



Implementing pop-up book-assisted STAD cooperative learning model to improve students' descriptive writing skills

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Article info	Abstract
Keywords descriptive, STAD model, pop-up book, writing	This paper documents the implementation of the STAD cooperative learning model assisted by pop-up book media to improve the descriptive writing skills of students in class VC UPT SDN 064025 Medan. This study is a classroom action research, which describes the process and results of actions taken in a classroom to improve results and quality of the learning process. The research subjects were students in class VC at UPT SDN Medan in the academic year 2024/2025. There were 25 students in class VC, consisting of 13 female and 12 male students. The research results indicate that implementing the STAD Cooperative Learning Model assisted by Pop-Up Books can improve descriptive writing skills, as evidenced by an increase in the learning completion rate from 64% in cycle I to 84% in cycle II. This shows that the STAD Cooperative Learning Model assisted by Pop-Up Books is suitable for improving elementary school students' descriptive writing skills.

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1. Introduction

Indonesian language learning in elementary school plays a key role in everyday life. Language skills developed from an early age will equip students for further education. Practical language skills will significantly impact life in the broader community. A person's command of language also influences success in communicating with others. Indonesian language learning has a specific goal, which is to master four skills, namely (1) listening, (2) speaking, (3) reading, and (4) writing. Writing skills cannot be acquired naturally or inherited from one's ancestors; instead, every student must be trained and study diligently from an early age as a foundation for further education. Thus, writing activities become a language skill that requires serious

attention. This is because writing skills are particularly challenging for students to master. In addition, good writing skills also enable a teacher to design interesting and varied learning materials, facilitate productive discussions, and create quality and relevant reading materials to present to students (Durga et al., 2018).

At the elementary school level, writing skills, especially descriptive writing, are an integral part of the thinking process because when someone writes a description, they must know. The knowledge referred to in the thinking process of elementary school children is the ability to express ideas, thoughts, or produce a product in the form of writing. Due to its productive nature, writing skills, especially descriptive writing, are considered difficult to perform.

Descriptive writing skills are taught in elementary school, but students' writing assignments reveal several problems related to writing instruction. Zulkarnaini (2011:145) highlights several challenges students face in learning writing skills, which are (1) limited use of spelling, (2) limited critical thinking in organising content systematically, and (3) writing instruction models that are not student-centred.

Based on the observation results conducted on January 20, 2025, in class VC during the descriptive writing learning process, the following observation data obtained are that students did not have a strong interest in descriptive writing, they lacked mastery of spelling, punctuation, and grammar, students were less enthusiastic and motivated in participating in the descriptive writing learning activities, they did not use media during the descriptive writing learning process, the learning process is conducted in a traditional manner, where the teacher frequently explained the material and students listened. In addition, students completed the descriptive writing assignment by following the examples provided by the teacher, but they still struggled to develop their ideas.

Above all, it can be seen that the descriptive writing skills of students in class IV C UPT SDN 064025 are still low. Students still have difficulty in developing ideas and concepts. Students also lack mastery of writing skills related to spelling, punctuation, and grammar. The lack of interest and motivation among students in descriptive writing lessons also contributes to the low level of descriptive writing skills among students in Class VC of UPT SDN 064025. Additionally, the teaching methods employed by the teacher appear unengaging, as they do not utilise teaching models or media in descriptive writing activities, relying solely on images from the students' textbooks. As a result, students' creativity in descriptive writing is not fully optimised. Furthermore, it was found that 68% or 17 students have not met the KKTP criteria, while 32% or eight students have met the KKTP criteria.

