

The Effect of Teams Games Tournament Assisted by Flipcharts on the Cognitive Abilities of Elementary School Students

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Abstrak. The problem of the lack of teacher innovation in learning is the main factor in the occurrence of a boring classroom atmosphere, so students often experience difficulties in learning certain materials. The objective of this study is to determine the cognitive abilities of elementary school students by using media and a cooperative learning model of teams games tournament. This research was conducted at SDN Wunut II Porong. True-Experimental Design with Posttest-Only Control Group Design, using quantitative research type. The sample of this study was class VI consisting of 30 students using simple random sampling data collection using instruments in multiple-choice tests containing indicators of the cognitive domain. The results showed that when compared to the posttest value of the control class using the lecture method, the experimental class using the teams games tournament type cooperative learning model assisted by flipchart had a superior value on students' cognitive abilities. It is anticipated that using the teams games tournament learning paradigm to social studies content using flipcharts will enhance student learning outcomes and strengthen cognitive skills. The success is influenced by students who are actively involved in games and competitions so as to make students excited in the learning process.

Keywords: Cognitive, Cooperative Learning, Flipchart, Learning Outcomes, Team Games Tournament.

1. Introduction

Education is an effort to shape a person's morals and personality by improving quality through learning outcomes after the process of instruction and learning. These learning outcomes have learning objectives from the achievements obtained by students in cognitive, affective, and psychomotor aspects (Rahmiati & Azis, 2023; Sudiana, 2023). Obtaining learning objectives to be achieved requires cognitive abilities that must be trained (Wuwung, 2020). Jean Piaget said that cognitive is the ability of memory, attention, deep understanding, and processing information that as a person ages, the more his ability increases (Amseke et al., 2021; Hapudin, 2021). Other developments, such as motor, communication, emotional, and social skills, are closely related to cognition (Basri, 2018; Sintya Devi & Wira Bayu, 2020). Therefore, students' cognitive ability is very necessary before the learning process, so it will also affect learning achievement and student competence (Al-Taujih et al., 2020).

The results of the Programme for International Students Assessment (PISA) research conducted by the Organization for Economic Co-Operation and Development (OCED) suggest that several factors might be responsible for the issue of declining student learning outcomes in the contemporary world. Internal variables including low motivation, disinterest in learning, and difficulty focusing might affect how well students learn. In contrast, outside influences consist of the community, school, and family settings. For instance, in the still-common setting of online learning, low student learning outcomes are a result of both online and non-online learning processes' ineffectiveness, as seen by low student attendance and mediocre assignments. Furthermore, a lack of zeal for education, a lack of interest in.

In the survey, Indonesia ranked 10th lowest out of 79 countries in measuring basic literacy levels. The survey found that the low competence of students was caused by their interest and motivation to learn. In addition, it is also caused by the teaching practices implemented by

the teachers. (Pusat Penelitian Kebijakan, 2021). Indeed, there are still many obstacles experienced by teachers, as in the use of a teacher-centered exclusively teaching and learning approach, the use of conventional learning methods such as lectures, questions and answers, and independent assignments, and the lack of useful learning media to encourage students to follow learning (Astikajaya, 2023; Raya & Rahman, 2023; Sofyan et al., 2021). This means students do not have the creativity to produce an interesting teaching and learning process because they only become passive listeners (Nitiasih, 2021).

1.1. Problem Statement

The issue with this research was found in the social studies class VI learning objectives at SDN Wunut II Porong with students with less interest in learning. The results of observations made by teachers show that in addition to the factors mentioned above, namely the lack of innovation in learning. Innovation or renewal of ideas in the learning process positively influences or can overcome problems students face (Ambarwati et al., 2022; Mahadi et al., 2022; Srilaksmi & Indrayasa, 2020). In addition, it is an effort to inspire students to engage in active participation in the process of learning. (Putri et al., 2022; Talakua & Aloatuan, 2021).

Thus, there needs to be improvements to increase and develop motivation, attention and understanding that can affect students' cognitive abilities in realizing better learning achievement. Therefore, teachers must choose teaching strategies that can overcome these problems. Among these is the implementation of cooperative learning. The teaching and learning process known as the cooperative learning model involves students cooperating in small groups to accomplish shared objectives (Slavin, 1982). The cooperative model can be divided into several types, one of which is the teams games tournament type.

