

The application of the two stay two stray (TSTS) model to improve student learning outcomes in social studies learning in schools

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Abstract

An effective learning model is the key to achieving quality learning outcomes. However, conventional learning methods such as lectures are often less able to actively engage students, so students' participation and academic achievement are less optimal. This research is motivated by the low learning outcomes of grade IV students of SDN 1 Parungsari in the subject of Natural and Social Sciences (IPAS). This study aims to improve student learning outcomes and their active involvement through the application of the Two Stay Two Stray (TSTS) type of Cooperative Learning model. This study uses the Classroom Action Research (PTK) method which is carried out in three cycles, with a qualitative approach and data collection techniques in the form of observations, interviews, and tests. The results show that the TSTS model is effective in increasing student active engagement and creating a more interactive and collaborative learning environment. This model encourages students to actively participate in group discussions and strengthen their understanding of the material through the exchange of information between groups. Further research is suggested to adapt this model to other subjects to expand the positive impact on improving student learning outcomes.

Keywords: cooperative learning; two stay two stray; learning outcomes; natural and social science learning.

INTRODUCTION

Education has an important role in shaping individual skills. In improving the quality of education, there are often challenges, the lack of effectiveness of the learning process is one of the main challenges in the world of education (Sutrisna, 2016). Therefore, Teachers have a very important role in the learning process (Susiyani, 2022). Related to this opinion, in learning a teacher is expected to be able to think creatively and innovatively in delivering learning materials that are in accordance with the times, so that the teaching and learning process can run optimally. In line with opinion Musrizal & Azhar (2024), which states that innovative teachers are able to create a learning environment that stimulates students' creative thinking, so that students can understand the material well.

In addition to mastery of the material, a teacher must also be able to choose and apply a learning model that is in accordance with the ability and readiness of students, in order to understand the material better. However, in grade IV of SDN 1 Parungsari, students often face difficulties in understanding abstract material, one of which is social studies learning. IPAS is a learning that combines Natural Sciences (IPA) and Social Sciences (IPS) (Suhelayanti *et al.*, 2023). These difficulties are caused by factors such as the use of inappropriate learning models and declining student learning motivation. Based on the results of the initial observation which

was held on Thursday, September 12, 2024 in grade IV of SDN 1 Parungsari. It was found that the learning provided was still not fully optimal, especially in science lessons, students tended to be passive during the learning process. Lack of participation in class, students only receive material and are less directly involved in the learning process. As well as low motivation to ask questions or just share opinions with their classmates, because students do not fully understand the content of the material.

This problem can result in students experiencing a decrease in learning outcomes which is characterized by the number of students who do not reach the KKM, which is 70.0. In grade IV of SDN 1 Parungsari in the science subject itself, only 10 out of 27 students managed to get a score above 70 or only 37% of students. According to him, student learning outcomes can have a negative impact on students' cognitive, affective, and psychomotor development. In the end, it can reduce the process of forming intelligence and overall student abilities, as a result of which a decrease in student learning outcomes can have a significant impact. This problem is caused by the learning methods used by teachers until now still relying on conventional approaches such as lecture and question and answer methods (Hatmanto, 2019). The use of models in the Teaching and Learning Process (PBM) must be appropriate in order to improve student learning outcomes in IPAS learning. Science lessons in elementary schools should be delivered through a student-centered learning model (Astuti *et al.*, 2024). One of them is the learning model that can be used, namely the (Cooperative Learning) (Makhdalena, 2023). Type Two Stay Two Stray (TSTS) was chosen to be applied in grade IV of SDN 1 Parungsari in social studies learning.

Siti Syamsiah & Ganes Gunansyah (2014), in his research entitled "The Application of the Two Stay Two Stray Type Cooperative Learning Model in Social Studies Subjects to Improve the Learning Outcomes of Grade IV A SDN Simomulyo 8 Surabaya students" found that the application of the TSTS type cooperative learning model can improve teacher and student activities, as well as student learning outcomes. The results of student responses in the first cycle were 82.14% and the student response in the second cycle increased to 87.01%, showing a good improvement and achieving the indicators of research success. This study shows a gradual increase from cycle I to cycle III, both in student activities, teacher activities, and learning outcomes, with student responses also significantly increasing to the learning process implemented.

