



Accepted	: July 9, 2026
Revised	: July 21, 2026
Approved	: August 11, 2026
Published	: August 11, 2026

THE EFFECT OF COOPERATIVE LEARNING USING WORD SEARCH ACTIVITIES ON FOURTH-GRADE STUDENTS' MOTIVATION AND IPAS LEARNING OUTCOMES

Atik Puji Astuti ^{1*}, Sudarmiani ²

^{1,2}Magister Pendidikan IPS, Universitas PGRI

Jl. AURI No. 16 (Kampus III UNIPMA), Kanigoro, Kartoharjo, Kota Madiun, Jawa Timur, Indonesia

*Corresponding Author. E-mail: naatiknataya@gmail.com

Abstract: IPAS instruction at the elementary school level often emphasizes memorization, a skill some experts consider lower-order, although it remains important for learning outcomes. Instruction that relies on lecture-based methods tends to be boring and fails to engage students, leading to low motivation and poor learning outcomes. This study describes the implementation of the Team Games Tournament (TGT) cooperative learning model aided by word searches, and examines the increase in motivation and IPAS learning outcomes among fourth-grade students following its application. This study is a Classroom Action Research (CAR) conducted in two cycles, each has two meeting and each comprising planning, action, observation, and reflection stages. The subjects were 29 fourth-grade students at SDN 02 Kanigoro during the 2025/2026 school year. Data were collected through motivation observation sheets, and an evaluation test at the end of learning, then analyzed using qualitative and quantitative approaches. Motivation was analyzed using a Likert-scale checklist instrument, while learning outcomes were analyzed based on students' average class scores. Results showed that learning motivation increased from 41% (low) in the pre-cycle to 64% (high) in Cycle II. Learning outcomes also improved significantly, with the classical completeness rate rising from 28% in the pre-cycle to 41% in Cycle I, then increasing sharply to 83% in Cycle II. These results indicate that cooperative learning aided by word searches effectively improves motivation and learning outcomes in IPAS. This study recommends that teachers integrate educational games as a variation in teaching strategies to create a more interactive and meaningful learning environment.

Keywords: Cooperative learning; Cooperative learning; Learning outcomes; Words search.

INTRODUCTION

Curriculum dynamics in Indonesia continue to evolve. One notable change is the introduction of the Integrated Natural and Social Sciences subject (IPAS), which merges Natural Sciences (IPA) and Social Sciences (IPS) beginning in third grade under the Merdeka Curriculum. The Ministry of Education, Culture, Research, and Technology (2022) describes IPAS as intended to foster students' curiosity about natural and social phenomena while cultivating environmental awareness and social interaction skills. Despite these aims, classroom practice often still emphasizes rote memorization, a strategy some experts classify as a low-level thinking skill, though it remains important for certain learning outcomes (Telaumbanua, 2022; in Afiah, 2020). Additionally, students' psychological states affect memorization: stress and anxiety raise cortisol levels and impede transfer to long-term memory (Akhmar et al., 2021). Teacher-centered instruction, lecture-based methods, and limited learning media further contribute to student passivity, boredom, and disengagement.

These discrepancies between curriculum goals and classroom realities expose a clear research gap: while IPAS policy emphasizes inquiry, environmental awareness, and social skills, many elementary classrooms continue to rely on memorization and teacher-led methods, with little empirical evidence on effective, scalable strategies to align practice with curriculum intentions. These contradictions between research results and the implementation of education in schools appear to be a gap in the study and development of the curriculum, because IPAS policy prioritizes inquiry, environmentally conscious citizens, and social competencies, but in reality, many elementary schools are still using the memorization process and teacher-centered methods, without any strong evidence on better strategies to achieve curriculum objectives. In addition, prior research on optimizing cooperative learning

methods has been widely explored by previous researchers, for instance, Hasanah, N et al. (2023) found that there was an increase in the learning motivation of third-grade students of SDIT Al-Iman through word search media. Likewise, Akhmad, N et.al.(2024) also proved that cooperative learning with word search media could improve the learning outcomes of tenth-grade students of SMAN 1 Baraka. 2023.

However, previous studies have separately demonstrated cooperative learning and word search media. There has been no prior study that has utilized word search media as a strategy in cooperative learning, so it is questionable how far the value of word search media has been used to overcome free-riders in cooperative learning, originally word searches were created to spark collective interest and overcome the phenomenon of free-riders. With these considerations, this study was designed to examine whether classroom practices that combine cooperative learning with game-based media could improve students' motivation and better mastery of IPAS in elementary school, as well as provide recommendations for teachers in implementing the Merdeka Curriculum. This study used modified syntax, where each student had different clue cards, so every student must work together to find solutions, this integrative and interactive element is expected to be able to increase students' internal motivation through the challenges provided in the game and have an impact on increasing learning outcomes.