As a teaching tool in learning carried out, this research is flipchart media, which is one of the latest tools that can be utilized. "Flipchart media are sheets of paper in the form of albums or calendars measuring 50x75 cm, or smaller sizes of 21x28cm as flipbooks arranged in a limited order at the top." Therefore, learning this way is expected to affect students' understanding of social sciences. As an instrument for education, learning media has the following objectives: a) to make learning in the classroom easier; b) make learning more effective; c) maintain the relationship between the subject matter and learning objectives; and d) support students' concentration while studying (Achriyati et al., 2022; Rafflesines et al., 2019; Yulianto et al., 2022)

1.2. Related Research

Teams games tournament is widely known as game-based learning; using academic games or tournaments makes for a fun classroom environment; learners prefer teaching and learning and are inspired to participate in learning (Ke & Grabowski, 2007; Mustika, 2020). Based on many research findings, The cooperative learning paradigm known as teams games tournament has the potential to enhance student learning results, which has implications for improving students' cognitive abilities. The findings are reinforced by behavioral changes that refer to positive directions such as diligently reading books, because students want to be winners in every learning process. In this discovery, there are also differences such as; the number of research respondents, the purpose of the research and the media used. (Maimunah et al., 2023; Melindawati, 2021; Mertayasa, 2022).

Unlike the previous research, this study collaborated the team games tournament learning model approach using flipchart instructional materials. Since flipcharts are useful for presenting information graphically and attractively, which can help students in understanding complex ideas, therefore The learning model of team games tournament is integrated with it. Additionally, the goal of utilizing instructional media is to motivate students to complete their school work as effectively as possible, one of which is flipcharts. Flipcharts contain summaries, images, tables or schemes that are flipped back and forth sequentially according to the learning material taught (Aloahyt et al., 2022; Arisetya, 2019; Talakua & Aloatuan, 2021). For this reason, the flipchart itself is considered capable of affecting students' cognitive ability it is proven that students are increasingly actively involved directly in the messages presented in the material learned (Novrica et al., 2022). This is found by the increased learning outcomes (Drestajumna et al., 2022; Hertarini et al., 2022).

1.3. Research Objectives

Judging from the advantages contained in it is anticipated that the teams games tournament learning and flipchart media would be able to address issues that instructors and students have when instructing and learning of social studies subjects. Flipchart media includes various information through interesting writing, concrete images according to the material studied, and a suitable layout to facilitate flipping. To measure cognitive abilities is carried out by conducting tests developed from the material. These cognitive domains include (C1) memorizing, (C2) understanding, (C3) applying, (C4) analyzing, (C5) evaluating, and (C6) creating (Magdalena et al., 2021).

The objective of the cognitive domain evaluation is to collect appropriate data regarding how students have met their academic objectives in this area, specifically concerning the memory of knowledge and its application, analysis, synthesis, and assessment. Improving student achievement in the cognitive domain, especially at the level of memory, comprehension, application, analysis, synthesis, and assessment, is a benefit of cognitive domain evaluation.

The purpose of this study was to determine if the flipchart-assisted team game tournament model had any influence on the cognitive abilities of elementary school students. Therefore, Applying and evaluating the teams games tournament learning is the aim of this project with flipchart media as a cognitive ability tool for grade VI students of SDN Wunut II Porong.

2. Theoretical Framework

2.1. Team Games Tournament Learning Model

Robert E. Slavin said that the teams games tournament learning model requires all students to participate in learning to actively compete as team representatives with other team members without any difference in status (Laksana et al., 2021; Musdalipa et al., 2022). The teams games tournament type model contains game elements, where teachers present the material to be learned and form groups of four to five students who have different characteristics. Next, they compete for the most points and close with an assessment (Huda, 2015; Isjoni, 2014; Slavin, 1988).

Using the teams games tournament cooperative learning methodology in the classroom has advantages. These benefits include broadening their horizons and learning more by working in groups and sharing their expertise with other students. This will broaden students' perspectives and help their understanding of the subject matter in their group. Applying the teams games tournament learning, students are expected to respect friends' opinions in their group. During tournaments, when students understand how to express their different opinions, students will appreciate friends who share different points of view (Adiputra & Heryadi, 2021; Rahmawati et al., 2023; Sembiring et al., 2020).