According to Yulianti, Muntari & Haris (in Mesah *et al.*, 2020) cooperative learning with its five main principles applied through type syntax Two Stay Two Stray, can increase positive interaction between students and affect student learning outcomes. This includes increasing learning interest, student attention, and student mastery of learning materials. The main focus of this research is to improve the learning outcomes of grade IV students of SDN 1 Parungsari, in the subject of Natural and Social Sciences. Through the application of a cooperative learning model Two Stay Two Stray (TSTS). The application of this model is expected to overcome the low learning outcomes of students and can increase the motivation and involvement of grade IV students of SDN 1 Parungsari, in the IPAS learning process through more effective collaboration in groups.

METHOD

In this study, the method used is qualitative classroom action research (PTK). This research was carried out in accordance with the actual conditions in the field, namely at SDN 1 Parungsari school in grade IV, through data collection with interviews, observations, and tests. At first, Action Research or classroom action research is developed with the aim of finding solutions to social problems, including in the field of teacher (Saputra, 2021). In addition, PTK is also understood as a strategy to solve problems that involve real actions and the process of developing skills in detecting and solving problems (Susilo et al., 2022).

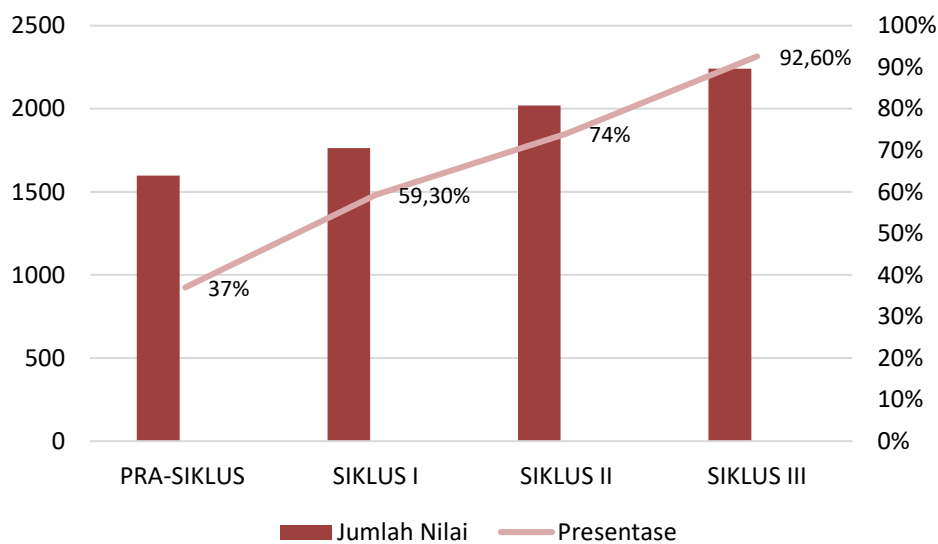
The study uses a model that refers to the model developed by Kemmis and Mc. Taggart. Based on the views of Kemmis and Taggart (1998) (in Saraswati, 2021), states that classroom action research is a reflective assessment of a group of students in the classroom with the aim of improving their understanding and reasoning of educational practices so that their knowledge and skills increase. According to Susilo *et al.*, (2022) mentioned that in the model of Kemmis and Mc. Taggart the main concept of classroom action research consists of four components, namely: planning, stuart T, observing, and reflection.

Meanwhile, the data sources in this study are divided into two types of sources, namely: Primary Data Source: The resource person in this study is the homeroom teacher of grade IV SDN 1 Parungsari, who will be interviewed so that the researcher can get information. Secondary Data Source: Is the data obtained indirectly from the research subject. The data or information obtained is from observations, recaps of student scores, documentation, and relevant previous research, it is secondary data in this study.

