Think Pair Share (TPS) Learning Methods to Improve Student Learning Activities

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A B S T R A C T

Active learning plays a vital role in learning because it can affect student learning outcomes. However, teachers still use conventional learning methods or teacher-centered learning. This study aimed to analyze the increase in student activity, student response, and student learning outcomes using the Think Pair Share (TPS) learning method. This type of research is a pre-experimental design with a one-group pretest-posttest design. The sample in this study was 35 students. Data collection methods used observation, tests, and questionnaires with instruments including student activity observation sheets, pre-test, and post-test questions, and student response questionnaire sheets. Data were analyzed using a quantitative descriptive method. Based on the research results, the results of student learning activities showed a percentage of 78% at meeting 1 increased to 84.64% at meeting 2. Metode pembelajaran TPS mendapat respons sangat baik oleh siswa, hal ini ditunjukkan dengan persentase sebesar 81,56%. Hasil belajar siswa pada pre-test sebesar 31% meningkat menjadi 100% pada hasil post-test. Disimpulkan bahwa penerapan metode pembelajaran TPS dapat meningkatkan aktivitas, respon, dan hasil belajar siswa pada mata pelajaran dasar-dasar kejuruan busana.

1. INTRODUCTION

The educational process is governed by the transmission of knowledge from teachers to students. The educational process that focuses on students tends to get boring quickly, the common result is that students are less enthusiastic in responding to lessons, students tend to be passive, learning efficiency is low, and learning methods are not appropriate (Hidajat et al., 2020; Sharp et al., 2020). The education carried out must be by the goals of national education, namely, "education aims to develop the potential of students to become human beings who believe in and fear God Almighty, have a noble character, are healthy, knowledgeable, competent, creative, independent, and become democratic citizens, and be responsible" (Diantoro et al., 2021; Hidayat & Abdillah, 2019). Learning takes place as a process of mutual influence between teachers and students in teaching and learning activities. Learning is said to be successful and of high quality if most students are actively involved, both physically, mentally and socially...
in the learning process. Based on the above, the teacher’s efforts in developing student learning activeness are very important, because student learning activity is a determinant of the success of the learning carried out (Luthfi & Nurmatin, 2023; Thalita et al., 2019). Basics of Fashion Skills is a lesson that contains the competencies that underlie the mastery of fashion skills. The Basics of Fashion Skills subject is a vocational subject which consists of various basic knowledge as a determinant in studying other subjects in the Fashion expertise program including understanding lifestyle, changes in tastes (trends) to design, production and marketing processes. In addition, as a basis for knowledge and skills for learning the concentration of expertise in class XI and XII. In accordance with the demands of the needs of society and the development of the times, science and technology are increasing rapidly, this is where the task of the Basics of Fashion Skills teacher is to constantly improve skills and quality in learning activities, even teachers of Basics of Fashion Skills need to appear at every opportunity both as educators, teachers, trainers, innovators, facilitators and as dynamicators by applying competent learning methods of Basics of Fashion Skills that can influence student learning activeness. The activeness of student learning in classroom learning can be briefly seen when students actively participate or are involved in learning in class.

Based on the results of observations in class, it was shown that in the process of learning the Basics of Fashion Skills, students were less enthusiastic, bored, and indifferent. One of the learning methods commonly applied by teachers in the classroom is conventional learning, which tends to minimize the involvement of students and teachers to be more active. The habit of being passive in the learning process can cause most students to be afraid and embarrassed to ask the teacher about material that is not understood. The learning atmosphere in the class becomes very monotonous and less interesting, even though the understanding of the Basics of Fashion Skills material that is not optimal results in learning outcomes and practical implementation later. So far, teachers in the theoretical subject of Basics of Fashion Skills have never applied innovative learning methods that can foster student activity in participating in the learning process. Other research explained that most students experience boredom in science subjects mostly due to didactic factors, including teacher-centered teaching (Jayanti et al., 2017; Lasari et al., 2021). Students tend to be silent, and shy to express their opinions. Students are also less active in class, this can be seen when many students do not understand the material being taught. Students who are still less active and tend to act individually can cause cooperation between students to be less than optimal (Lasari et al., 2021; Rumondor et al., 2019). This resulted in students having difficulty understanding the material presented by the teacher. The active role of students who are lacking in learning results in the activeness of students’ understanding of a material which tends to be slow and has an impact on learning outcomes (Nurmayani et al., 2018; Restyani, 2018; Shofiyah & Wulandari, 2018). Therefore, given the importance of increasing student activity and learning outcomes in the ongoing learning process, teachers are required to have a high level of creativity in order to create more effective, efficient and optimal learning conditions (Ginarjat et al., 2015; Irianto et al., 2015; Permata et al., 2017).