2.2. Flipchart

Flipchart teaching media is a collection of summarized information on sheets of paper that are pasted and accessed sequentially by turning the page of the subject matter of the learning material. In addition, flipchart also has another meaning, which is described as sheets of paper of the same size which are then stapled at the top. According to the understanding of professional experts from flipcharts, words or visuals can be used to convey information. Proper placement and design of flipcharts should be planned, and the way they are presented should consider the maximum number of learners and the distance at which they can see the flipchart paper (Rifai et al., 2023). White flipcharts, which are blank sheets of paper that are ready to be filled with learning content. And message flipcharts, which are sheets of paper containing learning material along with pictures, graphs, and other objects, are both types of flipchart media (Lestari et al., 2023). Based on the definition of flipchart teaching media, flipchart media can be interpreted as media made by stacking a number of sheets of paper together, and its use is quite simple, namely by opening the paper one by one.

2.3. Cognitive Abilities of Elementary School Students

The cognitive ability of primary school learners is the ability of the learner's brain to store, analyze, and extract information including logical reasoning, thought transformation, and attention. Academic success may be strongly influenced by learners' cognitive abilities. Strong cognitive aptitude also helps learners think creatively and solve problems more quickly, enabling learners to stay focused on learning and development (Shi & Qu, 2022).

Lev Vygotsky, a modern Piagetian psychologist, asserts that active learning requires strong and fruitful learner contact. To acquire knowledge, learners are encouraged to reflect, ask questions, and actively seek it out, not just passively receive it (Yusuf, 2023).

The central tenet of Vygotsky's constructivist social theory is "What the child can do in cooperation today, he can do alone tomorrow." What is being done today, or what the child is being taught, can be done in a group setting separately at a later time. In light of this assumption, Vygotsky suggests that teachers should be able to collaborate with students and provide them with the tools they need to develop understanding through discussions, debates, and even in-person interactions (Suci, 2018).

The method of measuring cognitive capacity, save for one, uses Bloom's taxonomy. According to Bloom, there are several levels of cognitive ability, including understanding, understanding, applying, analyzing, synthesizing, and evaluating. Remembering involves bringing relevant knowledge from long-term memory to mind. The capacity to comprehend complex instructional resources, such reading materials and instructor explanations, is another aspect of the understanding process. This process produces a variety of abilities, such as the ability to comprehend, provide examples, categorize, summarize, and conclude. The third step is application, which involves using newly learned procedures in both known and unknown scenarios. The following step is analysis, which entails dissecting knowledge into manageable chunks and considering how each chunk connects to the structure as a whole. The process of creation entails assembling elements to generate new knowledge (Arifudin, 2023).

3. Method

3.1. Research Design

This research uses quantitative methods with experimental types. The design used is True-Experimental Design with Posttest-Only Control Group Design type. With this design, there are two groups chosen randomly. The experimental group was the first group to receive treatment, and the control group was the second group to receive no treatment as in table 1.

Table 1. Scheme Posttest-Only Control Group Design

| Class | Treatment | Posttest |
|------------|-----------|----------|
| Experiment | X | T2 |
| Control | | T2 |

Information:

X = Treatment using flipchart-assisted Teams games tournament models

T2 = Posttest

3.2. Respondent

In this study, the teams games tournament model with flipchart assistance was used to treat the experimental group. In contrast, the control group did not get treatment or only applied teacher-centered learning with a lecture model. To decide the subject between the experimental and control classes, use simple random sampling. The study population was all grade VI students of SDN Wunut II Porong, totaling 30 people. There are 15 students in the

experimental class and 15 in the control class. With details of 16 male students and 14 female students who have an average age of 12 years.