The data collection technique in this study is by carrying out several stages, as follows: (1) Interview: according to Widiyanto (2016) (in Retno Ayu Wulandari *et al.*, 2024), an interview is a conversation between two or more people that is conducted orally, either directly or indirectly, for a specific purpose, and in which one party (the interviewer) seeks to obtain information from the other party (the source). In this study, an interview was conducted with a homeroom teacher of grade IV of SDN 1 Parungsari. This interview was conducted in the pre-cycle to obtain accurate data and information from the homeroom teacher of grade IV. Then the results obtained will be immediately recorded. This is done so that the researcher can reflect on the information received which will then be followed up to the next stage; (2) Observation: according to Creswell (in Adhandayani *et al.*, 2020) states that observation is a process of direct observation of participants and their environment, has a specific purpose, to uncover and understand the observed phenomenon. In this study, the researcher made direct observations on the subjects studied in the learning process, especially in learning IPAS which is taught directly to students by teacher. With this observation technique, the author can verify the correctness of the data obtained based on the reality that occurs in the field; (3) Test: a test is a measuring tool used to measure a person's abilities, knowledge, or behavior. According to (Sappaile, 2007) states that tests are procedures that are systematically arranged in the form of standardized tasks and given to individuals or groups to be completed, answered, or responded to, either in writing, oral, or action. The data used to evaluate the extent of student learning outcomes in IPAS learning through Application of the model Cooperative Learning type Two Stay Two Stray (TSTS).

The data analysis technique in this study uses the Miles and Huberman Model (2005) (in Zulfirman, 2022). The data analysis techniques used in this study are: (1) Data collection, data collection involves searching, recording, and collecting all information objectively and as it is, in accordance with the results of observations and interviews in the field; (2) Data reduction, data reduction involves selecting, simplifying, abstracting, and transforming raw data obtained during the process in the field; (3) Data presentation, data presentation is the process of compiling a set of information in such a way that it allows conclusions to be drawn and action taken; (4) Verification, The researcher collects data from various field records and organizes them systematically and in detail, to correct the initially untidy records to ensure the accuracy and consistency of the data.

RESULTS AND DISCUSSION



Results of Average Student Learning Scores in Pre-Cycle, Cycle I to Cycle III

Based on graph 4.3, it can be seen that the average value of student learning outcomes has increased at each stage of research. In the pre-cycle, the total number of students was 1,597 with an average student score of 59.1 (37%). Then, in the first cycle with the total score of 1,764 students with an average student score of 65.3 (59.3%). Then continued in cycle II, with a total score of 2,019 students with an average student score of 74.8 (74%). To achieve the target of the average grade score that the researcher has set, which is 75.0, this research is then continued in cycle III. Where in cycle III, the total number of students was 2,241 with an average student score of 83.0 (92.6%). In cycle III, the average grade of the class has reached or exceeded the target set by the researcher. Therefore, this research was stopped in cycle III, with a satisfactory overall score.

It can be concluded that the application of the Two Stay Two Stray type of Cooperative Learning model has proven to be effective in improving student learning outcomes, especially in the science subject of grade IV SDN 1 Parungsari. This model has a significant positive influence on the learning process, especially in CHAPTER 3 which discusses "Styles Around Us." Through structured learning steps, such as group discussions, exchange of information

between students, and presentation of discussion results, this model succeeds in creating a more active, collaborative, and interactive learning atmosphere. In addition, the application of this model not only improves students' understanding of the material, but also develops their social skills, such as communication, cooperation, and responsibility. Thus, the TSTS model is one of the innovative learning methods that is able to answer the challenge of improving the quality of education in the classroom.

In the discussion in this study, the researcher will explain clearly what happened during the implementation. This research uses the Classroom Action Research (PTK) method which goes well without obstacles, both from the teacher, the principal, and the school. The research was carried out at SD Negeri 1 Parungsari, Sajira District, Lebak Regency, Banten, in the learning of science class IV with a focus on CHAPTER 3 on "Styles Around Us." This chapter covers three topics, namely: topic A, the influence of force on objects; topic B, magnetism, a magical object; and topic C, an elastic object. This research is motivated by the low learning outcomes of students in class IV science learning, which is reflected in pre-cycle data. The lack of interaction between teachers and students has led to many students not achieving KKM, with only 10 out of 27 students achieving scores above 70. The average grade point in the pre-cycle was only 59.1.

