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Research Article

Improving Student Learning Outcomes Through The Think Pair Share (TPS) Learning Method

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Abstract: The goal of this study is to ascertain whether using learning model Think Pair Share (TPS) improves student interest and science learning outcomes. Classroom action research (PTK) is the term for this kind of study. Learning outcomes in science and interest rose by 14.82%. According to the questionnaire results for each cycle, the average percentage of student interest increased from 73.43% in the first cycle to 79.82% in Cycle II. Ten students, or 35.71% of the total, have finished at pre-cycles. One student's percentage of mastery rises to 60.71%, or 17 finished students, after completing a cycle action. With an average score of 84.46, the percentage of students who experience mastery has then increased to 100% in cycle two.

Keywords: Interest; Learning Outcomes; Learning Science Model; Think Pair Share

1. Introduction

Learning is an activity that has a purpose, namely to educate students to achieve the desired competencies. Learning is a very complex process influenced by several factors, including teachers, students, facilities, media, and the environment. To ensure that learning is effective, teachers play a very important role. Teachers not only function as sources of knowledge but also must play the roles of motivators and facilitators in developing students' interest in seeking knowledge independently. The teacher's skill in fostering students' interest in independently seeking knowledge is much more important than the direct transfer of knowledge from the teacher to the students. Therefore, forms of participatory education by applying active learning and cooperative learning methods are very necessary (BSNP, 2010).

The Indonesian Minister of Education Regulation No. 41 of 2007 concerning Process Standards is currently cited in the educational process that is carried out in schools. An introduction, a core, and a conclusion make up the learning activities in accordance with this regulation. The introduction is the first exercise designed to get students inspired and concentrated so they can actively engage in the learning process. In order to motivate students to actively participate, the core activity is the learning process to achieve basic competencies. It is carried out in an interactive, inspiring, enjoyable, and challenging manner, and it presents many chances for initiative, creativity, and independence based on the students' interests, talents, and physical and psychological development. The closing is an exercise used to wrap up the educational process. These regulations' learning process is perfect for use in the classroom. Student-centered learning activities have been established.

But in procedure, teachers still find it difficult to get students involved in what they are learning, so the process falls short of promises. Due to the madrasah's inadequate facilities,

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preliminary research at MTs Negeri Patas indicates that teachers hardly ever carry out experiments in the lab. Additionally, because cooperative learning is viewed as impractical, teachers hardly ever assist students in it. As evidenced by the subpar learning outcomes, this leads to low learning quality. The previous semester's general exam results, which are still well below the Minimum Completeness Criteria (KKM), reflect the poor science learning outcomes. A number of factors may contribute to the poor science learning outcomes, including:

a. The learning model applied in the implementation of science education is less appropriate when viewed from the characteristics of the material being discussed.
b. Teachers tend to be reluctant to innovate by using various teaching models, making science lessons monotonous and less engaging.
c. Students tend to only utilize the time available at school without developing additional materials to broaden their horizons outside of class hours.

A problem in the learning process is revealed by the low learning outcomes. According to Sanjaya (2009), the learning process's weakness is one of the issues the Indonesian educational system is grappling with. Up until now, teachers have dominated the learning process and have not given students enough opportunities to grow on their own by making discoveries about how they think. This holds true for science as well as all other subjects. The research findings of Sadia (2008), which indicate that the expository model is the most common learning model or strategy employed by teachers in the science learning process, lend support to this.

It is clear from the aforementioned claims and data that students continue to have poor learning outcomes and that the teacher's methods of instruction do not significantly engage the students in the process of learning. As a result, learning becomes less engaging and less demanding. Government Regulation No. 19 of 2005 Chapter IV Article 19 paragraph 1 affirms that "The learning process in educational units is organized in an interactive, inspiring, enjoyable, challenging manner, motivating students to actively participate, and providing sufficient space for initiative, creativity, and independence in accordance with the talents, interests, and physical and psychological development of the students." This reality is undoubtedly not in line with that regulation. This demonstrates that the teacher's lesson plan needs to be focused on the activities of the students. Consequently, the use of innovative learning models is one way that innovation in the learning process is required.

Recent years have seen the roll out of several innovations in science education. This is an attempt to educate students in order to maximize their intellectual potential. The cooperative learning model is one that can be used to enhance learning outcomes, make learning fun, and foster a cooperative mindset (Slavin, 2011). In cooperative learning, students work as a team to accomplish group tasks in order to reach a shared objective, making each group member equally accountable for the group's success. Cooperative learning models

come in a variety of forms, including Numbered Heads Together (NHT), Jigsaw, Teams Games Tournaments (TGT), Group Investigation (GI), STAD, and Think Pair Share (TPS).

