

# THE APPLICATION OF THE STUDENT TEAMS ACHIEVEMENT DIVISION TYPE COOPERATIVE LEARNING METHOD ASSISTED BY WORDWALL MEDIA TO IMPROVE THE LEARNING OUTCOMES OF IPAS CLASS IV SD NEGERI 192/II SUNGAI BULUH

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## ABSTRACT

This classroom action research aims to improve the learning outcomes of grade IV students in the subject of Natural and Social Sciences (IPAS) through the application of a cooperative learning model of the *Student Teams Achievement Division* (STAD) type assisted by Wordwall media. The research was carried out at SD Negeri 192/II Sungai Buluh in two cycles, each consisting of two meetings with stages of planning, implementation, observation, and reflection. The research subjects amounted to 20 students consisting of 10 male students and 10 female students. Data was collected through observation, tests, and documentation, then analyzed descriptively by calculating the percentage of teacher learning implementation, student activities, and completeness of learning outcomes. The results showed that educators' performance increased from good category in cycle I to very good in cycle II, which reflects a more optimal classroom management according to the syntax of the STAD model assisted by Wordwall. Student activity also increased, from the fair category in cycle I to good in cycle II, indicating higher student involvement, motivation, and collaboration. In addition, the completeness of student learning outcomes increased significantly, from 65% in the first cycle to 85% in the second cycle. These findings prove that the application of the STAD model assisted by Wordwall is effective in improving the learning process as well as student learning outcomes. Therefore, this model can be used as an alternative to innovative learning strategies that are oriented towards active, collaborative, and technology-based learning in accordance with the demands of the Independent Curriculum.

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## INTRODUCTIONS

Education is an important process that cannot be avoided because it plays a role in developing individual minds, interests, and talents (Saiful et al., 2024). Along with the times, the education system in Indonesia has undergone many changes, both in terms of policies and applicable standards. One of the tangible forms of these changes is the change of curriculum that aims to provide better quality education in order to be able to give birth to the next generation of superior nations.

The Ministry of Education then introduced the Independent Curriculum as an effort to improve the quality of national education. This curriculum is designed so that teachers can develop learning methods that are in accordance with classroom conditions and student needs (Pratiwi et al., 2023). With this new curriculum, teachers are required not only as material presenters, but also as facilitators who have professional, pedagogical, personality, and social skills in creating a meaningful learning atmosphere.

The Independent Curriculum provides greater freedom for teachers in determining learning strategies and formats (Maulidina et al., 2024). Students are also given space to explore the material in depth, both inside and outside the classroom. (Hidayatullah et al., 2025) One of the major changes implemented is the merger of science and social studies subjects into Natural and Social Sciences (IPAS) at the elementary school level in grades IV to VI. This change aims to enable students to understand natural and social phenomena in a more contextual and comprehensive manner. Social studies learning in elementary school is adjusted to the characteristics of elementary school age students who think concretely, holistically, and integrated. Children at this age see everything as a whole, so the integration of science and social studies in one subject makes it easier for them to understand concepts related to daily life. However, to achieve these goals, the right learning methods and media are needed so that students can be actively involved and motivated in the learning process.

The results of observations made by researchers in grade IV of SD Negeri 192/II Sungai Buluh show that the IPAS learning process still faces many obstacles. Classes are often not conducive, only a small percentage of students dare to answer the teacher's questions, and only a few students are able to complete the assignment. Teachers still use conventional lecture methods and learning resources in the form of books and pictures, without group learning. As a result, students tend to be passive, bored easily, and have low learning outcomes. The data from the daily review of IPAS strengthens these findings. Of the 20 students, only 9 students achieved grades according to the KKTP, while 11 students have not completed. In other words, more than half of grade IV students have not met the standards of completeness. This indicates that the learning outcomes of IPAS are still low and require significant improvement through more innovative learning strategies (Agustina et al., 2023). These conditions are also not in accordance with the demands of the Independent Curriculum and 21st century skills that emphasize critical thinking, creativity, collaboration, and communication. Student-centered learning, not just teachers, should be student-centered. Therefore, a learning model is needed that can encourage active student involvement while improving learning outcomes.

One of the relevant learning models is cooperative type *Student Teams Achievement Division* (CITY). This model emphasizes the division of students into heterogeneous groups to work together, help each other, and take responsibility for learning outcomes together (Ate et al., 2025). STAD is considered simple but effective in training students to collaborate, discuss, and improve material understanding through group interactions.

