fewer opportunities to discuss, express their opinions, or explore the material independently. A classroom atmosphere characterized by a culture of silence reduces students' critical thinking and interest in Islamic Religious Education (Miller, 2025).

The research gap lies in the limited application of the modified Two Stay Two Stray cooperative learning model which combines student activity with direct guidance from teachers in Islamic Religious Education subjects at the elementary school level.(Martindale, 2022)This classroom action research specifically documents the impact of the intervention model on improving student learning outcomes. Periodic evaluation is essential to measure the extent to which problems in understanding SKI material can be resolved (Hasanah, 2024).

Classroom Action Research (CAR) using the Kemmis and McTaggart model is a concrete solution to address Islamic Religious Education (PAI) learning challenges at Budi Harapan Elementary School. The implementation of the Two Stay Two Stray model provides equal opportunities for students to act as both guests (stayers) and information seekers (strays). This dynamic shift encourages balanced physical and mental engagement.

According to Latipah, (2023), the Two Stay Two Stray cooperative learning model is able to share results and information between groups effectively, thereby stimulating individual responsibility and group cooperation. This framework strengthens the rationale for choosing the Two Stay Two Stray model to increase students' active involvement and retention of Islamic Religious Education material.

The purpose of this classroom action research is to analyze the effectiveness of the implementation of the Two Stay Two Stray model in improving Islamic Religious Education (PAI) learning outcomes in the history element and to identify supporting and inhibiting factors. The action hypothesis states that the implementation of the Two Stay Two Stray learning model can significantly improve students' learning outcomes in the Islamic Religious Education subject for grade 5 at SDS Budi Harapan, East Jakarta. The implementation of this model is expected to have a sustainable positive impact on the quality of learning in elementary schools.

RESEARCH METHOD

Research Design

This study implemented a Classroom Action Research (CAR) design based on an integrated qualitative and quantitative approach. The researchers employed the Kemmis and McTaggart CAR model, implemented in three cycles. Each cycle consisted of four main stages: planning, action, observation, and reflection. The iterative cycle aimed to gradually address the weaknesses of conventional learning through the implementation of the Two Stay Two Stray cooperative model (Hossain, 2026).

Research Target/Subject

The research subjects included 19 Muslim students in grade 5 of Budi Harapan Elementary School, East Jakarta, in the 2025/2026 academic year. The research object focused on the overall implementation process and learning outcomes of Islamic Religious Education (PAI), particularly the Islamic Cultural History element through the application of the Two Stay Two Stray model. The activity location was at Budi Harapan Elementary School, located at Jalan Budi Harapan Number 11, Cipinang Melayu, East Jakarta. The time allocation for implementing the learning improvement lasted for six months, starting from February 2025 to July 2026 in the odd semester.

Research Procedure

The implementation procedure is designed to follow Kemmis and McTaggart's continuous spiral cycle. The planning stage includes the preparation of teaching modules/lessons learned, the creation of learning media, the determination of achievement indicators, and the preparation of test instruments and observation sheets (Zainuddin, 2023). The implementation stage involves implementing preliminary activities, core activities with a Two Stay Two Stray flow (two students are tasked with maintaining information at the post and two students visit other groups), and closing activities. The observation stage records all teacher and student learning activities using an observation format. The reflection stage

analyzes observation and test data to determine follow-up improvements in the next cycle (Zainal, 2025).

Instruments, and Data Collection Techniques

The data collection technique utilized a triangulation approach to ensure the validity of the information. Observation sheets were used as an instrument to record detailed teacher and student activities during the learning process (Yang, 2025). A structured interview guide was prepared to explore teacher perceptions, readiness, and student responses to cooperative learning. Final evaluation test questions were developed as a written test instrument to measure Islamic Religious Education (PAI) learning outcomes at the end of each cycle. Documentation included attendance lists, initial achievement records, teaching modules, and photographic evidence of classroom learning activities (Ganguly, 2026).

Data Analysis Technique

The data analysis technique combines qualitative and quantitative descriptive analysis methods. Qualitative data are analyzed descriptively to describe the development of attitudes, enthusiasm, participation, and social interactions of students during the discussion. Quantitative data are processed by calculating the average class value and the percentage of student learning completion using the percentage formula ($P = F/N \times 100\%$). The completion criteria are declared successful if at least 80% of students achieve the KKM score of 75 and there is an increase in active participation in class.

RESULTS AND DISCUSSION

Classroom action research at Budi Harapan Elementary School, East Jakarta, involved 19 fifth-grade students in Islamic Religious Education (PAI). Quantitative data collection included summative test scores from pre-action, cycle I, cycle II, and cycle III. The quantitative data are presented in detail to illustrate improvements in student learning outcomes.