An efficient cooperative learning model for generating diversity in the tone of conversation patterns is the think-pair-share model. According to Trianto (2010), the think pair share model's procedures can allow students more time to reflect, react, and support one another. Joyce et al. (2009) state that simple grouping, such as assigning two students to a group to complete a cognitive task, can be used to conduct cooperative practice. This method is the most basic approach to social organization. For teachers and students who are just learning how to work together, the think-pair-share learning model is therefore perfect. Students can work independently and cooperatively with others using the think-pair-share method of instruction. The technique's ability to maximize student participation is another benefit. Each student has more chances to be acknowledged and show others how they participated thanks to this method.

Students' retention skills are impacted by the think pair share learning strategy in biology classes, and their cognitive learning outcomes are impacted by the interaction between the think pair share learning strategy and academic aptitude. According to research by Sunarto et al. (2008), students who used the think pair share method in chemistry classes had better average learning outcomes than those who used the expository method. Gain scores following the adoption of the think-pair-share cooperative learning model demonstrated a significant increase in students' cognitive mastery and critical thinking abilities, according to Ambarwati (2012). The findings of Sukasari's (2012) study also demonstrate that students' learning outcomes are improved by cooperative learning models of the Think Pair Share variety. The three phases of the think-pair-share learning model are the thinking, pairing, and sharing phases. During the think stage, students are required to come up with their own solutions to the teacher's problems. Cognitive processes, such as thinking, are mental activities used to gain knowledge. One will have a conversation with oneself when forced to think. Students will discuss their prior ideas in pairs during the pair stage. Several thinking skills are needed in discussions, such as recognizing issues, figuring out solutions, obtaining and arranging the relevant data, comprehending and using appropriate and clear language, analyzing data, and drawing conclusions. Critical thinking is based on these cognitive abilities. Students will share with the class as a whole during the share stage. It is necessary at this point to be able to speak with complete confidence. Therefore, thinking skills, the basis of critical thinking, and the definition of critical thinking skills are all included in each step of the think-pair-share learning model. Students' critical thinking abilities are crucial for the think-pair-share learning model's phases to function properly. In mental tasks like problem-solving, decision-making, persuasion, assumption analysis, and scientific research, critical thinking is a focused and transparent process. The capacity for organized opinion expression is known as critical thinking (Johnson, 2007).

The process of methodically learning about nature is connected to the study of natural sciences (IPA). Learning science involves a process of discovery as well as memorization, comprehension, and facts found in nature. Because only one party, the teacher, actively participates in the conventional learning process, it is preferable to use a cooperative learning model when teaching science. In general, students receive lesson materials passively, which makes them bored and disinterested in taking part in the learning process. In order to accomplish learning objectives, the cooperative learning model places a strong emphasis on active group work, in which students cooperate and discuss solutions to teacher-given problems. Students will strengthen the learning model used to improve learning outcomes the more critical thinking abilities they possess. As a result, the variable of critical thinking abilities becomes a crucial consideration in this study.

2. Literature Review

If the learner evolves, the learning outcomes are considered successful. Learning outcomes serve as a standard by which to measure how well students grasp the material. According to Miaz (2012), an individual can be considered to have fully learned if their behavior has changed. Two-way communication between teachers and students will be more successful. It is expected of teachers to design a learning process that can provoke reactions from their students. Participation in the learning process is a good indicator of student responses (Kunci, 2014).

Motivation is crucial for learning; without it, learning outcomes will be subpar. The lesson will be more successful if the motivation is more appropriate. If students lack motivation to learn, they will never be engaged in the lessons and will not find learning fulfilling, which renders learning pointless, claim Zain and Ahmad (2021). This is consistent with research by Lusidawaty et al. (2020), which found that learning requires motivation and that learning with high motivation will produce positive outcomes. The enhancement of students' learning outcomes is influenced by motivation.

In order to make learning more effective and efficient in reaching the learning objectives themselves, teachers serve as sources of knowledge, decide on teaching models and techniques, and evaluate students' learning progress (Husada et al., 2020). The think-pair-share method, on the other hand, is intended to give students the chance to reflect on a particular subject by allowing them to generate unique ideas and discuss them with a fellow student (Usma, 2015). This is an instructional plan developed by Lyman to encourage pupil engagement in the classroom. The think-pair-share method is an innovative debate technique that helps students work in groups. (Riva Prathiwi et al., 2014) employed the Think Pair Share cooperative learning model. Through classroom discussions, students can develop positive social skills and interactions during the teaching and learning process, as well as boost their motivation to learn. The TPS learning model is one that can assist in motivating students

during the learning process, according to (Anita Lie, 2010). This learning model seeks to improve students' ability to manage information, communicate, and think critically while adhering to the lessons.