This experimental sample is determined by a number of variables, such as the purpose of the research and the complexity of the phenomenon being investigated. Probability sampling is not always necessary in educational research, particularly in experimental studies, and it may not be feasible to select individuals from the wider community. For this reason, in this situation accessible sampling is used, which refers to the use of subjects that are already available, such as the number of learners (Alwi, 2019). In the Krecjie-Morgan table (1970), R.V. Krecjie and D.W. Morgan provide guidance on how to ascertain the number of sample sizes based on the size of the population and race in relation to the number of sample sizes that must be used, the table states that a minimum sample size of 10 respondents is allowed (Payadnya & Jayantika, 2018). Thus this study used a sample of 30 learners, of which there were 15 learners in the experimental class and 15 learners in the control class. Each class was filled by learners of the same gender and not grouped based on their thinking ability or other different characteristics.

3.3. Data Collection

The instrument in this study used to collect data on both samples results from learning consisting of 30 questions. How to process multiple-choice test scores is by formula (Arikunto, 2014):

$$\text{Skor} = \frac{\text{Total sampel yang benar}}{\text{Total semua sampel}} \times 100\%$$

The methods used in this study to acquire data include 1) Test techniques, which are tested in the form of posttest question instruments given to students after participating in learning, both experimental class students and control class students; 2) Observation techniques, aimed at knowing the student-led activities in the process of learning about experimental classes and control classes; 3) Documentation techniques, by taking preliminary data before treatment from grade VI teacher archives in the form of student name lists and documentation during research in grade VI SDN Wunut II Porong.

3.4. Data Analysis

This data analysis technique uses a normality test, a procedure to determine whether a data set can be thoroughly described with a normal distribution and estimate the likelihood that the random variables the data collection has regularly distributed researcher. The Shapiro-Wilk test was employed in this study's normalcy test. Shapiro and Wilk developed the Shapiro-Wilk test as a computational or data distribution procedure. One of the testing techniques is the Shapiro-Wilk method—using normal small sample sizes that are valid and efficient. Homogeneity tests compare the variance of two or more sample data sets from the same population. To find out whether the data set examined has the same properties or not, A test for homogeneity is conducted. The homogeneity test in this study used the Fisher test. By comparing the variance of the first and second data groups, taking into account the degrees of freedom and confidence levels, the Fisher F test is used to ascertain whether the variance of the two data groups is homogeneous.

Furthermore, testing was conducted using a t-test with the formula Independent Sample T-Test. To compare two sample averages from an unrelated group, an independent sample t-test is used. This shows that many individuals contributed scores to each group. This test is intended to find out if the samples are different from each other.

3.5. Validity and Reliability

The instruments used have passed validity tests and reliability tests. Two expert lecturers have tested the instrument's validity. In contrast, the reliability test of the instrument is carried out by testing reliability by piloting the instrument once, then the data is analyzed with the Kuder Richardson (KR) 20 technique.

$$r_{11} = \frac{k}{(k-1)} \left\{ \frac{St2 - \sum pq}{St2} \right\}$$

- r_{11} = Internal instruments Reliability
- k = The number of question items or questions
- p = The proportion of questions is correct
- q = $1-p$
- S^2 = Varians Total

4. Result

This study determined the research subjects in two classes, namely the control class and the experimental class, without giving a pretest at the beginning. The data obtained is the value of the posttest results on the material of geographical characteristics and socio-cultural, economic, political life in the ASEAN region of Social Science (IPS) subjects in class VI SDN Wunut II.

4.1. Validity and Reliability Test results

Table 2 below displays the validity test calculation results.

Table 2. Validity Test Calculation Results

| Category | Question Number | Sum |
|----------|--|-----|
| Valid | 4,6,7,8,9,10,13,14,16,19,20,21,22,23,25,26,27,28,29,30 | 20 |
| Invalid | 1,2,3,5,11,12,15,17,18,24 | 10 |

Referring to table 2 of the posttest instrument validity test which has been tested as many as 30 multiple-choice questions, it was found that 20 questions were valid and met the criteria of each cognitive domain indicator. Then the reliability calculation using the Kuder Richardson formula (KR) 20 obtained 0.761. In the calculation conditions Kuder Richardson (KR) 20 can be declared reliable if the reliability value is more than 0.7. For this reason, the 20-point multiple-choice question instrument is reliable.