Preliminary data collected from the fourth-grade class at SD N 02 Kanigoro, Kota Madiun, illustrates this issue. The researcher conducted both non-test and test assessments. The non-test assessment was conducted to gain an understanding of the students' motivation to learn. The researcher used an assessment rubric as the instrument. The observation sheet included four items for observation: interest, attention, participation, and task completion. A validated learning motivation scale based on the Likert scale was administered to 29 students. The results of the observations on student motivation showed that, on average, only 41% of students were motivated. Meanwhile, learning outcomes were assessed through a written test covering a broad range of specific subject matter. This assessment was aligned with the school's Learning Objective Achievement Criteria (KKTP) of 78. The written test results showed that only 8 out of 29 students (28%) met the KKTP of 78, with a class average score of 62. These data were collected during the pre-intervention (baseline) phase.

In response to these issues, the teacher implemented the Team Games Tournament (TGT) cooperative learning model, supplemented by word search activities, as an alternative solution. According to Sanjaya (2016:22), the advantages of the cooperative learning model as a learning strategy are that students: 1) are not dependent on the teacher, allowing them to build confidence and develop the ability to think independently and find information; 2) can express their opinions or ideas and compare them with those of others; 3) practice accepting differing opinions from their peers; 4) They can practice taking responsibility. 5) They can improve their academic performance and social skills. 6) They can identify and assess their own abilities. 7) They can improve their ability to use information and their learning skills.

Meanwhile, the word search activity was chosen because it is engaging and helps students focus on the learning theme through word search puzzles. The strategy applied in the lesson takes the form of a word search puzzle game. In addition to being a solution for improving academic achievement, this strategy can also enhance motor skills and develop students' emotional intelligence. (Tarigas in Mujaiyanah, 2020, p. 108) as cited in Mashrurah (2022). According to Yurnaliza & Andayono (2019), as cited in Sani (2024:31), the factors influencing learning outcomes are internal and external. Internal factors include health, intelligence and talent, interests and motivation, and learning styles. External factors include family, school/university, society, and the surrounding environment.

By implementing this cooperative learning model aided by word searches, it is hoped that this will provide insight into how effective the use of educational games is in making IPAS lessons more interactive, enjoyable, and meaningful. Consequently, it is expected to significantly improve students' motivation to learn and their academic performance.

This study is expected to provide both theoretical and practical benefits. Theoretically, this study enriches the literature on the effectiveness of cooperative learning models and word search activities in enhancing motivation and learning outcomes in science education at the elementary school level, while also providing empirical evidence regarding the role of gamification in supporting conceptual mastery. For teachers, the findings of this study can serve as an alternative innovative teaching strategy to address classroom learning challenges and enhance professional competence.

For schools, this study contributes to improving the quality of learning and encourages the provision of a wider variety of learning support resources. For other researchers, the results of this study can serve as a reference and point of comparison for similar research in the field of education, as well as for researchers focused on developing game-based learning models and validating theories of learning motivation—such as self-determination theory—through elements of collaboration and challenge in learning.

RESEARCH METHODOLOGY

The research method used was Classroom Action Research (CAR), which is a reflective study that provides teachers with the opportunity to improve the quality of their teaching based on the results of the learning process (Sudjana, in Hasniyanti et al., 2024), which is carried out through the stages of planning, implementation of actions, observation, and reflection in a series of cycles (Totok, in Septiana, 2023). This classroom action research was conducted in two cycles, with each cycle consisting two meeting and its has four stages: planning, action, observation, and reflection.

The study was conducted at SDN 02 Kanigoro, Jalan Sri Unggul No. 13, Madiun City, East Java Province, during the first semester of the 2025/2026 academic year, specifically from October 2025 to May 2026, spanning the stages

from proposal development through the implementation of actions and the preparation of the final report. The research subjects were 29 fourth-grade students at SDN 02 Kanigoro in Madiun City—comprising 16 girls and 13 boys—in the IPAS course.

This study employed both qualitative and quantitative approaches. The qualitative approach was used to observe students' attitudes and behaviors in order to gain insight into their motivation to learn. Observations were used to collect data on students' motivation to learn through observation sheets completed during the learning process (Sahir, 2021). Meanwhile, the quantitative approach was used to analyze students' learning outcomes, which were expressed as numerical data.

The data collection techniques used in this study included three methods: observation, testing, and documentation. Written tests were used to measure students' cognitive learning outcomes at the end of each cycle in the form of multiple-choice questions and short-answer questions. Documentation was used to supplement supporting data during the implementation of the action.

This classroom action research was conducted in two cycles that comprised two meeting, with each cycle consisting of four stages: planning, action, observation, and reflection.