In addition to the learning model, the use of interactive media is also very important to create an interesting learning atmosphere. (Najihah et al., 2025) Digital media can help teachers present more creative learning and encourage students to think critically. One of the media that suits the characteristics of elementary school students is Wordwall, which is a web-based platform that provides various interactive activities such as quizzes, puzzles, and educational games. This media is able to present fun learning while fostering student motivation. (Rosiana et al., 2025) Although there have been previous studies showing the effectiveness of both STAD and Wordwall, most of them still focus on subjects other than IPAS. Studies on the application of STAD assisted by Wordwall in the context of IPAS in elementary schools are still very limited. In addition, previous research has highlighted more students' cognitive learning outcomes, while aspects of the learning process, student activities, and the role of teachers have not been studied comprehensively.

With this gap, this study is important to provide an empirical picture of the application of STAD assisted by Wordwall in science learning. The focus of the research is directed to improve the learning process, student involvement, and learning outcomes in grade IV of SD Negeri 192/II Sungai Buluh. Based on this background, this study aims to describe the application of a STAD-type cooperative learning model assisted by Wordwall media in improving the quality of the social studies learning process and outcomes of grade IV students of SD Negeri 192/II Sungai Buluh. Thus, this research is expected to be a reference for teachers in implementing innovative learning strategies that are in accordance with the demands of the Independent Curriculum and the needs of students in the digital era.

## METHOD

This study uses the Classroom Action Research (PTK) approach which is carried out in two cycles. Each cycle consists of two meetings, with stages of planning, implementation of actions, observation, and reflection (Widiastuti et al., 2021). The procedure was prepared to find out the extent of the application of the cooperative learning model *Student Teams Achievement Division* (STAD) with the help of Wordwall media can improve student learning outcomes (Mochammad Ricky Rifa'i et al., 2024).

The research place is SD Negeri 192/II Sungai Buluh, Central Rimbo District, Bungo Regency, Jambi Province. The subjects of the study were 20 grade IV students, consisting of 10 male students and 10 female students. The object of the research is the application of a STAD-type cooperative learning model assisted by Wordwall media in Natural and Social Sciences (IPAS) learning. This research was carried out in the odd semester of the 2025/2026 school year according to the school's academic calendar. The observation stage was carried out collaboratively between researchers, homeroom teachers of grade IV, and peers. Observations are focused on teacher activities during learning and student involvement in the learning process. Reflection is carried out after each cycle by analyzing the results of observation and evaluation of learning for improvement in the next cycle.

Data collection techniques use observation, tests, and documentation. Observations are used to obtain information about the learning process, teacher activities, and student involvement. The test was used to measure student learning outcomes in the cognitive realm after the application of the Wordwall-assisted STAD model. Meanwhile, documentation in the form of photos, videos, and learning administration attachments were used to strengthen the research findings.

The research instruments used include teacher and student observation sheets, test questions, and question grids. Observation sheets are used to assess the implementation of learning by teachers and student learning activities. Test questions are used to determine the improvement of student learning outcomes, while the question grid is arranged to ensure the compatibility between the question items and learning indicators. The data was analyzed in a quantitative descriptive manner by calculating the percentage of achievement of teacher activities, student involvement, and completeness of learning outcomes. The criteria for completeness are determined based on school standards, namely the KKTP score of 70. The research is declared successful if at least 80% of students obtain a score of  $\geq 70$  and the implementation of teacher learning and student involvement are in the good to very good category.

## RESULT AND DISCUSSIONS

This class action research is carried out through two cycles, where each cycle includes two meetings with stages of planning, implementation, observation, and reflection. Cycle II was carried out as a follow-up as well as an improvement from cycle I by optimizing the application of the *Student Teams Achievement Division* (STAD) model using Wordwall media.

### Results of Educator Observation Sheets in Cycles I and II

Based on the results of the research, data was obtained from the observation sheets of educators' activities in Cycle I and Cycle II which showed that the success of students in learning was greatly influenced by the quality of learning management by teachers. In this study, there was a significant increase in the implementation of learning

from Cycle I to Cycle II, which is shown in the following table.

**Table 1 Recapitulation of the Percentage of Educator Observation Sheets for Cycles I and II**

Yes	Activities	Percentage Value		Average Score	Category
		Meeting			
		I	II		
1	Cycle I	80%	85%	84%	Good
2	Cycle II	85%	95%	90%	Excellent

Based on Table 1, it is known that in Cycle I Meeting I the percentage of indicator achievement reached 80% and in Meeting II it was 85%. In Cycle II, the value increased to 85% at Meeting I and again rose significantly to 95% at Meeting II. The data shows that social studies learning in grade IV of SDN 129/II Sungai Buluh using the *Student Teams Achievement Division* model assisted by Wordwall has increased in each cycle. This proves that the learning process is increasingly effective and able to support students in understanding the material more optimally.

