

# Think-Pair-Share (T-P-S)

# Improving the Achievement of Students' Learning and Cooperation

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#### **ABSTRACT**

Think-Pair-Share (T-P-S) is intended to give students time and structure to think and work on the topic to be studied, which is done in pairs with peers to discuss the topic, and finally, during the third step, students synthesize and share ideas with a group or class. The purpose of this study was to illustrate the improvement of Islamic Cultural History learning outcomes through the use of Think-Pair-Share cooperative learning methods for students. This practical action research on seventh-grade students uses Kurt Lewin's action research model. Participants in this study were seventh-grade students at one private junior high school in West Jakarta, Indonesia. Data were analyzed using descriptive statistics. The findings show that generally, student performance gets better, and students are more actively involved with the use of the Think-Pair-Share type of cooperative learning method. The research has also shown that T-P-S is empirically able to improve students' cooperation while increasing students' academic content. The findings of this study suggest that teachers consider using the Think-Pair-Share type of cooperative learning model for less challenging subjects for students.

Keywords: Academic content, Collaborative learning, Group work, Sharing ideas, Think-Pair-Share.

# 1. INTRODUCTION

The basis of Cooperative Learning is that students learn with and from each other through structured interdependent relationships (Wallhead & Dyson, 2016). The cooperative learning model helps students acquire academic content and skills to discuss the goals and objectives of important social and human relations (Hermawan et al., 2020; Sudin et al., 2021), is effective for encouraging students' involvement in learning, and promotes behavior collaboration to complete the task (Rosfiani, Akbar & Neolaka, 2021).

Think-Pair-Share (T-P-S) is a cooperative learning procedure developed by Frank Lyman at the University of Maryland in 1981. Many educators who support cooperative learning have adopted similar teaching procedures or methods. The Think-Pair-Share procedure is intended to give students the opportunity to think about the topic to be studied, then students pair up with their partners to discuss their responses to the topic, and in the share (S) procedure, students are trained to have the

ability to synthesize and share ideas in their own ways. groups and classes (Shih & Reynolds, 2015).

The use of Think-Pair-Share strategies had great potential for improving achievement learning generally (Bamiro, 2015). Therefore, the objective of the present work paper is to investigate Think-Pair-Share as a cooperative learning procedure for improving the content and academic skills of students in Islamic Cultural History subjects.

Cooperative learning is more than just helping students acquire content and academic skills to meet the needs of important social and human relationships, cooperative learning is developed to achieve at least three goals: academic achievement, tolerance, and acceptance of diversity, and the development of social skills (Arends, 2012). Abdulwahed, Ismail and Allaq (2019) suggested that different cooperative learning and teaching recently attracted much attention because it was considered by educators and teachers to play an important role in motivating students and promoting interactive learning.

Research on cooperative learning techniques in classrooms, where students work in small groups and receive prizes or awards for their groups, has increased in recent years. The pattern of cooperative learning methods is to improve student achievement, positive relationships in separate schools, mutual attention among students, student self-esteem, and other positive results (Slavin, 1980). Team-based learning is a separate component that is often used in high class, team-based learning can improve grade grades, performance tests, and grade improvement. Team-based learning is interesting, facilitates a deeper understanding of content, and is more effective for understanding and performance of courses (Swanson & Lewis, 2017).

The cooperative learning model has a positive impact on students. Cooperative learning is very helpful for students who have special and remedial education, and cooperative learning can increase student success. Cooperative learning contributes to the acquisition of student knowledge and skills (Raphael, Bachen & Hernández-Ramos, 2012).

Cooperative learning supports teachers to attract students' interest in learning and makes it easier for teachers to organize learning. Where small groups allow students to share and discuss each other without feeling awkward, and students are more flexible in conveying ideas. These results are supported by (Rosfiani et al., 2018) who showed that interest in learning directly also affects student achievement. On the other hand, a correlational study by (Rosfiani et al., 2019) reports that the learning environment directly influenced student learning assessment.

Think-Pair-Share is an effective way to change the conversation patterns in class. This strategy challenges the consideration of memorizing and discussing what needs to be done in the context of the whole class, also has procedures to give students more to think and respond to and help each other (Arends, 2012).

#### 2. METHOD

Action research is aimed at empowering educators, creating lasting change in schools, and influencing student learning outcomes (Flessner & Stuckey, 2014), through a cycle of continuous improvement (Casey & Evans, 2018). Action research uses a variety of methods and tools to achieve change (Dick, 2015). Action research is a starting point for reflection on the very real challenges of creating an inquiry community (Eikeland, 2006). Classroom action research (CAR) is part of the main task of a teacher (Rosfiani & Hermawan, 2019). Classroom action research activities are complex and difficult activities for some elementary school teachers (Hermawan & Rosfiani, 2019).