Table 1. Recapitulation of Student Learning Outcomes Pre-Action, Cycle I, Cycle II, and Cycle III

Research Stage	Total Value	Class Average	Total Completed	Unfinished Amount	Completion Percentage	Information
Pre-Action	1,357	71.42	6	13	31.58%	Very less
Cycle I	1,469	77.32	11	8	57.89%	Low
Cycle II	1,557	81.95	16	3	84.21%	Very high
Cycle III	1,697	89.32	18	1	95.00%	Very high

Table 1 narrative notes the development of the class average score that has increased consistently. The pre-action class average score of 71.42 increased to 77.32 in cycle I. The average score achievement rose again to 81.95 in cycle II and peaked at 89.32 in cycle III. Classical learning completion data showed a significant growth trend. The initial completion percentage of 31.58% increased to 57.89% in cycle I. The learning completion rate shot up to 84.21% in cycle II and reached 95.00% at the end of cycle III.

The primary cause of the low pre-action learning outcomes stems from the use of conventional learning methods. The one-way delivery of Islamic Cultural History material

leads to student boredom in the classroom. The teacher-centered nature of learning limits active student participation.

Table 2. Results of Observations of Teacher Activities from Pre-Action to Cycle III

Research Stage	Score Obtained	Maximum Score	Performance Percentage	Category
Pre-Action	20	40	50.00%	Not enough
Cycle I	30	40	75.00%	Good
Cycle II	35	40	88.00%	Very well
Cycle III	40	40	100.00%	Very good

Table 2 shows a gradual increase in the percentage of teacher activity implementation. The pre-action teacher performance score of 20 (50.00%) fell into the poor criteria. Improved actions increased the teacher score to 30 (75.00%) in cycle I, 35 (88.00%) in cycle II, and 40 (100.00%) in cycle III. The change in teacher performance percentage reflects the shift in the educator's role in the classroom. Educators transformed from conventional teachers to effective cooperative learning facilitators. Improved teacher guidance directly improved the flow of student learning interactions.

Observations of student activity measured four key indicators during Islamic Religious Education (PAI) learning. Observation indicators included student attention, questioning skills, group collaboration, and enthusiasm for learning. Assessments used a structured observation sheet with a Likert scale.

Table 3. Results of Observations of Student Activities from Pre-Action to Cycle III

Research Stage	Score Obtained	Maximum Score	Activity Percentage	Category
Pre-Action	19	40	47.50%	Not enough
Cycle I	28	40	70.00%	Enough
Cycle II	37	40	92.50%	Very good
Cycle III	38	40	95.00%	Very good

Table 3 presents the student activity development scores during the three action cycles. The student activity score in the initial condition only reached 19 (47.50%) with a poor category. The implementation of the action increased the activity score to 28 (70.00%) in cycle I, 37 (92.50%) in cycle II, and 38 (95.00%) in cycle III. The achievement of student activity scores in cycle III is classified as very good. The increase in scores demonstrates the increasingly dominant physical and mental involvement of students. Students' passive habits were successfully replaced by active group learning interactions.

Increased student learning activity directly impacted the distribution of individual completion scores. The implementation of the Two Stay Two Stray model provided students with the opportunity to share information on Islamic Science material. Peer re-explanations facilitated understanding of Islamic History concepts.

Table 4. Distribution of Student Learning Completion Per Cycle

Value Range	Category	Pre-Action	Cycle I	Cycle II	Cycle III
≥ 75	Completed	6 (31.58%)	11 Students (57.89%)	16 Students (84.21%)	18 Students (95.00%)
< 75	Not yet finished	13 (68.42%)	8 Students (42.11%)	3 Students (15.79%)	1 Student (5.00%)

The narrative in Table 4 shows the shift in the number of students from the incomplete category to the completed category. The number of students who completed the pre-action was recorded at 6 people, then increased to 11 people in cycle I. Cycle II recorded 16 students who completed it and cycle III successfully completed 18 out of a total of 19 students. The success of 18 students exceeding the KKM (75) confirmed the effectiveness of cooperative learning. The decrease in the number of students who did not complete it from 13 people to 1 person proved the success of the intervention. The target percentage of classical completion of 80% was successfully exceeded with a final achievement of 95.00%.

A close relationship exists between improved teacher performance, student engagement, and average class grades. Improved teacher classroom management encourages comprehensive student engagement. Effective teacher guidance consistently increases summative test scores.



Figure 1. Graph of the Development of Average Student Learning Outcomes from Pre-Action to Cycle III

Figure 4.1 shows a positive linear trend line for the increase in the average class grade. The increase in grades moved from a starting point of 71.42 to 77.32 in cycle I. The graph line continued to rise to 81.95 in cycle II and peaked at 89.32 in cycle III. The graphic visualization of Figure 4.1 confirms the positive relationship between the action cycle and academic achievement. Each cycle of corrective action significantly contributed to the increase in the average student grade. The graphic data proves that the implementation of corrective action is ongoing.