Table 1. Implementation of improvements to cooperative learning aided by word search

Cycle	Cycle Learning Activities
Cycle I comprised two meetings	1. Development of a Lesson Plan (RPP) using the TGT cooperative learning model aided by word search, preparation of learning materials and media, attendance lists, and assessment instruments. 2. Meeting Action Stage I Executed with activities preliminary (apperception and presenting learning objectives) and main (presentation of material, creating heterogeneous group, playing word search in class using LCD Projector so that students can answer freely without waiting for classmates. Students who find the correct words will receive awards/prizes. Next, the class is divided into a group tournament. Students will answer question cards based on level decided by the teacher. (Students paste/upload answers). Question cards will have concept/definition style questions as hints for Word Search. This is to ensure students remember the concept of material studied. Example: The bark that smells good is (answer: sandalwood). Teacher observe students' motivation during tournament. 3. Meeting Action stage II Students play a word search puzzle with questions they made in the form of concept/definition questions as clues to find words for review of vocabulary from material. After teacher has taught the material he/she asks the students to play using questions created from the material being studied. For an example: This plant is used as a speci and is antive endemic transitional plant.
	
	Upon completion of the game, students confer to arrive at the communicatively appropriate solution to a case study related to the target material. Lastly, students complete a test to determine how well the material they have learned. During this activity, the teacher collects data on student learning outcomes.
	4. The reflection phase is conducted to evaluate the shortcomings of Cycle I as a basis for improvement in Cycle II, since student motivation and learning outcomes in Cycle I still did not meet the established success indicators.
Cycle II comprised two meetings	The plan for the second cycle was developed based on the results of reflection cycle I, with improvements in Group management, time management, and technical aspects of the game word search (word search). planning by setting up a words search box is then printed and displayed on the board along with questions—to ensure the class stays under control and every student has an equal chance to participate. The action, observation, and reflection phases of Cycle II are carried out using the same procedures as in cycle I, with improvements in class management and time allocation based on the findings of cycle I reflection but different materials.

1. Meeting Action Stage I
 - a. Classes are divided into heterogeneous groups of 5-6 students, b. Teacher pastes tournament media aided by words search. The question form encourages students to understand the sentence / concept before answering and look for the answer in the words search box. Sample questions: Wild boar Fauna is abundant in the area.... (Answer: Sulawesi), c. The teacher explains the rules of the game, d. Students who are representatives of the group have an equivalent level of ability, e. Teachers make observations of their motivation with observation sheets that have been prepared, f. The teacher rewards the group with the highest score, g. Students discuss to determine the problem given, h. Students make presentations on the results of the discussion.
2. Meeting Action Stage II
 - a. Teachers distribute word search sheets to work independently, b. Teachers reward students with the highest scores, c. Students discuss to solve contextual problems given by the teacher related to the material studied, d. Students present the results of the discussion, e. Students work on independent work sheet, teacher takes data from this test to measure learning outcomes.

Data on learning motivation were analyzed using a Likert-scale checklist instrument, which was converted into quantitative data and then analyzed using descriptive statistics to obtain learning motivation scores. Data from observations during each session were processed using the percentage formula $P = (f/n) \times 100\%$, where P is the percentage frequency of occurrence, f is the number of activities observed, and n is the total number of activities (Indarti, 2008, in Alfahmi et al., 2014). Learning outcome data were analyzed using descriptive statistics (mean, median, frequency) with the formula for the mean of a single data set, $M = \Sigma x/N$, where M is the mean, Σx is the sum of all students' scores, and N is the number of students (Arikunto, 2005, in Farida, 2016).

RESULTS AND DISCUSSION

Observation of student motivation was carried out during the learning process using observation sheets. Observation is a form of evaluating results in the research subject through systematic observation and recording of facts (Sujarweni, 2022, as cited in Haryati, 2024, p. 41.). Thus, based in the indicators of learning motivation that were developed by Wena in 2009, p.33 as cited in Utami (2017:40), the researchers identified the following four indicators of student learning motivation: 1. The level of attention of students during the learning process (shows interest in learning activities), 2. The level of needs or desires during the learning process (shows interest in learning activities), 3. The level of self-confidence of students (asks and answers questions), 4. The level of satisfaction of students with the learning process implemented (accurate performance of tasks assigned by the teacher).

Based on the four indicators used by Wena mentioned above, in this study the observer identified the following indicators of learning motivation of students: 1. Interest (Being interested, enthusiastic and confident in participating in learning), 2. Attention (Focus of students when the teacher explains material), 3. Participation (Participation in working groups), 4. Task Performance (Accurate implementation of tasks).

Variables in this study were measured using a Likert scale. The questionnaire consists of 4 categories of responses, namely: 1 (never), 2 (sometimes), 3 (often), 4 (always). According to Indarti, 2008:26, as cited in Alfahmi et al. (2014:5) the researcher explained the calculation procedure for percentage scores for learning motivation data obtained from student observation sheets during the tutorial meetings. Percentage score = total score obtained / maximum score x 100%. Meanwhile, classical interval score is presented in the following classification: 81% – 100% (very high), 61% – 80% (high), 41% – 60% (moderate), 21% – 40% (low), and 0% – 20% (very low).