Table 3. Experimental Class Posttest Results

| No | Student Name | Value |
|----|--------------|-------|
| 1 | AZR | 75 |
| 2 | ANS | 85 |
| 3 | AFS | 75 |
| 4 | DF | 90 |
| 5 | DEW | 75 |
| 6 | FRA | 95 |
| 7 | IACP | 85 |
| 8 | MAHA | 75 |
| 9 | MAKPP | 85 |
| 10 | MFAP | 85 |
| 11 | MFH | 95 |
| 12 | MSA | 80 |
| 13 | PNA | 80 |
| 14 | SPAR | 70 |

| | | |
|----|---------|------|
| 15 | ZRF | 70 |
| | Sum | 1220 |
| | Average | 40,6 |

It is seen from table 3 that the number of posttest results obtained in the experimental class attended by 15 students was 1220 and had an average of 40.6.

Table 4. Control Class Posttest Results

| No | Student Name | Value |
|----|--------------|-------|
| 1 | AZAA | 75 |
| 2 | ABP | 60 |
| 3 | AS | 55 |
| 4 | AKLI | 65 |
| 5 | BSP | 45 |
| 6 | DRA | 75 |
| 7 | DFIA | 45 |
| 8 | EAPR | 50 |
| 9 | HKA | 65 |
| 10 | MSL | 80 |
| 11 | MAN | 75 |
| 12 | MIH | 70 |
| 13 | MRDAP | 60 |
| 14 | RSA | 75 |
| 15 | TAS | 75 |
| | Sum | 970 |
| | Average | 32,2 |

It is evident from Table 4 that the number of posttest results obtained in the control class attended by 15 students was 970 and had an average of 32.2.

According to the posttest learning outcomes data in Table 3, The experimental class's average score is 40.6. While the control class's average value in Table 4 is 32.3. This shows that the average score of the experimental group is superior to the average value of the control group. Then, the next step is to carry out prerequisite tests, namely normality and homogeneity tests. To ascertain whether the data obtained is distributed normally or not. The normalcy test computation results are displayed in the table below.

4.2. Normality and Homogeneity Test results

Table 5 displays the results of the validity test calculation, and Table 6 below displays the results of the homogeneity test calculation.

Table 5. Shapiro-Wilk Normality Test Calculation Results

| | Shapiro-Wilk | | |
|------------|--------------|----|------|
| | Statistic | df | Sig. |
| Eksperimen | .924 | 15 | .224 |

| | | | |
|---------|------|----|------|
| Kontrol | .896 | 15 | .082 |
|---------|------|----|------|

a. Lilliefors Significance Correction

Table 5 shows the results of calculating the data normality test with Shapiro-Wilk assisted by SPSS 25.0 for Windows with a significance level of $\alpha = 0.05$ from the results of experimental class learning obtained 0.224 for a sample of 15 students. In contrast, the acquisition of control class learning outcomes was obtained at 0.082 for 15 students. If the Sign value > 0.05 can meet the requirements of normality testing, then the research data is normally distributed. This leads to the conclusion that the calculation results for the experimental and control classes are regularly distributed.

The homogeneity test establishes if the data population is variable or not. The data homogeneity test results are shown in the following table 6.

Table 6. Shapiro-Wilk Normality Test Calculation Results

| | | Levene Statistic | df1 | df2 | Sig. |
|-------|---------------|------------------|-----|-----|------|
| Value | Based on Mean | 2.513 | 1 | 28 | .124 |

The outcomes of the homogeneity test calculation using the Fisher test with a significance level of $\alpha = 0.05$. Table 6 displays the computation outcomes of the two classes that obtain the sign value. $0.124 > 0.05$. Therefore, the data variance of the posttest values of both classes is expressed equally or homogeneously.

4.3. Hypothesis Testing

Next, the theory will be put to the test utilizing the Independent Sample T-Test after proving that the sample class has a normal and homogeneous distribution.