One solution to overcome this problem is to implement a more interactive and engaging learning model, such as the Student Teams Achievement Division (STAD) cooperative learning model. Suarbawa (2019:59) states that the STAD model is a form of cooperative learning that emphasises cooperation in small groups, where each member is responsible for the success of their group. The success of the STAD model in improving student understanding can be reinforced using innovative learning media, such as pop-up books. Nabila (2021: 3930) explains that pop-up books are practical to use, easy to carry, can increase student enthusiasm, and make students more active because of the interesting presentation of the material. Teachers use media to convey a message or material so that students can more easily understand the content or message in the lesson. Serialised picture media helps improve visual understanding, stimulating imagination and creativity, and helping students who may have limitations in reading text to stay involved in the learning process (Julia et al, 2023)

Pop-up books can increase students' attention and interest, increasing student activity. Another reason for using pop-up books is that students learn to think logically. Students can

easily arrange words into sentences and paragraphs, creating a complete piece of writing or work. It is hoped that learning with Pop-Up Book media improves the descriptive writing skills of students in class VC at UPT SDN 064025 Medan.

2. Literature Review

The Student Teams Achievement Divisions (STAD) learning model is a cooperative learning strategy emphasising student cooperation in small groups to understand lesson material and improve learning outcomes. The following are some of the main definitions and characteristics of the STAD model. According to Rusman (2023:305), the Student Teams Achievement Division (STAD) cooperative learning model is the most appropriate model for teaching science subjects, such as mathematics, language and mechanics, geography and mapping skills, and other scientific concepts. Ridwan et.al (2022:451) explain that the Student Teams Achievement Division (STAD) cooperative learning model emphasises group cooperation as the primary strategy in the learning process. In STAD, students work in small groups of 4-5 people with diverse academic abilities.

The STAD cooperative learning model is carried out in groups with diverse group members consisting of males and females, different ethnic groups, and diverse intelligences in each group. Besides, team members must also discuss (Berlyna & Purwaningsih, 2019) and help one another work on the activity sheets (Gambari et al., 2015). Students must help each other in the quiz so that the score obtained by the group can be maximised. Qismullah (2015) stated that assigning roles must be entrusted to students to increase their responsibility towards fulfilling group assignments.

One of the advantages of STAD is its simplicity and ease of implementation, making it a suitable method as a first step in implementing cooperative learning. Sumarni (2020:1310) adds that this model also emphasises student activity and interaction, which is important in increasing their engagement during learning. Widhiastuti (2020:1391) writes that the Student Teams Achievement Divisions (STAD) learning model has various advantages that can improve the effectiveness of the teaching and learning process. One of its advantages is building students' self-confidence and individual skills through group social interaction. In addition, the STAD learning method is a learning method that involves the recognition of teams where students are divided into several heterogeneous groups based on the level of achievement or level of learning ability (Habsiah et al, 2017).

Komang (2021:179) adds that another advantage is student-centred learning, where students are more active in discovering concepts from the material being studied. In addition to its advantages, the STAD learning model also has disadvantages. One of them is the lack of contribution from low-achieving students, which can make high-achieving students feel less motivated or even disappointed. Furthermore, the preparation and implementation of the model require a significant amount of time, which can pose a challenge in achieving curriculum goals. Teachers also need specialised skills in managing cooperative learning, and not all students possess the appropriate traits for working in groups (Widhiastuti, 2020:1392).

Annisa Nurul Izzah & Deni Setiawan (2023:87) define a pop-up book as a book with moving parts or three-dimensional elements that provides a more engaging story visualisation, starting with images that move when the pages are opened. Nurrohmah et al. (2020:76) add that pop-up books offer potential for movement and interaction through paper mechanisms such as folds, rolls, slides, tabs, or wheels. These different forms of display make Pop-Up Books more than

just ordinary books because they have additional dimensions and elements of surprise when the pages are opened.

3. Method

This research design is a type of Classroom Action Research (CAR). CAR is a type of research that describes the process and results of actions taken in a classroom to improve learning outcomes and quality. Classroom action research aims to improve the quality of learning in the classroom by addressing key issues arising from real-life situations. According to Arikunto (2015:16), four stages must be carried out in classroom action research (CAR). Broadly speaking, four stages are commonly followed: (1) Planning, (2) Implementation, (3) Observation, and (4) Reflection.

The main objective of classroom action research is to improve and enhance the professional services of educators in handling the teaching and learning process. The research model used is the STAD Cooperative Learning Model Assisted by Pop Up Book Media to Improve the Descriptive Writing Skills of Students in Class VC of UPT SDN 064025 Medan.