Table 2. Distribution of Students' Learning Motivation — Pre-Cycle Stage

No.	Category	Frequency (Students)	Percentage (%)
1	Very High	0	0%
2	High	0	0%
3	Moderate	11	41%
4	Low	20	69%
5	Very Low	0	0%

No.	Category	Frequency (Students)	Percentage (%)
Total		29	100%

Table 2 shows that at the pre-cycle stage, no students fell into the high or very high motivation categories. As many as 20 students (69%) were in the low motivation category, while 9 students (31%) were in the moderate category, with a classical motivation percentage of 41% (low category). This condition indicates that students had not yet shown interest or active participation in IPAS learning.

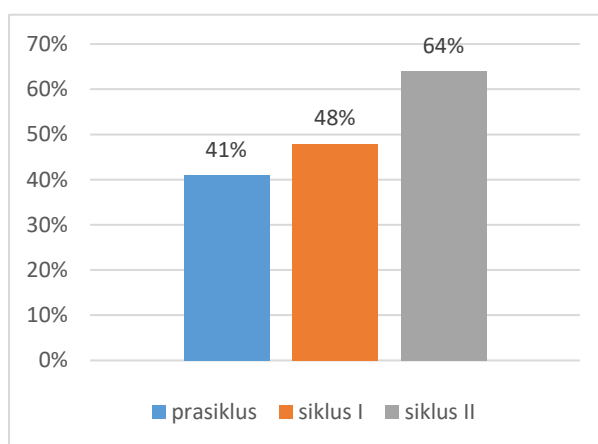
Table 3. Recap of Students' IPAS Learning Outcome Completeness – Pre-Cycle Stage

Criteria	KKTP (Minimum Completeness Criteria)	Number of Students	Percentage (%)
Complete	≥ 78	8	28%
Incomplete	< 78	21	72%
Total		29	100%

The written test results at the pre-cycle stage showed a class average score of 62, with the highest score being 83 and the lowest 30. Only 8 students (28%) reached the KKTP, while 21 students (72%) had not achieved completeness. This data confirms that the IPAS learning outcomes of fourth-grade students at the pre-cycle stage were still far from expectations and required corrective learning intervention.

1. Increase in IPAS Learning Motivation

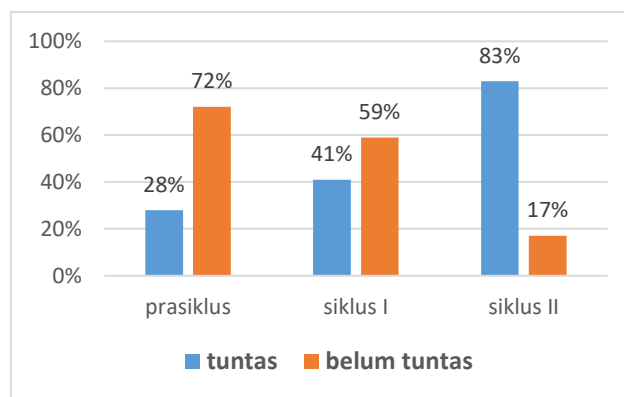
Observation results show that the implementation of this model successfully increased students' motivation and learning outcomes gradually from pre-cycle, Cycle I to Cycle II.



Graph 1. Comparison of learning motivation from pre-cycle, Cycle I, and Cycle II

The graph above illustrates that there is an increase in the tendency of the line. At the stage of pre-cycle, classical learning motivation reached only 41% (low category), which means that most students were uninterested and unmotivated to study IPAS. After introducing the cooperative learning model assisted by word search, Cycle I improved to 48% (moderate category), which was still low since students had not been accustomed to the new model yet. However, in Cycle II, there was a substantial increase in learning motivation to 64% (high category), as students got used to the game mechanism and could easily engage in the tournament. Similar results were obtained by Hasanah, Azzahroh, and Faturrahman (2023), who revealed that the incorporation of word search media also enhanced learning motivation among students.

2. Increase in IPAS Learning Outcomes



Graph 2. Comparison of learning outcomes from pre-cycle, Cycle I, and Cycle II

The information provided in Figure 2 demonstrates that there has been an improvement in the learning process throughout the three stages of implementation. In particular, in the pre-cycle stage, where the rate of mastery was only 28%, teaching was purely teacher-centered, meaning that students were not actively participating in the learning process. The teachers mostly used the lecture method to deliver the course content to students. The lecture method, although effective in some cases, when used consistently may become boring and thus ineffective (Tripuji, 2023). According to Mulyatiningsih (2015) as mentioned by Lestari, T., et al. (2020), the lecture-based method is not effective since it is considered monotonous, resulting in poor learning outcomes. Student learning outcomes, which are defined as “the behaviors that students display or the skills that they acquire as a result of learning something new,” incorporate cognitive, affective, and psychomotor domains of learning. Considering the importance of using the appropriate teaching methods, I can agree with the researchers that examining the improvement levels of motivation and learning outcomes is essential in understanding to what extent the learning process was effective (Tabrani, 2022).