The qualitative data for the case study comes from an interview with a student named Clovi Zivana Wihan. Clovi expressed her enjoyment of learning Islamic Religious Education

(PAI) because she was able to participate in other groups. An interview with her homeroom teacher, Ms. Siska Herawati, confirmed the increased confidence of passive students in class.

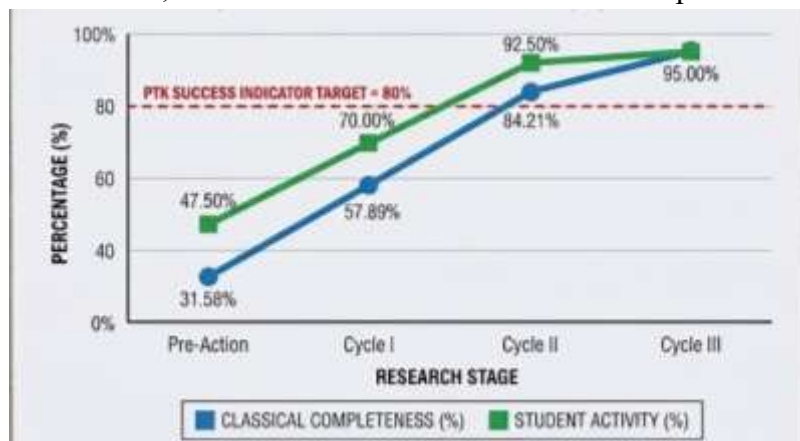


Figure 2. Graph of Increase in Percentage of Classical Completion and Student Activities per Cycle

Figure 4.2 displays a parallel growth curve between student activity and classical completion. The student activity percentage curve increased from 47.50% to 95.00%. The classical completion curve moved in sync from 31.58% to 95.00% in cycle III. Special case findings identified one student who had not yet completed cycle III. This student is a child with special needs with learning delays (slow learner). This student's grade achievement was unable to exceed the KKM limit of 75 despite having participated in three cycles of action.

The results of the case study interviews explain the psychological mechanisms behind the improvement in student grades. Variations in the Two Stay Two Stray model eliminate boredom in learning Islamic Cultural History. The pleasant learning atmosphere improves students' memory and understanding of the Khulafaurasyidin material. The homeroom teacher's statement explains the researcher's successful classroom management. The use of timers and strict discussion rules successfully controlled noise during group changes. Clear role allocation encouraged students who were usually quiet to become active hosts. The case description of students with special needs shows the limitations of the mass application of the cooperative model. The characteristics of slow learners require special individual guidance services outside the regular group. This fact clarifies that the failure of 1 student is rooted in internal developmental factors, not the failure of the learning model.

Relational synthesis connects qualitative interview evidence with a surge in quantitative statistics. Expressions of enthusiasm and ease of understanding of the material are reflected in the increase in mastery from 31.58% to 95.00%. Qualitative and quantitative data mutually reinforce the validity of the research findings. The relationship between learning model modifications and the achievement of PTK targets is proven to be very strong. The presence of teachers as active facilitators accompanying the Two Stay Two Stray model has proven effective in improving Islamic Religious Education learning outcomes. The target success indicator of 80% was convincingly exceeded. The integration of all data proves that the implementation of the Two Stay Two Stray model successfully resolved learning problems at SDS Budi Harapan. The results of this classroom action research answer all problem formulations systematically and empirically. The proposed action hypothesis is scientifically proven.

The results of the classroom action research recorded a consistent increase in students' cognitive abilities from the initial conditions to cycle III. The average pre-action class score of 71.42 increased to 77.32 in cycle I. The average score continued to rise to 81.95 in cycle II and reached a peak of 89.32 in cycle III. The percentage of classical learning completion experienced a drastic increase continuously. The initial conditions only showed a completion of 31.58% with 6 students completing. Cycle I recorded an increase in completion to 57.89%, cycle II reached 84.21%, and cycle III successfully completed 95.00% of the classical with 18 of 19 students exceeding the KKM. Qualitative observations showed a significant increase in teacher performance and student activity. The percentage of teacher performance increased from 50.00% in pre-action to 100.00% in cycle III. Student activity scores jumped from 47.50% (poor criteria) to 95.00% (very good criteria).

The findings of this study align with those of Rahmaniati et al. (2018), which demonstrated the effectiveness of the Two Stay Two Stray model in improving learning outcomes. Rahmaniati's study recorded an average increase from 63.61 to 77.85. The average achievement in the SDS Budi Harapan study was relatively higher, reaching 89.32. The results of this study corroborate these findings Bardowska, (2025) as well as Yanto, (2023) regarding the advantages of the TSTS model at the elementary school level. Talaar's research recorded an increase in the experimental class's science learning outcomes to an average of 82.71. The application of TSTS to Islamic Religious Education (PAI) subjects has proven effective in creating an active and enjoyable learning atmosphere. The novelty of this research lies in the modification of the Two Stay Two Stray model structure. The conventional TSTS model is entirely student-centered without intensive teacher intervention. This research combines group independence with the active role of the teacher in assisting, directing, and providing brief explanations of difficult material.