To overcome the problem, the researcher chose Using the model Cooperative Learning type Two Stay Two Stray developed by Spancer Kagan in 1992 (Hasanah *et al.*, 2020) (in Huda, 2015). This model aims to improve learning outcomes and student engagement cognitively, affectively, and psychomotorly. The researcher submitted this model to a grade IV teacher, who was approved to apply. As part of the learning process, researchers also provide consistent motivation and enrichment to students.

In cycle I, the researcher follows the stages of planning, action, observation, and reflection. In planning, the researcher collaborates with the classroom teacher to design the learning concept and prepare instruments and evaluation questions that are in accordance with the model and material. At the action stage, the TSTS model was applied with the material "Style and Its Effect on Objects." Students are divided into heterogeneous groups, where two members of each group stay to explain the results of the discussion, while the other two visit other groups to exchange information. Observations show an increase in student involvement although some are still less active in asking questions and discussing. The average student score increased to 63.3, with a completion percentage of 59.3%. This cycle reflection identifies the need for a more detailed explanation of the TSTS procedure to improve learning effectiveness.

In cycle II, improvements were made by providing more detailed directions regarding group rotation and discussion mechanisms so that students could better understand and be able to follow the learning steps well. The material taught is focused on the topic of "Friction Style in Everyday Life," which is relevant to the context of students' lives and easy to apply. The results of the observation showed a significant increase in group discussion activities. Students look more enthusiastic, are able to work well together, and begin to show a deeper understanding of the concepts being taught. The average student score increased to 74.8, with a completion percentage of 74.0%. However, time management during learning is the main challenge that needs to be improved so that learning activities can run more effectively and efficiently in the next cycle.

In cycle III, learning focuses on the topic of "Elastic Style and Examples," with an emphasis on the use of props to help students understand concepts more concretely. This approach makes it easier for students to relate theory to practice, thus increasing their interest and involvement in the learning process. The group discussions went more smoothly than the previous cycle, with almost all students actively asking questions, answering, and sharing opinions. This shows a significant development in students' collaborative skills and critical thinking skills. The average student score reached 83.0, with the percentage of completeness increasing to 92.6%. This improvement not only reflects the success in the implementation of the TSTS model, but also indicates that students have been able to understand and master the material well. The application of the TSTS model in cycle III shows increasingly optimal results, both in improving learning outcomes and active student involvement in learning.

Overall, this study shows positive developments. In the pre-cycle, the overall score of students was 1597 with an average of 59.1 and a completion percentage of 37%. In cycle I, the score increased to 1764 with an average of 63.3 and a completion percentage of 59.3%. In the second cycle, student scores reached 2019 with an average of 74.8 and a completion percentage of 74%. Finally, in cycle III, the student score increased to 2241 with an average of 83.0 and a completion percentage of 92.6%. Based on these results, it can be concluded that the application of the Two Stay Two Stray type of Cooperative Learning model is effective in improving student learning outcomes. This is in line with opinion (Hasanah *et al.*, 2021) which states that the TSTS learning model can improve student learning activities and outcomes.

CONCLUSION

Based on the results of the research that has been carried out, it can be concluded that the application of the Two Stay Two Stray (TSTS) type of Cooperative Learning model is effectively able to improve student learning outcomes in the learning of science class IV SDN 1 Parungsari, especially in CHAPTER 3 about "Styles Around Us." This model has a significant positive impact on student activities in learning, marked by an increase in the average student score from pre-cycle by 59.1 (37%) to reach 83.0 (92.6%) in cycle III. This improvement is achieved through the implementation of structured learning measures, such as group discussions, member rotations, and presentation of discussion results, which not only improve students' understanding of the material but also their social skills, such as cooperation, communication, and responsibility. This success shows that the TSTS model is able to create more active, collaborative, and interactive learning, as well as make a real contribution to improving the quality of education, in accordance with the theories and results of previous research that support the effectiveness of this model.

BIBLIOGRAPHY

Astuti, Y. P., Wahdian, A., & Jamilah, J. (2024). Penerapan model cooperative learning dengan teknik two stay two stray dalam pembelajaran IPAS di Sekolah Dasar. *Jurnal Pendidikan Guru Sekolah Dasar*, 1(3), 8. <https://doi.org/10.47134/pgsd.v1i3.246>.