The application of appropriate teaching methods during the learning process can improve students' learning outcomes (Sulistyo, I., 2016), as argued by Dewi, H.R. et al. (2024). As a result, mastery in Cycle I improved to 41%. It happened due to improvements made by applying cooperative learning with word search activities assistance. The “Word Search” puzzle game was utilized to raise learners' awareness and help them acquire the necessary information while maintaining a positive attitude toward the educational setting (Lestari & Yusuf, 2018). After reflection and developing plans for cooperative learning with “Word Search” in Cycle II, the percentage of successful students reached 83%, surpassing the classical success threshold of 80%. It appears that such a learning curve is typical for cooperative learning, where the relatively low growth in Cycle I implies that students needed more time to adapt to the new conditions, namely, the unfamiliar social system, and the absence of the teacher's guidance. The significant leap in Cycle II suggests that cooperative learning with “Word Search” as a word puzzle game allowed students to enter a safe environment where memorizing definitions was transformed into a competitive game with time constraints.

This finding aligns with the research of Nengsih, Rahman, and Salmawati (2024), which showed an improvement in science (IPA) learning outcomes through the TGT model aided by a word search puzzle.

Thus, the implementation of the Team Games Tournament (TGT) cooperative learning model aided by word search has proven able to improve the motivation and learning outcomes of fourth-grade students in the IPAS subject at SDN 02 Kanigoro, confirming the action hypothesis of this study.

Discussion

Based on the analysis and discussion of the results of the research conducted on the application of a cooperative learning model aided by word search activities in the IPAS subject for fourth-grade students at SDN 02 Kanigoro, it was found that:

The implementation of the cooperative learning model aided by the word search activity in the IPAS subject for fourth-grade students at SDN 02 Kanigoro was carried out in two cycles and through stages that included the presentation of learning objectives, the formation of heterogeneous learning groups, the presentation of material, the word search game, group collaboration in a tournament, and the awarding of group prizes. The implementation of Cycle I did not fully meet expectations, due in part to the following: 1. Time management issues: students were too focused on finding hidden words, thereby wasting time that should have been used for group discussions or presenting results; 2. Ineffective group work because some students dominated the word-finding process. This caused many students to become passive spectators; 3.

The classroom atmosphere became chaotic as students shouted at each other when they found a word; 4. Students were still confused about the game rules or the cooperative learning steps they were supposed to follow because the teacher's initial instructions were unclear.

These obstacles were then addressed in Cycle II through reflection and planning adjustments, resulting in a more effective, structured, and well-aligned implementation of instruction in Cycle II, consistent with the in-depth lesson plan that had been developed.

The implementation of cooperative learning aided by word searches was able to increase motivation for learning IPAS among fourth-grade students at SDN 02 Kanigoro. This is demonstrated by the improvement in observational data on students' learning motivation from the pre-cycle stage through Cycle I to Cycle II. The classical percentage of students' learning motivation in the pre-cycle stage—31%—fell into the low category; it increased in Cycle I to 48%, falling into the moderate category; and in Cycle II, the classical percentage rose to 64%, remaining in the moderate category. This improvement occurred because the cooperative learning model aided by word search was able to create a more enjoyable and interactive learning atmosphere, involving students' active participation in word search activities and during tournaments related to IPAS material, thereby making students more enthusiastic, confident, and eager to participate in the learning process. Similarly, research conducted by Hasanah (2023) in a study titled "Efforts to Improve Student Motivation and Learning in Thematic Instruction Through the Word Search Medium" aimed to identify solutions for enhancing general motivation in thematic learning. This study aimed to find solutions to improve motivation in thematic learning in general. Data collection techniques included observation, interviews, and documentation. Data analysis was conducted using both qualitative and quantitative methods, including a percentage (%) questionnaire to assess the effectiveness of the word search activity. The results indicated that learning with the word search activity proved effective in capturing students' attention and maintaining their focus. The average student motivation, which was initially 69%, increased to 83.87% in Cycle 2.

The implementation of a cooperative learning model aided by word search can serve as an innovative learning alternative to improve students' learning outcomes in the IPAS subject. Through group discussions, educational games, and academic tournaments, students become more active, enthusiastic, and better able to understand the learning material. This is evidenced by the increase in the percentage of student learning achievement from the pre-cycle stage, through Cycle I, to Cycle II. In the pre-cycle stage, the achievement rate was only 28%; it increased to 41% in Cycle I; and then rose significantly to 83% in Cycle II, which means it exceeded the established classical achievement indicator of 80%. Learning outcome data were collected from written tests administered at the end of each session. This aligns with the research conducted by Sani, A.M. (2024), titled "The Effect of the Team Games Tournament Learning Model Assisted by Visual Word Search Puzzle Media on Indonesian Language Learning Outcomes." The study states that based on data analysis conducted using simple regression analysis, there is an effect of the Team Games Tournament learning model supported by visual media (Word Search Puzzle) on Indonesian language learning outcomes, as determined by a t-test. Meanwhile, the N-Gain test also showed that the Team Games Tournament learning model supported by visual media in the form of a word search puzzle in the experimental class resulted in an improvement in students' learning outcomes, with an average score of 0.52, which falls into the moderate-to-high category; therefore, this model and media are effective for use.