To overcome these problems, we need a learning method that is more appropriate and interesting, where students can learn cooperatively, can ask questions and express opinions. One effort to increase student activity and learning outcomes is to apply learning methods. The learning method is one of the factors that determine the success of a learning program (Noerbadilla, 2022; Suswanto, 2020). So we need an innovative and creative learning method that can foster enthusiasm for learning (Amponsah et al., 2019; Qodriani et al., 2022). This enthusiasm for learning is used to strengthen students’ memory of the material being studied so that learning objectives are achieved. The characteristics of good teaching and learning activities are conducive, effective and efficient (Mustajib, 2020; Sari & Sari, 2023; Sudarsana, 2019). One of these learning methods is thought pair share, which is a type of cooperative learning designed to influence student interaction patterns (Guntara, 2020; Sumarsya & Ahmad, 2020). Think-pair-share is an active learning strategy designed to give all students in the class a chance to think and talk about the ideas they are learning (Cahyono et al., 2022; Indriyani & Kelana, 2021). There are three steps to Think Pair Share (TPS), namely: "Thinking, Pairing, Sharing" (Kurniawan et al., 2022; Octavia, 2020; Suryaningsih et al., 2017). The TPS model grew from cooperative learning research, the Think Pair Share (TPS) model can also be referred to as a pair teaching and learning model designed to influence student interaction (Ningsih et al., 2019; Wuryandani & Herwin, 2021). The advantage of this learning method is that it can improve students’ oral communication skills (Phan & Lan, 2021; Suaidah & Pasaribu, 2022), motivation to learn (Radjabani et al., 2021; Sumarsya & Ahmad, 2020), critical thinking (Kurjum et al., 2020; Pohan & Hasibuan, 2019), and student participation to contribute ideas (Benjelloun, 2021; Lestari et al., 2019). TPS has procedures that are explicitly defined to give students more time to think, answer, and help each other (Sutopo et al., 2020; Zulfantri et al., 2021). With the TPS-type learning method students are expected to think more, respond, and help each other, by practicing cooperation in solving group problems (Nadeem & Nadeem, 2019; Wuryandani & Herwin, 2021). As for this learning method,
there are also deficiencies because it is not easy for the teacher to encourage students to think systematically and not many ideas come out of students’ minds (Cooper et al., 2021; Rivai & Mohamad, 2021). Another reason why the TPS learning method needs to be applied as a learning method is that there is no competition between students or groups (Rahayu & Suningsih, 2019). They work together to solve problems by overcoming different ways of thinking among students (Mudawamah & Idawati, 2022; Sharma & Saarsar, 2019). For this reason, the authors apply the TPS-type cooperative learning method. Learning methods that can make the atmosphere conducive, effective, and efficient. This learning method is expected so that students can play an active role not monotonous and not passive. As well as encouraging students to be more enthusiastic about learning when the learning atmosphere takes place so that it can help students. Some of the findings of previous research, the implementation of the TPS learning method can increase student learning activity (Astutik, 2023; Fadilah, 2022; Putri et al., 2020). TPS can also improve student learning outcomes (Astutik, 2023; Kamil et al., 2021; Suwela, 2021). So, the TPS method has a positive influence on learning, so that this learning method is used as a solution that can be used to overcome low student learning outcomes and student learning activities.