According to Rusman (2023:306), the following are the steps of the STAD (Student Teams Achievement Divisions) learning model that is applied: Communication of Objectives and Motivation, Group Division, Presentation by Teacher, Team Learning Activities (Teamwork), Quiz (Evaluation), and Team Achievement Awards. In overcoming the STAD learning model, it can be done by using the help of pop-up books. A pop-up book is a book-shaped medium with three-dimensional and moving elements, where, when the pages of the book are opened, a raised image appears that can move through paper mechanisms such as folds, rolls, slides, or wheels. The uniqueness of pop-up books lies in their two-dimensional appearance, which has three-dimensional elements that can move, providing more interesting and interactive visuals.

The research problem is the low level of descriptive writing skills among students in class VC at UPT SDN 064025. The researcher was directly involved in the research process by monitoring, analysing, recording, collecting data, and reporting the research results. This research was conducted by providing an intervention to identify strengths and weaknesses so that improvements could be made to enhance the quality of the learning process in descriptive writing skills.

The research subjects were students in class VC at UPT SDN 064025 Medan in the academic year 2024/2025. There were 25 students in class VC, consisting of 12 male and 13 female students. The reasons why the researcher chose SDN 064025 Medan as the location for the study are as follows:

- a. There are problems with teaching descriptive writing in class VC at UPT SDN 064025 that need to be addressed immediately.
- b. The school was open to conducting research entitled “Implementing Pop-Up Book-Assisted STAD Cooperative Learning Model to Improve Students’ Descriptive Writing Skills.”
- c. Teachers were willing to collaborate with researchers to improve the learning process.

The research design is a classroom action research. Four stages that must be carried out, according to Arikunto (2015:16), are commonly (1) Planning, (2) Implementation, (3) Observation, and (4) Reflection. The research data collection techniques used were observation and testing. The data analysis used was qualitative and quantitative. Qualitative techniques were used to describe the implementation of the action plan, the learning process, and student activity in learning activities. Quantitative techniques were used to analyse student learning achievement or performance. The presentation of quantitative data in the form of cognitive

learning outcomes was analysed by determining the mean or average. Quantitative data were presented in the form of percentages. The percentage formula is as follows:

$$P = \frac{Fx}{N} \times 100\%$$

Explanation:

P : Percentage of learning activities implemented

Fx : Number of learning activities implemented

N : Total number of learning activities planned

This study's research outcome indicator is the achievement of minimum competency standards in student learning outcomes. The researcher set a benchmark of 75% of students whose learning outcomes improved by achieving a score of ≥ 70 .

4. Results

The following are the research results on implementing the STAD cooperative learning model assisted by pop-up books to improve the descriptive writing skills of fourth-grade students at UPT SDN 064025 Medan. This classroom action research was conducted over two research cycles. Cycles I and II consisted of two learning sessions comprising four stages: planning, implementation, observation, and reflection. Student learning outcomes were obtained through written tests in the form of pre-tests and post-tests in the two action cycles. At the initial stage (pre-test) before the action, the learning outcomes of Grade 4C students at UPT SDN 064025 Medan were not optimal. Based on the initial assessment (pre-test) conducted before the action, only nine students (36%) achieved the Learning Objective Completion Criteria (KKTP) of 70, while 16 students (64%) were still below the KKTP.

Cycle 1

1. Planning

Before developing a lesson plan or teaching module, the researcher identified problems in class V-C at UPT SDN 064025 Medan. Once the issues were identified, the researcher developed action steps to implement in Cycle I. Subsequently, the researcher developed a teaching module tailored to the STAD Cooperative Learning Model with Pop-Up Book Media Assistance for the Writing Descriptions material for the learning process.