- Hatmanto, E. (2019). *Metode pengajaran konvensional sebabkan siswa kurang berpikir kritis*. Universitas Muhammadiyah Yogyakarta.
- Makhdalena. (2023). Upaya meningkatkan hasil belajar siswa dalam pembelajaran IPS menggunakan model cooperative learning tipe two stay two stray (TSTS) di Kelas V SD Negeri 61 Kajai Pisik Kecamatan Lubuk Basung pada semester genap tahun Pelajaran 2020/2021. *Jurnal Ilmiah Pengembangan Pendidikan*, 61.
- Mesah, D. B., Wahyuni, S., & Liliek, T. (2020). Penerapan cooperative learning two stay two stray untuk meningkatkan hasil belajar dan keaktifan siswa SMA. *JINoP (Jurnal Inovasi Pembelajaran)*, 6(2). <https://doi.org/10.22219/jinop.v6i2.13461>
- Musrizal, M., & Azhar, A. (2024). Inovasi guru dalam meningkatkan kreatifitas berpikir anak di era 4.0. *Al-Rabwah*, 18(01), 040–048.
- Retno Ayu Wulandari, Nailla Rafa Safitri, Nilot Pramudita Ayu Mahesty, Alif Kurniyanto, Fitrotul Afifah, Abdul Rahman Bin Rahim, & Suhariyanto Suhariyanto. (2024). Peningkatan skill wawancara narasumber melalui pelatihan jurnalistik teknik wawancara narasumber pada siswa SMA 02 Masehi PSAK Semarang. *TUTURAN: Jurnal Ilmu Komunikasi, Sosial dan Humaniora*, 2(3), 205–218. <https://doi.org/10.47861/tuturan.v2i3.1094>
- Sappaile, B. I. (2007). Konsep instrumen penelitian pendidikan. *Jurnal Pendidikan dan Kebudayaan*, 13(66), 379–391. <https://doi.org/10.24832/jpnk.v13i66.356>
- Saputra, N. (2021). *Penelitian tindakan kelas*. Yayasan Penerbit Muhammad Zaini.
- Saraswati, S. (2021). Tahapan PTK. *Penelitian Tindakan Kelas*, 49.
- Suhelayanti, S., Z, S., Rahmawati, I., Tantu, Y., Kunusa, W., Nasbey, N., S.Tangio, J., & Anzelina, D. (2023). *Buku referensi pembelajaran ilmu pengetahuan alam dan sosial (IPAS)*. Yayasan Kita Menulis.
- Susilo, H., Chotimah, H., & Sari, Y. D. (2022). *Penelitian tindakan kelas*. Media Nusa Creative (MNC Publishing).
- Susiyani, R. (2022). Upaya peningkatan hasil belajar IPA melalui model *problem based learning* (PBL) tipe kooperatif two stay two stray (TSTS). *JURNAL LENTERA: Kajian Keagamaan, Keilmuan dan Teknologi*, 21(2), 171–181.
- Sutrisna, E. (2016). Penerapan model pembelajaran kooperatif tipe two stay two stray untuk meningkatkan hasil belajar IPS Kelas IV SD Negeri 010 Silikuan Hulu. *Primary: Jurnal Pendidikan Guru Sekolah Dasar*, 5(2), 172. <https://doi.org/10.33578/jpfkip.v5i2.3707>
- Syamsiah, S. (2014). Penerapan model pembelajaran kooperatif tipe two stay two stray pada mata pelajaran IPS untuk meningkatkan hasil belajar siswa Kelas IV A SDN Simomulyo 8 Surabaya. *Universitas Negeri Surabaya*, 2(1).

Zulfirman, R. (2022). Implementasi metode outdoor learning dalam peningkatan hasil belajar siswa pada mata pelajaran Pendidikan Agama Islam di MAN 1 Medan. *Jurnal Penelitian*, 3(2).

Adhandayani, A., Psi, S., & Si, M. (t.t.). *Metode Observasi dalam Penelitian Kualitatif*.

Hasanah, I., Nurjanah, U., & Muslim, I. B. (t.t.-a). *Penerapan model pembelajaran kooperatif tipe two stay two stray (TSTS) untuk meningkatkan aktivitas dan hasil belajar siswa MTS Raudlatul Syabab Jember*.