Table 7. Calculation Results of Independent Sample T-Test

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | 95% Confidence Interval of the Difference | | | | |
|-------|-----------------------------|---|------|------------------------------|--------|---|-----------------|-----------------------|-------|--------|
| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | Lower | Upper |
| Value | Equal variances assumed | 2.513 | .124 | 4.527 | 28 | .000 | 16.667 | 3.682 | 9.125 | 24.208 |
| | Equal variances not assumed | | | 4.527 | 24.924 | .000 | 16.667 | 3.682 | 9.083 | 24.251 |

With reference to Table 7, a significant value of 0.000 with a significance level was obtained by calculating the experimental and control class hypothesis test data = 0.05. Based on this, it can be said that if $\text{Sign. (2-tailed)} = 0.000 < 0.05$, H_a accepted and H_0 rejected. It can be said that the use of flipchart-assisted teams games tournament learning models has a considerable impact on the cognitive abilities of elementary school students.

5. Discussion

Applying the teams games tournament learning model in Class VI SDN II Wunut Porong uses the 2013 curriculum in experimental and control classes. Things were prepared by researchers, such as learning tools, which include syllabus, learning implementation plans or lesson plans, student worksheets to streamline student cognitive assessment, attitude assessment, knowledge assessment, skill assessment, posttest instruments, and teaching tools in the form of flipcharts.

In experimental class learning, learning activities begin by explaining the material of geographical characteristics and socio-cultural, economic, and political life in the ASEAN region of Social Sciences (IPS) subjects with the help of flipchart teaching media. Researchers explain the material by using flipcharts in the classroom. Furthermore, the teams games tournament learning model is applied to students in several learning groups of 5 students with various skills, genders, and even different ethnic and racial backgrounds. In these groups, students learn to work together between groups to compete according to the rules that have been set together. Then, there will be rewards for the group that scores the highest. Finally, learning activities are closed by doing student worksheets, learning outcomes questions (Posttest), and giving prizes.

Based on the research results, using the teams games tournament learning model in experimental classes is a very effective way to influence student learning outcomes, especially cognitive abilities. It can be seen from the practical and control classes' learning processes that the two uses of the learning model have different influences on the development of student's cognitive skills. This is due to the learning syntax of the teams games tournament learning model, which includes learning through academic games rather than just listening to the teacher provide lesson material (Teedja & Malta, 2019). Conversely, in the conventional lecture method, the learning process only focuses on the teacher.

Observations made in this experimental class show that using student engagement and learning results can be enhanced by the teams games tournament learning paradigm. The success is influenced by learners who are actively involved in ongoing learning. These games and competitions inspire pupils to take part enthusiastically during the educational process and become passionate about learning. Students' enthusiasm for competing and winning games and competitions also arouses students' enthusiasm about participating in learning. When students participate in games and tournaments, they learn from teachers and fellow group members as each group competes to understand the other's subject matter so that the group can answer questions in games and competitions.

Learners interact with each other both in groups and individually. Learners' desire to compete with other groups increases when they are taught in groups, thus fostering an engaging and creative learning environment. Positive student behavior is seen during observation, including persistent reading of books. This is the result of the desire of students to succeed in every effort to carry out academic tournaments. Previous researchers also found that the team games tournament learning model was implemented better (Fadila et al., 2023; Mahasin et al., 2021; Zahroh & Setiyawati, 2023). Not only that, students also develop greater critical thinking skills through discussion sessions. Since academic tournaments have limited time, it can help teach learners to manage their time discipline.

Shortcomings in applying the teams games tournament learning model were also found in this study, namely students are accustomed to getting prizes because of games and competitions during the educational process to encourage participation in the learning process because of rewards. Available to do so. In contrast to the availability of awards that make students have a very high enthusiasm for learning, it is feared that incentives will arise for students who follow the substandard learning process. Therefore, many argue that giving gifts to students serves as a kind of reinforcement and stimulus for their education.

The quantity of students in the course also affects the classroom atmosphere; it is feared that it can create chaos and rowdiness that causes other classes to feel disturbed. Because students are very active and feel like playing in such tournaments, this makes teachers find it difficult to be calm and conducive to the classroom atmosphere. Teaching and learning activities carried out by the experimental class as seen in Figure 1.



Figure 1. Team Games Tournament Model Learning in Experimental Classes

Learning in experimental classes assisted by learning media in the form of flipcharts that resemble calendars is presented organized, brief, and clear. When the teaching and learning process is put into practice, before implementing the Teams games tournament model, students are directed to conduct a discussion session. Researchers gave each group the opportunity to use flipchart media. In the discussion session, researchers observed that many students wanted to use flipcharts to discuss with their group members. Although students are very enthusiastic to see flipcharts, students can still be conducive to learning discussions in class. Not a few students feel that using the flipchart is a fun experience in learning.