2. Action

During the action phase, the researcher conducted the learning process in class V-C of UPT SDN 064025 Medan by applying the teaching module developed using the STAD Cooperative Learning Model Assisted by Pop-Up Books. The steps taken were as follows:

- a. The teacher conducts learning activities following the teaching modules that have been designed.
- b. The teacher conveys learning objectives and learning motivation to students.
- c. The teacher shows the pop-up book media and briefly explains its use.
- d. The teacher divides the students into heterogeneous groups (4-5 students per group) based on their diverse abilities.
- e. Each group is given a topic to write a description using simple language based on the pop-up book media explained.

- f. Each group discusses and writes a description using language that is easy for the group to understand.
- g. Each group takes turns presenting their creative descriptions.
- h. The teacher assesses and provides feedback on the tasks completed by students.
- i. The teacher awards each group, presenting the results of their descriptive writing discussions.

3. Observation

During cycle 1, observations were made of student activities. The results showed that students were more active and enthusiastic about participating in learning with teachers using Pop-up Books. They asked questions more often, discussed, and helped each other in groups.

4. Reflection

After implementing Cycle I, the post-test results showed improved learning outcomes. The average class score rose to 66.8, with a total score of 1670. The number of students who achieved mastery also increased to 16 (64%), while 9 (36%) still did not meet the minimum passing grade. Despite the improvement, numerous students must be encouraged to be more active in group discussions and writing descriptive texts.

Cycle 2

1. Planning

Based on the evaluation and reflection results in cycle I, the researcher then makes improvements in cycle II by paying attention to the things that need improvement. The improvements made in Cycle II include the following:

- a. Revising the teaching module created following the syntax of the STAD cooperative learning model, assisted by Pop-Up Books with material on descriptive writing.
- b. Creating observation sheets for teachers and students to observe the learning process.
- c. Preparing exercises for writing descriptions using the pop-up book media that has been prepared.

2. Implementation

The implementation of cycle II research was conducted to improve the learning process and enhance descriptive writing skills.

3. Observation

The observation results during the implementation of cycle II showed a significant improvement. Students have improved in developing a framework for writing descriptions, choosing appropriate vocabulary, and writing descriptive texts more systematically and organised. Cooperation among group members has also become more effective, with each student playing an active role in discussions and contributing ideas to be written in descriptive texts.

4. Reflection

Based on the observation results and reflections from the implementation of cycle II, there was an increase in student engagement in the learning process, particularly during group work activities. In addition to increased student participation, learning outcomes also significantly

improved. This indicates that the STAD cooperative learning model assisted by Pop Up Books successfully improved the descriptive writing skills of students in class VC UPT SDN 064025 Medan. After improvements were made in the second cycle, the class average score increased to 78.48 with a total score of 1962.

5. Discussion

5.1 Completeness of classical student learning outcomes in the pre-test

After knowing individual completeness, classical completeness is summarised from the learning outcomes of students who are complete and those who have not completed. Students who have completed their learning classically, if in the class, 75% of students complete their learning. Classical completeness in the pre-cycle is shown in the following table:

Table 1. Classical student learning outcomes in the pre-test

Learning Completeness	Pre-Test	
	Number of Students	Percentage
Completed	9	36%
Not Completed	16	64 %
Total	25	100 %

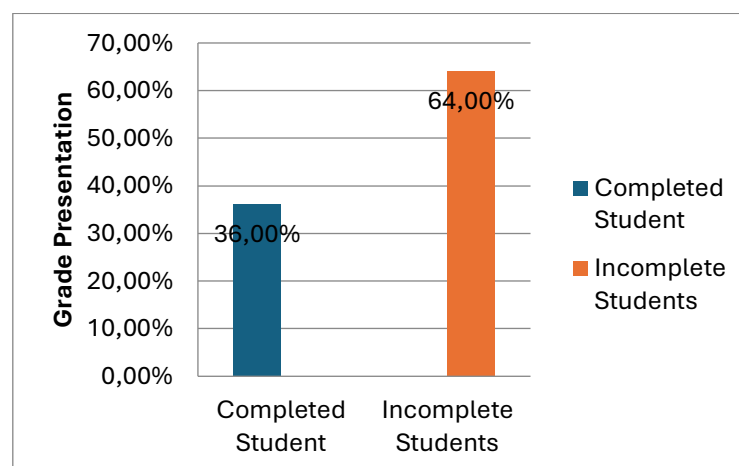


Figure 1. Classical student learning outcomes in the pre-test

5.2 Average student learning outcomes on pretest

The data in Table 1 shows that the highest score was 80, and the lowest score was 40. The overall average (\bar{x}) score was 50,12. Therefore, it can be concluded that the students' initial ability before implementing the STAD model assisted by pop-up books was incomplete because the average KKTP score was less than the established 70.