Based on the conclusions of the research findings presented, this study can serve as a reference and contribute to further research on the application of the cooperative learning model aided by word search puzzles in enhancing student motivation and learning outcomes in the IPAS subject at the elementary school level. The results of the study by Nurfajrianti, A., et al. (2020) also show similar findings, stating that the analysis of the data and discussion lead to the conclusion that word search puzzles have a positive effect on the TGT cooperative learning model regarding the learning outcomes of 10th-grade students at SMAN 1 Baraka on the subject of hydrocarbons.

The implementation of a cooperative learning model aided by word searches reinforces the theories of cooperative and interactive learning, which emphasize learner-centered learning. It creates an interactive learning environment where students are more active in the learning process, feel more confident, and experience a fun and meaningful learning atmosphere through group discussions, academic tournaments, and healthy competitions, thereby enhancing students' motivation and learning outcomes in IPAS. According to Shamdani (2020) as cited in Putri (2024: 2), the cooperative learning model is an approach that involves dividing students into groups during the learning process. The goal is for students to exchange ideas within these groups, as they typically feel more comfortable sharing ideas or opinions with their peers than directly with the teacher. Nevertheless, the teacher's role remains crucial in this model specifically, to oversee group formation, guide the discussion process, and present the students' discussion outcomes to the class.

This study is not without certain limitations that must be honestly disclosed so they can serve as considerations for future research. First, this study was conducted in only one class, Grade 4 at SDN 02 Kanigoro—with a sample size of 29 students; therefore, the findings cannot yet be broadly generalized to a larger population. Second, this study was conducted over only two cycles (each consisting of two sessions)

with a relatively limited time allocation; consequently, the improvements in motivation and learning outcomes observed reflect conditions only during the study period and may not be sustained in the long term. Third, this study focused exclusively on the IPAS subject; therefore, the effectiveness of the cooperative learning model aided by word searches when applied to other subjects remains unknown. Fourth, the instrument used to measure learning motivation in this study was an observation sheet; although its validity and reliability have been tested, it still has limitations in capturing all aspects of motivation comprehensively. Based on these limitations, the researcher offers the following suggestions for future research: 1. To expand the research sample, for example, by involving more than one class or school, so that the research results can be more representative and generalizable. 2. To apply the cooperative learning model aided by word search to other subjects or different IPAS materials, so that the effectiveness of this model can be assessed more broadly. 3. To combine the cooperative learning model aided by word search with digital technology-based learning media, so that its impact on other variables, such as students' creativity, critical thinking skills, or collaboration abilities can be determined. 4. To use a more diverse range of instruments for measuring learning motivation, such as a combination of questionnaires, observations, and interviews, so that the data obtained is more comprehensive and in-depth.

CONCLUSION

First, based on the results of the analysis and discussion carried out across two cycles, several conclusions can be drawn as follows. First, the implementation of the cooperative learning model aided by word search in the IPAS subject for fourth-grade students at SDN 02 Kanigoro was carried out through the stages of conveying learning objectives, forming heterogeneous learning groups, presenting material, the word search game, group collaboration in the tournament, and group awards. In Cycle I, students were still adapting to the learning syntax, so several obstacles were found, such as students not yet being accustomed to group work, some students still being passive, and classroom and time management not yet being optimal. These obstacles were addressed in Cycle II through reflection and refinement of planning, so that the learning implementation ran better and in a more structured manner.

Second, the implementation of the cooperative learning model aided by word search was able to increase the IPAS learning motivation of fourth-grade students at SDN 02 Kanigoro, with the classical motivation percentage increasing progressively from the pre-cycle stage through Cycle I and into Cycle II. This increase occurred because the learning model was able to create a more enjoyable, interactive learning atmosphere that involved students' active participation in both the word search activity and the tournament.

Third, the implementation of the cooperative learning model aided by word search was also proven to improve the IPAS learning outcomes of fourth-grade students at SDN 02 Kanigoro, with the completeness percentage increasing significantly from the pre-cycle stage through Cycle I and into Cycle II, surpassing the established classical completeness indicator. Thus, the implementation of the TGT cooperative learning model aided by word search is declared successful in improving the motivation and IPAS learning outcomes of fourth-grade students at SDN 02 Kanigoro.

This study has several limitations, including that it was only conducted in one class with 29 students, so the results cannot yet be broadly generalized; it was only carried out over two cycles with limited time allocation; it focused only on the material of Flora and Fauna Diversity in Indonesia; and the learning motivation instrument only used an observation sheet. Therefore, future research is recommended to expand the research subjects to more than one class or school, apply this model to different subjects or materials, combine this model with digital technology-based media, and use more varied instruments for measuring motivation, such as a combination of questionnaires, observation, and interviews. For schools and teachers, the results of this study can serve as a consideration in developing innovative learning models and media, while for students, the implementation of this model is expected to continue fostering attitudes of cooperation, active participation, and responsibility within learning groups.