In contrast to the previous research above, in this study the researchers focused on developing learning methods through the implementation of the Think Pair Share method in increasing student activity and learning outcomes. Assessment of student learning activity in this study was seen from six indicators, namely asking questions, submitting opinions, doing assignments, being able to answer teacher questions, being able to work with other students, and being responsible for the assignments given. As a support for active learning, students are given the opportunity to be able to work alone and in collaboration with others, as well as discuss with each other to express ideas among peers through the application of the TPS method. Based on the background above, the author examines the implementation of the TPS-type cooperative learning method to increase student activity in the Basics of Fashion Skills Subject in class X at SMK Negeri 4 Surakarta. This study aimed to analyze the increase in student activity, student responses, and student learning outcomes using the Think Pair Share (TPS) learning method.

2. METHOD

The type of research conducted in this research is the pre-experimental design using the “one-group pretest-posttest design,” that is by comparing the conditions before being given treatment with the conditions after being given treatment. The research trial subjects involved in the research were 35 class X FT1 students of SMK Negeri 4 Surakarta. This study uses 3 methods in data collection, including: (a) Observation method. Observations were made by researchers to determine research respondents, research settings and characteristics of the subjects to be studied. Indicators in observing student activity are: asking questions, submitting opinions, doing assignments, being able to answer teacher questions, being able to work with other students, and being responsible for the assignments given. (b) Questionnaire Method. The questionnaire was used to find out the response of class X FT1 students of SMK Negeri 4 Surakarta regarding the TPS method in the Basics of Fashion Skills subject. The observed indicators are: 1) By applying the TPS method, the teaching and learning process in class is more effective. 2) Applying the TPS method makes you more active in teaching and learning activities. (c) Test method. The test is a way to get a score that reflects student learning outcomes. In this study the tests used were pretest and posttest. The pretest is used by the teacher to find out to what extent the level of ability and understanding of students follows the Basics of Fashion Skills which will be taught using the TPS method. The post-test is used to find out how the student’s learning outcomes relate to the basics of vocational clothing delivered by the teacher using the TPS method. Test questions indicators including the definition of Basics of Fashion Skills, basic sewing technology, basic pattern making, and basic design.

Methods of data analysis used in the discussion of the results of this research is quantitative descriptive method. Quantitative descriptive method is a method that describes the data in the figures obtained during research. In the lesson plan instrument, what is used as validation is aspects of basic competence, indicators and achievement of results, materials, language, formats, sources and learning objectives, teaching and learning activities, and time allocation. The results of the Lesson Plan validation on: (1) Aspects of basic competence get a percentage of 75%, if converted the descriptor is included in the high/valid interpretation criteria, (2) Aspects of the achievement indicators get a percentage of 75%, if the descriptor is converted is included in the high/valid interpretation criteria, (3) The material aspect gets a percentage of 83.33%, if converted the descriptor is included in the very high/very valid interpretation criteria, (4) The language aspect gets a percentage of 83.33%, if the descriptor is converted included in the very high/very valid interpretation criteria, (5) The aspect of format gets a percentage of 80.56%, if converted the descriptor is included in the high/valid interpretation criteria, (6) The aspect of learning resources and facilities gets a percentage of 70.83%, if the converted descriptor is included in the
high/valid interpretation criteria, (7) The teaching and learning activities aspect gets a percentage of 91.67%, if converted, the descriptor is included in the very high/very valid interpretation criteria, and (8) the time allocation aspect gets a percentage of 91.67% if converted it is included in the very high/very valid interpretation criteria. So that the overall percentage is 81.75%, and thus it can be concluded that the Lesson Plan is declared valid and feasible to use.

Student activity data using the Think Pair Share method were analyzed to know student activity. Assessment of student learning activity in this study was seen from six indicators, namely asking questions, submitting opinions, doing assignments, being able to answer teacher questions, being able to work with other students, and being responsible for the assignments given. Observations were made on students during learning activities, with an analysis of the score formula 1 to 5 with the interpretation of the numbers. The Student Response Questionnaire is used to determine student responses to the application of learning using the TPS method. The aspects used to determine student responses are presented in Table 1.