Through flipcharts, the delivery of material is more efficient in saving time, especially writing on the blackboard. The use of this flipchart is very flexible, can be carried everywhere and is easy to use both in education, both within and beyond the classroom. The existence of media flipchart learning in the classroom is more fun, in order for students to feel inspired and increase curiosity to learn. In addition, with the flipchart, students are able to remember and memorize related material presented. In general, the development of talent and progress of students will increase if they are taught using very interesting learning media. (Azizah et al., 2021). Therefore, developing students' cognitive skills through fun learning can have a positive impact on learning outcomes. Based on previous studies, One type of medium that may be utilized in the educational process is flipcharts so that students remain active and do not feel bored while in the classroom (Khasanah et al., 2022; Nofita & Rusnilawati, 2022).

The combination of a cooperative learning model, especially in the Teams games tournament type with flipchart teaching media, responds well to the learning carried out by SDN Wunut II Porong grade VI students. Many students revealed that learning with these learning models and media is fun and facilitates students' comprehension of the subject. Based on the data that has been presented, strengthened by the positive activities of students, and seen from the increased learning outcomes, the use of the Teams games tournament learning approach with flipchart assistance is indeed very effective and influences the cognitive abilities of students. Activities for the use of learning media can be seen in Figure 2.



Figure 2. Use of Flipchart Media in Experimental Class

In learning in the control class, researchers used conventional methods, namely lectures. Where students only listen to the material presented. Learners did not show active, innovative, creative, or fun learning during the activities they participated in. Most learners did not pay attention to the researcher during the learning process. When participating in learning, many students show a lack of enthusiasm. After the delivery of the material, the next activity is the administration of learning outcomes test questions (posttest). The application of the conventional lecture method is unsuitable for social studies learning materials, especially in class VI SDN Wunut II Porong, as seen from the learning outcomes of the control class. Students must actively participate in observing the material taught in social studies class.

Judging from student responses in the control class. Using traditional forms of lecture instruction is considered less effective in implementing the teaching and learning process. Although the model is considered easy, practical, and efficient, it is difficult for students to improve learning outcomes, especially training students' cognitive abilities if applied continuously. In addition, it does not accommodate diverse learning styles because each learner has a different learning style, such as visual, auditory, and kinesthetic. Nevertheless, the conventional lecture method is still a good method to use. Because in every lesson, many teachers must use these methods. However, in its application, it is innovatively reshaped to change the classroom atmosphere to keep it fun to use for student learning. The instruction and education activities carried out by This is the control class in Figure 3.



Figure 3. Conventional Learning in Control Classes

6. Conclusion

This study demonstrates a significant impact of using the teams games tournament learning model with the use of flipcharts on the cognitive capacities of primary school kids, as indicated by the data processing analysis and discussion above. This is indicated by the results of the Independent Sample T-Test obtained using SPSS 25, where the significance level is $0.000 < 0.05$. In addition, it is known that experimental class students got a higher average posttest score more than the control class students' average posttest result. This research demonstrates how the experimental class used the teams games tournament learning with the use of flipcharts provides superior results compared to using conventional lecture methods in the control class. The success is influenced by learners who are actively involved in games and competitions so as to make students excited in the learning process.

Limitation

This research still has limitations, researchers in general have tried to produce the best results. Regarding this, the researcher realizes that these limitations include limited time in carrying out research. In addition, the researcher also tried to balance the mood of the students because before the previous research there were activities outside of class hours that made students tired.

Recommendation

According to this article, there has been an increase in the learning outcomes tests that students have completed, hence it is advised that the teams games tournament learning model be used in the teaching and learning process with the use of flipcharts. Additionally, it demonstrates that pupils are responding positively, demonstrating that they are engaged, inventive, and excited about learning. As a result, it is advised that educators take into account implementing the teams games tournament learning model in conjunction with flipcharts to enhance cognitive skills and enhance student learning results.

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Conflict of Interest

This research was conducted with the consent of the research subject and the institution that oversees it, and there was no coercion.

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