REFERENCES

- Afdal, A. Handayani, E.S., & Rohaniah (2024). *Peningkatan Hasil Belajar melalui Model Pembelajaran Kooperatif pada Siswa kelas IIB Sekolah Dasar*. PTK, Vol.4 No.2 Mei 2024 DOI: <https://doi.org/10.53624/ptk.v4i2.355>
- Akhmad, N. , Sulastry,T., & Yunus,M. (2024). *Pengaruh Permainan Word Search Puzzle dalam Pembelajaran*

- Kooperatif Tipe TGT (Teams Games Tournament) Terhadap Hasil Belajar Siswa Kelas X SMAN 1 Baraka (Studi pada Materi Pokok Hidrokarbon). ChemEdu (Jurnal Ilmiah Pendidikan Kimia) Volume 3 Nomor 3, Desember 2022, 144-152 <http://ojs.unm.ac.id/index.php/ChemEdu/index>
- Akhmar, I.A., Lestari, H., & Ismail, Z. (2021). *Metode Efektif Menghafal Al-Qur'an Bagi Siswa Madrasah Ibtidaiyah*. El-Mujtama: Jurnal Pengabdian Masyarakat, Vol.1 No.1
- Alfahmi, A.M. (2014). *Penerapan Model Pembelajaran Kooperatif Tipe TPS (Think Pair share) Untuk Meningkatkan Hasil Belajar Siswa pada Mata Pelajaran IPS di Sekolah Dasar*. JPGSD. Volume 02 Nomor 02 Tahun 2014
- Angraini, I.S. (2016). *Motivasi Belajar dan Faktor-Faktor yang Berpengaruh: Sebuah Kajian pada Interaksi Pembelajaran Mahasiswa*. e-journal.unipma.ac.id/index.php/PE/article/download/39/37.
- Dewi, H.R., Khomariyah, N., Rosyid, A. (2024). *Efektivitas Penerapan Model Pembelajaran Teams Game Tournament (TGT) Terhadap Hasil Belajar Siswa*. <https://doi.org/10.64626/snej.v2i2.207>
- Hendra (2015). *Identifikasi Motivasi Belajar dan Faktor-Faktor yang Berkontribusi terhadap Keseriusan Belajar Siswa SMP Muhammadiyah Kota Bima*. Lembaga penelitian dan pengabdian STIKIP Taman Siswa Bima.
- Hasibuan, F.N., Handayani, A.P. (2025). *Analisis Faktor-Faktor Penyebab Siswa Kesulitan Dalam Menghafal*. JIIC: Jurnal Intelek Insan Cendekia. Vol : 2 No: 4, April 2025
- Hasanah, N., Azzahroh, F., & Faturrohman, N.I., (2023). *Upaya Meningkatkan Motivasi Belajar Siswa Menggunakan Media Word Search Pada Siswa Kelas III SDIT Al-Iman*. Jurnal Bintang Pendidikan Indonesia (JUBPI) Vol.1, No.1 Februari
- Hasniyanti, Ihwana, Tahir, R. (2024). *Meningkatkan Motivasi Belajar Siswa melalui Penerapan Model Cooperative Learning Tipe STAD pada Mata Pelajaran Bahasa Indonesia Kelas 5*. <https://dmi-journals.org/deiktis/issue/view/63> Vol.4 No.4 <https://doi.org/10.53769/deiktis.v4i4.1094>
- Kammis, Hadi (2022). *Manfaat Media Pembelajaran*. <https://perpustakaan.man1alor.sch.id/index.php?p=fstream-pdf&fid=3&bid=14>
- Kemendikbudristek. (2022). *Capaian pembelajaran mata pelajaran Ilmu Pengetahuan Alam dan Sosial (IPAS) fase A-fase C untuk SD/MI/Program Paket A*. Badan Standart, Kurikulum, dan Asesmen Pendidikan Kementerian Pendidikan Kebudayaan, Riset dan Teknologi Republik Indonesia
- Lathifa, N.N., Anisa, K., Handayani, S., Gusmaneli, G. (2024). *Strategi Pembelajaran Kooperatif Dalam Meningkatkan Motivasi Belajar Siswa*. Cendekia: Jurnal Ilmu Sosial, Bahasa dan Pendidikan. Vo.4, No.2 Mei 2024. <https://doi.org/10.55606/cendekia.v4i2.2869>
- Lestari, T., Nanda, S., Syarifuddin (2020). *Efektifitas Metode Ceramah Bervariasi Dalam Pembelajaran Sejarah Guna Meningkatkan Hasil Belajar Siswa*. <https://ejournal.uksw.edu/>
- Mahrushoh, S. (2022). *Pengaruh Strategi Word Search Puzzle Terhadap Hasil Belajar Siswa Sekolah Dasar pada Pembelajaran IPS*. Universitas Pendidikan Indonesia repository.upi.edu perpustakaan.upi.edu
- Mauludy, N.B., Widiyanto, J., Iswanto. (2020). *Penerapan Model Pembelajaran Kooperatif Tipe Eam Games Tournament Berbantuan Media Puzzle Flanel Untuk Meningkatkan Hasil Belajar Peserta Didik Kelas V*. <https://journal.unpas.ac.id/index.php/pendas/issue/view/537> 2024 vol 09 No.04
- Nurhalifah, Lestari, & Yusuf. (2018) *Efektivitas Media Pembelajaran Word Search Puzzle dalam Meningkatkan Daya Ingat Siswa*. <https://www.academia.edu/65749231>
- Pagarra, H. Syawaluddin, A., Krismanto, W., & Sayidiman (2023). *Media pembelajaran*. Makasar: Badan Penerbit UNM
- Putri, K.M.F., Ranti, L.R., Fernando, G.H. (2024). *Artikel Model Pembelajaran Cooperative Learning*. Dewantara: Jurnal Pendidikan Sosial Humaniora Vol.3, No.3 September 2024. <https://doi.org/10.30640/dewantara.v3i3>
- Sahir, S.H. (2021). *Metodologi Penelitian*. Yogyakarta: KBM Indonesia
- Sani, A.M. (2024). *Pengaruh Model Pembelajaran Teams Games Tournament Berbantuan Media Search Puzzle Terhadap Hasil Belajar Bahasa*. Skripsi <http://digilib.unila.ac.id/>
- Sanjaya, T. (2016). *Studi Perbandingan Hasil Belajar Ekonomi Menggunakan Model Pembelajaran Kooperatif Tipe Team Games Tournament (TGT) dan tipe jigsaw II dengan Memperhatikan Gaya Belajar Visual dan Auditorial Pada Siswa Kelas X SMA Negeri 2. PTK* <https://digitallib.iainkendari.ac.id/id/eprint/3620/3/3%20BAB%20II.pdf>
- Septiana, A. (2023). *Penggunaan Media Pembelajaran Spinning Wheel Untuk Meningkatkan Motivasi Belajar siswa Pada Pembelajaran IPS di Kelas V SDN Semanan 14 Petang*. <http://repository.upi.edu>
- Suhelayanti, S., Syamsiah, Z., Rahmawati, Kunusa, & N Suleman, N. (2023). *Pembelajaran Ilmu Pengetahuan Alam dan Sosial (IPAS)*. Penerbit: Yayasan Kita Menulis.
- Sitepu, R. (2019). *Peningkatan Keterampilan Berbahasa Inggris Siswa Melalui Model Pembelajaran Cooperative Script di Kelas VII-6 SMP Negeri 1 Tigapanah*. Guru Kita. Vol. 3 No. 2 Maret 2019
- Sholicha, M., Indrawati, V., Pangesthi, L., Bahar, A. (2021). *Penerapan Pembelajaran Kooperatif Tipe Team Games Tournament (TGT) Untuk Meningkatkan Hasil Belajar Siswa SMK*. <https://ejournal.unesa.ac.id/index.php/jurnal-tata-boga/> Vol.10 No.2 hal.238