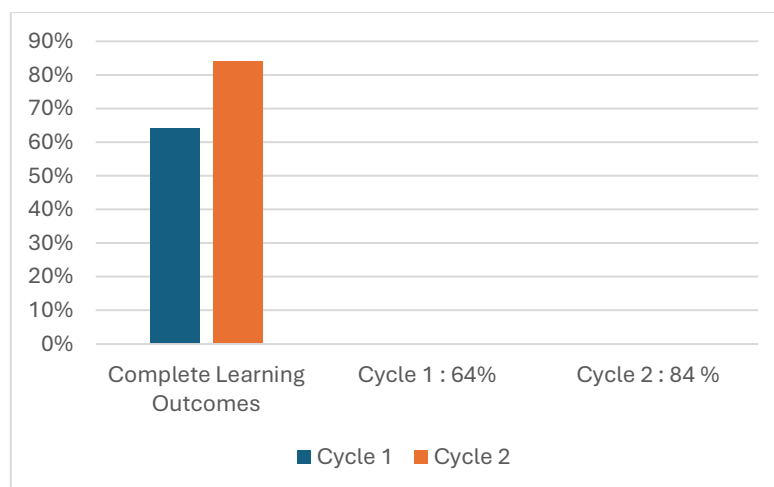
5.3 Completeness of post-test learning outcomes

Based on the study's results, data on descriptive writing skills obtained by applying the STAD cooperative learning model assisted by pop-up books can be seen in Table 2. Writing skills results for cycle 1 and cycle 2:

Table 2. Completeness of post-test learning outcomes

No	Analysis Component	Cycle 1	Cycle II
1	Average Completion Rate	16 (64%)	21 (84%)
2	Highest Score	85	95
3	Lowest Score	55	62
4	Average Non-Completion Rate	9 (36%)	4 (16%)

Based on the Table 2 above, it is known that out of 25 students, the average learning completeness in cycle I reaches 64% (16 students), while nine students or 36% do not achieve KKTP. In cycle I, this is because numerous students are still less active in group discussions and do not fully understand the steps of writing descriptions. Therefore, improvements are made to the learning process in Cycle II, significantly improving students' descriptive writing skills. 84% or 21 students successfully achieve the KKTP. Students are more active in group discussions, exchanging ideas in writing according to the example steps. Interaction between students and teachers improves, the atmosphere is livelier, and students show greater enthusiasm in participating in the learning process.

**Figure 2.** Learning outcomes completion diagram

6. Conclusion and Implications

The implementation of descriptive writing using the STAD cooperative learning model, assisted by Pop-Up Books, obtained 64%. It achieved an average score of 66.8 in cycle I and obtained 84% and an average score of 78.48 in cycle II. The obstacles that arose were that teachers did not fully implement the steps of the STAD cooperative learning model assisted by pop-up books and did not provide sufficient guidance to each group, resulting in some students still finding it difficult to develop descriptive writing. All obstacles were overcome by paying attention to the syntax of the learning model and using pop-up books creatively.

Based on the research results conducted in class VC UPT SDN 064025 Medan, the following recommendations are made for teachers:

- In teaching descriptive writing, teachers can use the STAD cooperative learning model with pop-up books, which not only attract students' attention but also help them describe objects more carefully and in greater detail.

- b. Teachers should carefully observe each step of using the STAD cooperative learning model with assistance so that students achieve the desired learning outcomes in descriptive writing skills.

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