**Table 1. Student Response Aspects**

<table>
<thead>
<tr>
<th>No.</th>
<th>Student Response Aspects</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>You feel happy with the application of the Think Pair Share (TPS) learning method in the Basics of Fashion Skills subject.</td>
</tr>
<tr>
<td>2</td>
<td>By applying the Think Pair Share (TPS) learning method, the learning process in class is more effective.</td>
</tr>
<tr>
<td>3</td>
<td>You are interested in taking lessons that use the Think Pair Share (TPS) learning method.</td>
</tr>
<tr>
<td>4</td>
<td>By applying the Think Pair Share (TPS) learning method, you can better understand the subject matter that has been delivered by the teacher.</td>
</tr>
<tr>
<td>5</td>
<td>By applying the Think Pair Share (TPS) learning method, the material delivered by the teacher in class is very clear and developed so that you are motivated to follow it.</td>
</tr>
<tr>
<td>6</td>
<td>Applying the Think Pair Share (TPS) learning method makes it clearer for you to understand the subject matter.</td>
</tr>
<tr>
<td>7</td>
<td>By applying the Think Pair Share (TPS) learning method, the teaching and learning process in the classroom is not boring.</td>
</tr>
<tr>
<td>8</td>
<td>By applying the Think Pair Share (TPS) learning method, you will be more active in teaching and learning activities.</td>
</tr>
<tr>
<td>9</td>
<td>By applying the Think Pair Share (TPS) learning method, it can increase student activity.</td>
</tr>
<tr>
<td>10</td>
<td>You feel that the Think Pair Share (TPS) learning method can train cooperation among students.</td>
</tr>
</tbody>
</table>

The analysis used to determine student responses to the Think Pair Share (TPS) learning method is to use the following formula (Riduwan, 2013). Then the results of the calculation of the student response questionnaire are converted according to Table 2.

**Table 2. Conversion of Student Response Questionnaire Values**

<table>
<thead>
<tr>
<th>Score</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>0% - 20%</td>
<td>Very Less Response</td>
</tr>
<tr>
<td>21% - 40%</td>
<td>Less Response</td>
</tr>
<tr>
<td>41% - 60%</td>
<td>Response Enough</td>
</tr>
<tr>
<td>61% - 80%</td>
<td>Good Response</td>
</tr>
<tr>
<td>81% - 100%</td>
<td>Very Good Response</td>
</tr>
</tbody>
</table>

Analysis of learning achievement tests aims to determine student learning completeness so that the application of the Think Pair Share (TPS) learning method runs effectively for students. A student is said to have completed learning if he has achieved mastery learning outcomes ≥75%. A class is said to have completed learning if in the class it reaches ≥80% of students who have achieved learning mastery with the following calculations. Before the instrument test questions are given to students, validity and reliability tests are first carried out. This instrument is used to determine the validation of test questions, which are used as validation material as aspects of the material, construction, and language.
Based on the validation results of the student learning outcomes instruments presented in Table 6, the following data are obtained: (1) the material gets a result of 75%, meaning that based on the percentage criteria table when converted the descriptor is included in the high/valid interpretation criteria, (2) the construction gets a result of 81.67%, meaning that based on the percentage criteria table when converted the descriptor is included in the very high/very valid interpretation criteria, (3) the language gets a result of 83.33%, meaning that based on the percentage criteria table when converted the descriptor is included in the very high interpretation criteria/very valid. If the results of these three aspects are added together, you will get an average of 80%. Thus it can be concluded that the item instrument is valid and feasible to use. Item analysis was carried out to determine the level of validity of the questions to be used as pre-test - post-test evaluations. The results of the item validation test stated that all items were valid. Based on data analysis, the value of the $r_{\text{count}}$ is 0.520 if the value of $N = 35$ and look for the distribution of the value of the $r$ table of significance 5%, the value of the $r_{\text{table}}$ is 0.334. ($Value = r_{\text{count}} 0.520 > r_{\text{table}} 0.334$). This means that the test item instrument items can be said to be reliable or trustworthy as a means of collecting data in research.