The research results signal a paradigm shift in Islamic Religious Education (PAI) learning from conventional methods to an active, cooperative approach. The high completion rate demonstrates that Islamic Cultural History does not have to be taught through one-way memorization (Tun, 2025). Discussion-based learning among students has proven to be more effective in fostering understanding. The surge in student activity scores is an indicator of the elimination of the culture of silence in the classroom (Paul, 2025). The physical activity of visiting and receiving guests has been proven to effectively alleviate learning boredom. Students' self-confidence grows along with the opportunity to explain material to other group members. The presence of one student who did not complete the task marks the limits of the reach of the classical cooperative model. Students with special needs who are slow learners require special treatment. This finding indicates the need for integration between the cooperative learning model and the individual differentiation approach (Samrin, 2026).

The pedagogical implications underscore the need for a transformation in the role of Islamic Religious Education teachers in elementary schools. Teachers no longer act as sole lecturers in front of the class. Educators take on a strategic role as facilitators, directors, and guides of group dynamics (Senger, 2022). Instructional implications encourage schools to adopt the Two Stay Two Stray model in their learning curriculum (Astuti, 2024). Schools can use this model as a primary alternative for teaching narrative material. The widespread implementation of TSTS has the potential to continuously improve the quality of the teaching and learning process. The socio-affective implications impact the character development and interpersonal skills of students (Lee, 2025). Students are trained to work together, respect

opinions, and take responsibility for group assignments. Creating an inclusive classroom climate supports children's positive mental development (Bruijniks, 2022).

Cognitive explanation is rooted in the peer teaching mechanism in the Two Stay Two Stray storyline. Students are tasked with conveying information to guests and reporting back on the results of their visit. The activity of re-explaining strengthens students' memory structures and retention of the material (Tait, 2025). The affective explanation relates to the model's suitability to the developmental characteristics of elementary school-aged children. Elementary school-aged students enjoy moving, interacting, and playing. The play element present in the TSTS model stimulates intrinsic motivation and the joy of learning (Myers, 2024). The methodological explanation lies in the effectiveness of teacher intervention modifications in the field. Teacher guidance, strict time management, and motivation prevent chaos. Teacher supervision ensures the discussion process remains focused on achieving PAI material indicators (Khanif, 2023).

Educators are advised to combine the Two Stay Two Stray model with visual media or digital aids. The use of interactive information boards at each station can clarify the material. Time management arrangements need to be carefully prepared before the discussion session begins (Zhang, 2026). Principals and educational institution managers need to facilitate regular training for teachers. This training focuses on developing innovative cooperative learning models in the classroom. Support for infrastructure and classroom space must be optimally provided (Webb, 2022). Further research is recommended to test the effectiveness of the TSTS model on other Islamic Education (PAI) elements, such as Fiqh (Islamic jurisprudence) or Aqidah (creed). Future research can expand the sample size to a larger school scale. Developing specific intervention strategies for slow learners in cooperative groups is an important focus of further research (Bremer, 2023).

CONCLUSION

The most important findings of the study indicate that the application of the modified Two Stay Two Stray cooperative learning model has succeeded in significantly improving the learning outcomes of Islamic Education (PAI) in the Islamic Cultural History element of 5th grade students at SDS Budi Harapan, with an average increase from 71.42 in the pre-action to 89.32 in cycle III and a classical completion percentage from 31.58% to 95.00%. The unique novelty lies in the synthesis between the independence of cooperative groups and active scaffolding guidance by teachers, rather than simply leaving the entire discussion process to students independently. This research provides a methodological contribution in the form of a guided Two Stay Two Stray model design that is effective in overcoming the culture of silence and learning passivity at the elementary school level, while contributing to the concept of PAI history learning that is applicable, interactive, and enjoyable.

The limitations of this study lie in the limited subject coverage of one elementary school class with 19 students and the focus of the material centered on the element of Islamic Cultural History. The presence of one student with special needs (slow learner) who has not reached the Minimum Competency (KKM) emphasizes the limitations of the effectiveness of group learning without individual differentiation intervention. Further research is recommended to expand the application of the guided Two Stay Two Stray model to other Islamic Religious Education elements such as Fiqh or Aqidah with a wider sample, as well as integrating differentiated learning strategies to accommodate the needs of students with special needs.

AUTHORCONTRIBUTIONS

Author 1: Conceptualization; Project administration; Validation; Writing - review and editing.

Author 2: Conceptualization; Data curation; In-investigation.

Author 3: Data curation; Investigation.

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