This practical action research uses Kurt Lewin's model, which consists of cycles, where one cycle consists

of four components, namely planning, action, observation, and reflection. Participants in this practical action research were subject teachers and twenty six seventh-grade students at a private junior high school in Kembangan, West Jakarta, Indonesia in the Islamic Cultural History course.

The performance of teachers and students were observed during the Think-Pair-Share procedure and recorded any information obtained from the stages and behavior of teachers and students in the observation notes. Class observation takes a central role (Steinberg & Garrett, 2016). Observation is more emphasized on participation (Johnson, Avenarius & Weatherford, 2006).

In this practical action research, the data were analyzed qualitatively and quantitatively. Quantitative data analysis was carried out using descriptive statistics from student learning test results, namely by calculating the average achievement of Islamic cultural history learning objectives at the end of each cycle to determine the increase in student learning outcomes. While the qualitative analysis uses texts from the results of observations of teacher and student performance from the Think-Pair-Share procedure.

# 3. FINDINGS AND DISCUSSION

The findings presented here is organized based on the stages of the action research in the two cycles conducted.

#### 3.1. Action Research Cycle 1

# 3.1.1. Planning

At the planning stage, what the researcher did was give informed consent to the school, prepare lesson plans for the history of Islamic culture, design individual worksheets, prepare notes on teacher and student performance observations, prepare group discussion worksheets, prepare answer keys, and provide awards for groups.

# 3.1.2. Acting

#### 3.1.2.1. First Meeting

The teacher explains the learning objectives by adapting the use of the Think-Pair-Share type of cooperative learning model, dividing students into discussion groups. The material to be studied is the history of the Prophet Muhammad SAW.

The teacher forms a study group. One group consisted of four students who were homogeneous both in terms of gender and level of intelligence. The teacher motivates students by rewarding the group. The teacher explains that the success of the group depends on the success of the individual, so to be the best group, each

group member must be a peer tutor of his friend, in terms of social skills guiding his friend in achieving learning goals. Thus, it is expected that all students in the group achieve the learning objectives.

The teacher delivered material about the history of the Prophet Muhammad SAW. The teacher gives a discussion sheet that will be done by each group according to the time allotted. After the allotted time ends, the teacher asks group representatives to present the results of their discussions to other groups in turn. Then the teacher guides the students to conclude the results of the discussion together.

#### 3.1.2.2. Second Meeting

The teacher continues to explain the material about the history of the Prophet Muhammad SAW. The teacher asks students to return to their respective groups to discuss the discussion sheet given. Each group consists of four students, then students discuss in pairs. After finishing discussing in pairs, students return to groups of four to share the results of the discussion which will be presented in front of other groups.

The teacher checks the results of each group's discussion and gives awards to the group that gets the best social skills to score and academic scores.

At the end of the second meeting, the teacher held a test in order to evaluate student learning outcomes. Tests are carried out individually. Each student works on 10 questions. After conducting the evaluation, the teacher and students ended the lesson by reading a prayer.

# 3.1.3. Observing

Based on the teacher's performance observation notes, it is known that the teacher's weaknesses include weak classroom management, the teacher's voice being small, so it is not clearly heard by students behind, and the teacher is not used to using the Think-Pair-Share procedure. While the observation notes on student performance include, that students are very interested in learning Islamic cultural history using Think-Pair-Share, some students are not focused, less involved, and hesitant, and are not confident in expressing their ideas during the discussion process.

# 3.1.4. Reflecting

Based on the findings from the reflection of cycle 1, corrective action is needed in cycle 2.

Cycle 1 data (Table 1) shows that 42.3% (11 students) have not achieved learning objectives, 67.7% (15 students) have achieved learning objectives, student learning activities from T-P-S 60%, and teacher teaching activities from T-P-S 68.3%. More complete research data for cycle 1 is shown in Figure 1.

Table 1. Data on achievement of cycle 1

Cycle 1	Students who have not achieved the learning objectives	Students who have achieved the learning objectives	Student activities	Teacher activities
	42,3% (11 students)	67,7% (15 students)	60%	68,3%

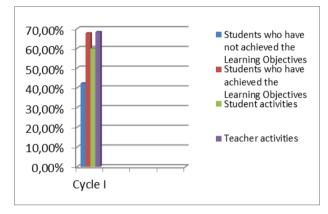


Figure 1 Data from research cycle 1.

# 3.2. Cycle 2

# 3.2.1. Planning

The teacher designs the lesson plans for the Islamic cultural history subject for cycle 2, designs worksheets, prepares answer keys, prepares notes on teacher and student performance observations, and prepares group discussion worksheets.