- Sofwatillah, Risnita, Jailani, M.S., & Saksitha, D.A., (2024). *Teknik Analisis Data Kuantitatif dan Kualitatif dalam Penelitian Ilmiah*. Journal Genta Mulia Volume 15, Number 2, 2024 pp. 79-91
- Tabrani. (2022). Jurnal Pendidikan dan Konseling. Jurnal Pendidikan Dan Konseling, 4(3), 1349–1358.
- Taniredja, T., Faaridli, E. F., & Harmianto, S. (2015). *Model - Model Pembelajaran Inovatif dan Efektif*. Bandung: Alfabeta
- Tripuji, H. (2023). *Pengaruh Metode Pembelajaran Dalam Pendidikan Agama Kristen Terhadap Daya Tangkap Siswa SD Negeri 1 Banyumanis Jepara*. 5(1), 88–109.
- Utami, T.W.N (2017). *Meningkatkan Motivasi Belajar Siswa Melalui Metode Talking Stick Pada Pembelajaran IPS dik Kelas VIII-5 SMP NEGERI 9 Bandung*.
https://repository.upi.edu/31213/6/FPIPS_S_PSIPS_1300174_Chapter%203.pdf
- Yani, T. (2022). *Pengaruh Penggunaan Media Pembelajaran Berbasis Komputer Words Search Puzzle Terhadap Motivasi Belajar Siswa Mata Pelajaran PPKN Kelas VIII SMPN 22 Kota Jambi*.
<https://repository.unja.ac.id/id/eprint/43451>