3. RESULT AND DISCUSSION

Result

The following will present the data in Figure 1. A diagram to see all student activity. Student activity data has increased during the learning implementation process. At the first meeting, student activities got an average score of 78% (Good), but from various aspects, the two observers still got a score of 3, namely aspects of reading teaching materials, aspects of showing social skills (asking questions, contributing ideas, or opinions), and aspects of demonstrating social skills (communication). So that it can be said in Meeting I that students are still awkward being taught by temporary substitute teachers (researchers), and tend to underestimate teachers because they are not teachers from SMK Negeri 4 Surakarta. From the revision of the first meeting, better and satisfactory results were obtained because the second meeting experienced an increase compared to the first meeting with an average score of 84.67% (very good), namely by marking this aspect as the absence of an alternative answer to number 3 by the observer. because students have been able to establish cohesiveness in the learning process, are more disciplined and no longer underestimate new teachers who are carrying out the learning process. After conducting research in class X FT1 SMK Negeri 4 Surakarta, data were obtained regarding student responses to the application of the Think Pair Share learning method by researchers.

From the data on the results of student responses in figure 2 with the Think Pair Share (TPS) learning method, it shows that student responses from 35 students obtained the highest score of 90.00% and the lowest score of 75.65% if calculated the average the overall percentage is 81.56%. When converted into an interpretation table the percentage score is included in the very good interpretation criteria. After conducting research in class X FT1 SMK Negeri 4 Surakarta, student learning outcomes were obtained using the Think Pair Share (TPS) cooperative learning method through two learning outcomes tests given, namely the Pre-test (the test given before receiving the material) and the Post-test (Tests that have been purchased after receiving the material). From this test, the results obtained are in the form of scores, the assessment is based on the Minimum Completeness Standard (MCS) of ≥75. The completeness of the class is 80% (Riduwan, 2013). Due to the maximum rating set at 100, the minimum completeness.
score is 75, which means that it is declared complete, if the minimum acquisition of students = 75 and if in all students there is only one who gets a score of <75 then it cannot be declared complete. Student Learning Outcomes showed in Table 3.

<table>
<thead>
<tr>
<th>Test</th>
<th>Students Passing the MCS</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>11</td>
<td>31%</td>
</tr>
<tr>
<td>Posttest</td>
<td>35</td>
<td>100%</td>
</tr>
</tbody>
</table>

From the data on student learning test results, it was shown that in pretest, out of 35 students, the average score obtained from the pre-test scores was only 11 students who were declared complete in this matter. Then the class completeness value is obtained at 31%, this is still far from the class completeness standard of 80% because students are less enthusiastic and enthusiastic in the learning process so they have not fulfilled the MCS. From the data on student learning test results, it was shown that in posttest, out of 35 students, the average score obtained from the Post Test score had increased. The Post Test scores of 35 students have exceeded the minimum completeness criteria, namely ≥ 75 with the class passing grades obtained 31%. So it can be concluded that the teaching and learning process in the posttest has reached completeness. Based on the results of the learning tests, it can be concluded that in the pre-test, many students have not reached the Minimum Completeness Standard (MCS) ≥ 75 with a class completeness score of 7 students who have been declared complete and 21 students who have been declared incomplete. So that with the value of class completeness 100% in the learning process using the Think Pair Share (TPS) learning method students with enthusiasm and enthusiasm in the learning process are said to be complete because students have achieved MCS.