According to ((Fitriani & Wuryandari, 2019)), one of the key criteria influencing a student's success in their own learning is their cooperation when participating in the learning process. Cooperation skills are highly valued in the 2013 curriculum since students are required to solve problems in groups as part of thematic integrative learning, which takes a scientific approach. Being able to accomplish something with others in order to reach a shared objective is what it means to work together. Every student needs to be able to cooperate in order to improve their communication skills, recognize and value differences, demonstrate concern, and accomplish group objectives.

The teacher is one of the elements that affects education's success. One of the most crucial elements in the teaching and learning process is the teacher. Teachers need to be able to come up with innovative and creative ways to present the material and design the learning process. The way the teaching and learning process is executed determines whether an educational objective is successful. When choosing instructional models, teachers must use creativity and innovation. If the teacher is motivated and provides clear material, the learning process will proceed smoothly (Osviani, 2014). Students, curriculum, teachers, facilities and infrastructure, and environmental factors all have a significant impact on how well students learn in schools. Meeting these requirements will certainly speed up the learning process, support the attainment of the highest possible learning outcomes, and ultimately raise the standard of education (Widyastuti, 2014).

3. Method

This research is a Classroom Action Research (CAR). This research was conducted at SMPN 1 Banguntapan. Classroom Action Research is an action research conducted with the aim of improving classroom learning (Najemi, 2014). The object of this research is the TPS learning model, interest, and science learning outcomes. The data collection techniques used in this study are Observation, Questionnaire, and Test techniques. Observation is a technique or method of data collection by conducting observations of ongoing activities. class (Najemi, 2014). Questionnaires or surveys are methods of data collection conducted by providing a set of written statements or questions to respondents to be answered according to the user's request (Pratiwi, 2014). According to Arikunto (2013), a test is a tool or procedure used to measure something according to predetermined rules. The instrument trial in this study is the validity test and the reliability test. Meanwhile, the reliability test uses the KR-20 formula. Data analysis techniques are conducted quantitatively and qualitatively. For quantitative data, the test scores from Cycle I and Cycle II are compared and calculated based on the average

formula (Arikunto, 2012). Meanwhile, for qualitative data, the percentage formula is used (Sudijono, 2008).

4. Results and Discussion

In this section, the author needs to explain the hardware and software used, dataset sources, initial data analysis, results, and results analysis/discussion. Presenting the results with pictures, graphs and tables is highly recommended. Formulas or evaluation measuring tools also need to be included here. There must be discussion/analysis, and you can't just rewrite the results in sentence form, but you need to provide an explanation of their relationship to the initial hypothesis. In addition, this section needs to discuss and elaborate on important findings.

The observed interest indicators consist of 4 aspects: curiosity, attention, enjoyment, and activity. The comparison of interest from the pre-cycle, cycle 1, and cycle 2 is presented in Table 1.

Table 1. Comparison of Interest Each Cycle

Indicator	*Percentage*		
	Prasiklus	*Siklus 1*	*Siklus 2*
interest	66.79%	65,98%	75.32%
Care	56,32%	68.55%	77.50%
Feeling happy	70,98%	77%	81.25%
Activity	51.77%	68,19%	76.33%
average	65%	67,88%	68.74%

Meanwhile, the comparison of learning outcomes in each cycle is presented in Table 2.

Table 2. Comparison of Science Learning Outcomes for Each Cycle

Indicator	*Prasiklus*	*Siklus 1*	*Siklus 2*
High value	76	89	100
Low value	29	40	68
Student account ≥ 75	9	16	25
Student account ≤ 75	15	9	0
Class average	59.82	56.39	75.23

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5. Conclusions

The procedure for implementation to learn through the TPS type cooperative learning model is carried out across multiple stages, according to data analysis and discussion of research results using the model on students. These stages include: (1) Students are grouped in pairs, (2) The teacher asks the students questions, such as how to address contaminated water, air, and soil, (3) Students think independently to find answers to the teacher's questions, (4) Students discuss with their partners, (5) At each cycle, the teacher gives out worksheets for the students to discuss. (6) Students then present the outcomes of their discussions on the worksheets and the teacher's questions. Students' interest and performance in science were also achieved when using a cooperative learning model of the TPS type. Students' interest in learning increased by 14.82%, according to the observation results. In Cycle I, it rose by 5.67% to 73.43% from the pre-cycle 65%, and in Cycle II, it increased by 6.39% to 79.82%. Additionally, there was a 64.29% increase in student learning outcomes. The completion rate was 35.71% at the beginning of the cycle, rising by 25% in Cycle I to 60.71%, and then expanding by 75% to 100% in Cycle II.

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