#### 3.2.2. Acting

# 3.2.2.1. Third Meeting

The teacher motivates students to be more serious in participating in learning in cycle 2. The teacher presented material about the history of the Prophet Muhammad SAW classically as an indicator of the mission of the Prophet Muhammad SAW as a mercy to the universe. After explaining, the teacher gives a discussion task that will be discussed by students according to the groups that have been formed.

Students discuss in pairs in one group, then report the results of the discussion to their group friends, then report it to other groups. In the Think-Pair-Share group discussion, the teacher acts as a facilitator. In the final activity at the third meeting, the teacher and students concluded the results of the discussion and then closed the lesson by praying.

# 3.2.2.2. Fourth Meeting

The teacher explains the material on the mission of the Prophet Muhammad SAW to bring peace, prosperity, and progress to society. The teacher gives individual oral tests and provides feedback. The teacher conducts individual formative tests.

# 3.2.3. Observing

Observation of cycle 2 shows that the teacher is starting to be able to arouse students' enthusiasm to ask questions and express opinions, where active learning has been seen. Meanwhile, observations on student performance showed that students were more actively involved with the use of the T-P-S type of cooperative learning method. These results are consistent with Tanujaya and Mumu (2019) and suggest that group members should consist of students who already know each other well, but should not have the same level of knowledge, while the number of group members should start from two students.

#### 3.2.4. Reflecting

The results of the second cycle of reflection show that all learning process activities have increased, the evaluation results of student tests have increased, and the notes on observations of teacher and student performance have also shown progress.

Based on the findings of these reflections, T-P-S is empirically able to improve students' social skills while increasing students' academic content. These results agree with the findings of other studies, Parker and Ashare (2021) reveal that the think-pair-share learning technique teaches motivation and engagement, provides immediate feedback, develops social and physical skills simultaneously, helps students to learn with fun, and increases interest and confidence levels student.

Cycle 2 data (Table 2) shows 15.3% (4 students) have not achieved learning objectives, 84.6% (22 students) have achieved learning objectives, student learning activities from T-P-S 82.5%, and teacher teaching activities from T-P-S 86%. More complete research data for cycle 2 is shown in Figure 2. While the data acquisition for cycles 1 and 2 is shown in Table 3.

Our findings reveal that the data in cycles 1 and 2 above show an increase in student learning outcomes, which means that there is an increase in students' cognitive abilities in the academic content of the learning objectives of the history of Islamic culture in the historical material unit of the Prophet Muhammad SAW.

Comparative data on student learning outcomes, and teacher and student activities (performance) are shown in Figure 3.

**Table 2.** Data on achievement of cycle 2

	Students	Students	Student	Teacher
	who have	who have	activities	activities
	not achieved	achieved the		
.C	the learning	learning		
Cycle 2	objectives	objectives		
6				
, ,	15,3%	84,6%	82.5%	86%
	(4 students)	(22		
		students)		

**Table 1.** Comparative data on the achievement of cycles 1 and 2

Cycle	Students who have not achieved the learning objectives	Students who have achieved the learning objectives	Student activities	Teacher activities
1	42,3% (11 students)	67,7% (15 students)	60%	68,3%
2	15,3% (4 students)	84,6% (22 students)	82.5%	86%

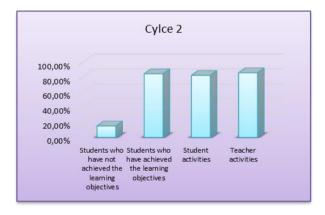
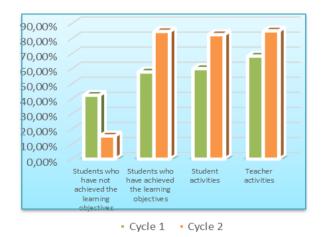


Figure 1 Data from research cycle 2.



**Figure 2** Comparative data of research cycles 1 and 2.

These results further support the idea of Wuryandani and Herwin (2021) which shows that there is a significant effect of the think-pair-share learning model on student learning outcomes. Student learning outcomes scores experienced a significant increase after the think-pair-share learning model was applied.

#### 4. CONCLUSION

This study has found that generally, student performance gets better, and students are more actively involved with the use of the Think-Pair-Share type of cooperative learning method. This study has shown that all activities in the learning process have improved, the results of student test evaluations have increased, and the observation notes on teacher and student performance have also shown progress. The research has also shown that T-P-S is empirically able to improve students' cooperation skills while increasing students' academic content.

The findings of this study suggest that teachers can consider using the Think-Pair-Share type of cooperative learning model for less challenging subjects for students were remembering the names of characters, dates, and places of events makes students not feel involved in the learning process. Think-Pair-Share helps teachers and students provide solutions to more challenging learning procedures through small group discussions, while students can share ideas and ideas, and all students listen to and respect each other's opinions. This has an impact on improving students' cognition in general, where the learning objectives are achieved by 80%.

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