Discussion

Student Activity from observations indicates a percentage of 78% at meeting I and increased to 84.64% in meetings II. The increase in student activity occurs because of the teaching and learning activities of students who are required to be active in working groups and in charge of the lesson itself and others. Increasing student learning activeness in learning using the TPS method is in line with research which proves that the implementation of the TPS learning method can increase student learning activity (Astutik, 2023; Fadilah, 2022; Putri et al., 2020). The activity and learning outcomes of students in science subjects in class IV-A increased after applying the think pair share cooperative learning model (Lasari et al., 2021). This can be seen from the results of observations of students who also look enthusiastic and active while participating in learning activities. The Think Pair Share model is a learning model that optimizes the process of interaction between one student and another, so that they can exchange ideas and build their knowledge together (Hastuti et al., 2020; Tela et al., 2019). Learning activities in the think pair share model have several positive impacts such as allowing students to work alone and in collaboration with others, optimizing student participation and providing opportunities for students to show their participation to others (Hikmawati, 2019; Mulyono et al., 2021). The skills generally needed in this strategy are sharing information, asking questions, summarizing other people's ideas, and analyzing. So that this can train and develop students' activeness in learning. Based on the results of student responses prove that the Think Pair Share cooperative learning method received a very good response from students. This was indicated by a students response percentage of 81.56%. Student responses to the
implementation of the Think Pair Share (TPS) learning method are very good by looking at several things including students want to listen and pay attention to the teacher's explanation, students can do assignments well, students pair up and express their opinions to their partners, students express their opinions in front of the class to other friends, and students can work on the post-test questions well. Based on the results of the student response questionnaire on the application of the TPS model, students gave very positive responses. These student responses indicate that the indicators of research success have been achieved, namely that student responses are at least in the positive category. These findings are the same as previous studies which state that the Think Pair Share learning method makes learning more interactive (Hasbi et al., 2020; Ismail et al., 2022; Saraswati et al., 2021). TPS can also improve self-confidence and all students are given the opportunity to participate in class (Febnasari et al., 2019; Masana, 2022; Meilana et al., 2020). TPS as a cooperative learning model which consists of 3 stages, namely thinking, pairing, and sharing. Teachers are no longer the only source of learning (teacher oriented), but instead students are required to be able to discover and understand new concepts (student oriented). TPS provides opportunities for students to work alone and in collaboration with others, as well as discuss with each other to express ideas among peers (Febnasari et al., 2019; Suwela, 2021). Learning with the TPS model will provide opportunities for students to interact with their peers (Dewi et al., 2021; Hasanah et al., 2023). The existence of TPS in learning will provide a varied atmosphere in the discussion process and be adapted to the characteristics of elementary school children.

Based on research results, obtained a large percentage of the completeness of the class from the pre-test is 31% and increased to 100% of the results of the post-test. The increase in learning outcomes from the pre-test to the post-test was due to the application of the Think Pair Share learning method in the subjects of the Basics of Fashion Skills which were well implemented and running smoothly. Increasing student learning outcomes in learning using the TPS method is in line with research which proves that TPS can improve student learning outcomes (Astutik, 2023; Idayani, 2021; Kamil et al., 2021; Suwela, 2021). This TPS model allows students to reflect on what they have learned and ask questions about it, as it provides them with indirect examples of questions the teacher has asked in the past and gives them time to reflect on the lesson itself. By giving students more time to reflect and discuss subject matter, as well as to ask and answer questions, the TPS model has been shown to improve student academic outcomes. (Febnasari et al., 2019; Hasanah et al., 2023). Based on this explanation, in learning the Basics of Fashion Skills it can be used as an innovation to optimize students’ Basics of Fashion Skills learning outcomes and the development research carried out can be said to be successful. The Think Pair Share (TPS) cooperative learning method can assist students in expressing all of students’ ideas about the material. Thus students actively explore their own knowledge by thinking logically, critically, and creatively. Students can also exchange ideas with peers and help each other in finding their findings. With the Think Pair Share (TPS) cooperative learning model, it is able to encourage students to more easily understand the material and achieve optimal results. The implications of this research are expected to assist teachers in delivering material on Basics of Fashion Skills, so as to increase student activity and learning outcomes. This research has several limitations that need to be considered. This research was only conducted in one class in one school, so the generalization of research results needs to be done with caution. In addition, learning using the TPS method requires quite a long time, while the teacher must adjust to the time allotted by the school for the Basics of Fashion Skills subject at SMK Negeri 4 Surakarta.

4. CONCLUSION

The implementation of the TPS learning method can increase student learning activities in the subject of the Basics of Fashion Skills. The implementation of the TPS learning method can also improve student learning outcomes in the subject of the Basics of Fashion Skills. Student responses to the implementation of the TPS learning method in the subject of basics of vocational fashion are very good by looking at several things including students want to listen and pay attention to the teacher's explanation, students can do assignments well, students pair up and express their opinions to their partners, students express their opinions in front of the class to other friends, and students can work on the post-test questions well.

5. REFERENCES