The improvement of teacher performance also made a major contribution to the success of this research. Teachers are able to carry out learning in accordance with the steps of the *Student Teams Achievement Division* model with the help of Wordwall optimally as a supporting medium. In addition, teachers consistently reflect based on the results of observations given by observers at each meeting, so that shortcomings in the learning process can be immediately corrected at the next meeting. With these continuous improvements, the learning process becomes more directed, students are more actively participating, and learning outcomes are increasing, as shown by the increasing number of students who achieve KKTP.

#### **Results of Student Observation Sheets in Cycles I and II**

The success of students in learning is not only measured by the test results, but also through their active involvement during the learning process recorded on the students' observation sheets. Observation data showed an increase in student participation and learning activities from Cycle I to Cycle II. This improvement can be seen in the table showing the comparison of the results of observations in the two cycles.

**Table 2 Recapitulation of the Percentage of Observation Sheets of Cycle I and II Students**

Yes	Activities	Percentage Value		Average Score	Category
		Meeting			
		I	II		
1	Cycle I	60%	70%	65%	Enough
2	Cycle II	80%	90%	85%	Good

Based on Table 2, the involvement of students in learning in Cycle I of Meeting I was recorded at 60% and increased to 70% in Meeting II. In Cycle II, the percentage of student participation increased to 80% in Meeting I and again increased to 90% in Meeting II. This data shows that the application of the *Student Teams Achievement Division* model assisted by Wordwall in social studies learning resulted in a significant increase from Cycle I to Cycle II, from an average of 65% to 85%. This increase occurs because the model encourages students to play an active role in the learning process.

#### **Results of Student Learning Tests Cycles I and II**

The data from the study showed that in Cycle I, the average percentage of student learning completeness reached 65%, while in Cycle II there was a significant increase to 85%. This improvement reflects an improvement in the learning process, especially after the implementation of the *Student Teams Achievement Division* Assisted Wordwall model which is able to improve student understanding.

**Table 3 Recapitulation of the Percentage of Learning Test Results for Class IV Students Cycle I and II**



Execution of Actions	Completeness		Completeness	
	Conclusion	Incomplete	Conclusion	Incomplete
Cycle I	13	7	65%	35%
Cycle II	17	3	85%	15%

Based on Table 3, it can be seen that there was an increase in student learning outcomes from Cycle I to Cycle II by 85%. This shows that the application of the *Student Teams Achievement Division* Assisted Wordwall learning model in the material is able to significantly improve student learning outcomes. The *Student Teams Achievement Division* Assisted Wordwall learning model can improve student learning outcomes due to a combination of teamwork, motivation, and the use of interactive digital media. STAD encourages students to collaborate, help each other, and be accountable for their learning, while Wordwall provides educational games that make the learning process more dynamic and engaging.

Overall, the findings of this study are in line with the results of previous research which states that cooperative learning models combined with interactive digital media can increase student activity and learning achievement. Thus, the use of the Wordwall-assisted STAD model can be used as an alternative learning strategy that is in accordance with the demands of an independent curriculum that is oriented towards active, collaborative, and technology-based learning (Anisa et al., 2024).

## CONCLUSION

Based on the results of class action research conducted in two cycles, it can be concluded that the application of the *Student Teams Achievement Division (STAD) type cooperative learning model* assisted by Wordwall media is able to improve the quality of the learning process and the learning outcomes of social studies students in grade IV of SD Negeri 192/II Sungai Buluh. In the educator aspect, the implementation of learning has increased from the good category in the first cycle to very good in the second cycle, which shows that teachers are increasingly optimal in managing learning according to the STAD syntax assisted by Wordwall. In terms of students, activities and involvement in learning also increased from the sufficient category in cycle I to good in cycle II, so that students are more active, motivated, and participate in every activity. Furthermore, the results of the student learning test also showed an increase in completeness, from 65% in the first cycle to 85% in the second cycle, indicating a significant improvement in the achievement of learning outcomes. Thus, the use of the Wordwall-assisted STAD model has proven to be effective as an innovative learning strategy that can improve the role of educators, student involvement, and learning outcomes, while being in line with the demands of the Independent Curriculum which is oriented towards active, collaborative, and technology-based learning.

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