Discussion and Think Pair Share Strategies on Enhancement of EFL Students’ Speaking Skill: Does Critical Thinking Matter?

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\textbf{Abstract}

Previous research has underscored the importance of learning strategies and critical thinking. However, the relationship between both constructs toward the enhancement of the students’ speaking skills in EFL context still receives scant attention. Therefore, this study aims to investigate the influence of learning strategies (i.e. Discussion Strategy and Think-Pair-Share Strategy/TPS) mediated by critical thinking on the speaking skill of the Department of English Education students at a private university in Cirebon. The subject of this research consisted of 60 students divided into two classes (N=30 for experimental class and N=30 for control class). This study employed an experimental research design with a 2X2 factorial design. The findings demonstrated that English speaking skill of the students with Discussion Strategy was higher than those with the TPS strategy. Second, the English speaking skill of the students with high critical thinking level was higher than those with low critical thinking level. Third, there was a relationship between learning strategy and critical thinking toward English speaking skill. Fourth, there was no significant difference between the students’ speaking skills with Discussion strategy than those with Think-Pair-Share strategies in the group of students with low critical thinking level. This study concludes with the recommendations for future research to examine the effectiveness of discussion and think-pair-share strategies on enhancing the students’ critical thinking skills to promote their speaking skills.

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\textbf{INTRODUCTION}

English is an international language used by most countries in the world to communicate and gain some information by discussing phenomena such as law, education, or factual news with own argument. In relation to the education sector,
of the four core skills of English, speaking is considered the most difficult among EFL students. Mastering English language skills can be very challenging for Indonesian EFL learners since several problems can be faced during the process of mastering the language (Mahmud, 2018). Speaking is a means of communicating with other people to exchange some information, but the students must master the speaking aspects. The main aspects of speaking skill include fluency, comprehension, grammar, vocabulary, and pronunciation.

As with the innovation to emphasize speaking ability, the learning process should involve an effective learning strategy. Learning strategy which appropriates in this century which can be implemented encourages group discussion to create a positive environment of study, build the responsibility, and develop the critical thinking ability. Two of which are discussion strategy and Think-Pair-Share strategy.

Both learning strategies are believed to have an influence on the student’s critical thinking ability. The reason is that the students can develop the responsibility by themselves to build a cooperative team in solve the encountered problems. Second, the students can increase not only a responsibility but also speaking ability by giving argumentation and an overview of the case. Third, the students can investigate a case by their critical thinking ability from the scientific resources with depth and carefully while solving the case.

THEORETICAL FRAMEWORK

English Speaking Ability

Students often think that the ability to speak is the product of language learning, but speaking is also a crucial part of the language learning process Syafirzal & Rohmawati, (2017:71). Speaking is the verbal use of language to communicate with others (Syafirzal, Sutrisno, et al, (2018:67). Speaking becomes the tool of communication in daily activity. Speaking skill refers to verbal communication ability in a practical, functional, and precise way using the target language. It is simply concerned with putting ideas into words to make other people grasp the message that is conveyed (Al-Tamimi & Attamimi, (2014 : 31). Therefore, speaking is the ability which students must learn to build better communication. When speaking students should have a good pronunciation as the one of speaking aspect. According to Brown (1994) in Ardhya (2018 : 19), speaking is the interactive process of constructing meaning that involves
producing, receiving and processing information. Meanwhile, speaking is one of the main purposes of language learning in that is an ability to transfer some ideas to other people clearly and correctly Argawati, (2014:74). Moreover, speaking is the tool of communication to get some of information and message by understanding the meaning when expressing the message properly and fluently to the interlocutors. Thus, the students are encouraged to know the aspects of speaking itself, so that when having a conversation; it can be understood by the other students, especially when having a discussion in the learning process.

**Critical Thinking in the 21st Century Speaking Activities**

In the development of 21\textsuperscript{st}-century foreign language education, the students must have critical thinking in responding to a problem, for example in everyday life. They have to be able to explore relevant sources through authentic research and fact. In addition, the language learners who have developed critical thinking skills are capable of doing activities of which other students may not be capable Shirkhani & Fahim, (2011:112). They also can assert something to act rationally, empathically and reasonably Fell & Lukianova, (2015:2). According to Istiara and Lustyantie critical thinking is an activity that relates to the ability and action (Istiara & Lustyantie, 2017:23). Moreover, the students can take action to solve the problem during the learning process by learning group or by their own thinking.

Students with higher critical thinking can think rationally. Thus, the students as young generations need to be able to discriminate facts from opinions, evaluate and judge the credibility of evidence El Soufi & See, (2019 : 140). In the learning process, when students are given some questions by the lecturer, they should raise a problem until given the right solution by the argument. A critical thinker raises vital questions and problems, gathers and assesses relevant information, formulates well-reasoned conclusions and solutions, thinks open-mindedly within the alternative system of thought and communicates effectively with others in figuring out solutions to a complex problem Bhushan, (2014:11).

Critical thinking in the field of education is the learning process not only focused on the students’ answers but also students who thinking critically to give perspective about what they think. In addition, Ennis stated that critical thinking is the reasonable reflective thinking that is focused on deciding what to believe or do. It also entails formulating a hypothesis, a different perspective of viewing a
problem, questions, possible solutions, and plans for examining something, (Ennis 1991 p. 6; Ennis 2011 as cited in Devi, Musthafa, & Gustine 2017:3).

Therefore, the influence of critical thinking on speaking skill has been investigated by previous scholars, such as Fahim and Koleini (2014), Shirkhani and Fahim (2011), Afshar and Rahimi (2014). Fahim and Koleini (2014) investigated contributing factors of the speaking skill and critical thinking levels of EFL/ESL learners. The research was conducted involving 40 students. The research design was experimental. The findings showed that there were several relationships between critical thinking skill and speaking skill at the academic level with the significance level $r=0.423$, $<0.01$. However, the research only explores the relationship of the learner's factors and critical thinking skill, leaving a gap in the relationship between learning strategies and critical thinking upon speaking skill.

Afshar and Rahimi (2014) also investigated the relationship between learners’ attributes and critical thinking on speaking skill by using the California Critical Thinking Skills test and interview. The findings suggested that critical thinking ability had a correlation with speaking skill. All components of the correlation of emotional intelligence and speaking skill had correlated significantly. Additionally, there was a positive effect between emotional intelligence and critical thinking ability. Based on the research, it can be concluded that critical thinking has a relationship with speaking skill. However, the researcher did not attempt to explore the mediation of critical thinking within the use of learning strategies upon the speaking skill of the students.

**Learning Strategies**

The students must be trained to activate their learning strategies to reach an effective learning process. In addition, their critical thinking ability can mediate the use of learning strategies. Learning strategies are helpful to assist the speaking learning and understanding the target language. It is important then to be successful in accomplishing academic tasks. For example, they can make inferences based on the information in integrated language instruction including speaking and writing tasks Oxford et al., (2014:36). A technique or strategy can also be in the forms of specific classroom activities Richards & Renandya, (2002:121). Brown (2000) added that to encourage learning strategy especially in speaking strategies some ways are worth to take into account such as asking for clarification, asking someone to repeat something, using conversation, and getting
someone’s attention (Brown, 2000). Meanwhile, students will have a chance to build conversation to clarify the problem by discussion and make a pair with their group discussion. Thus, of the available learning strategies, discussion and think-pair-share strategies are the focus of the present study.

**Think-Pair-Share Strategy**

According to Arends Think-Pair-Share is a challenge for the assumption that all recitation or discussion needs to be held in whole-group settings, and it has built-in procedures for giving students more time to think to respond and to help each other Arends (2012:454). Then, think-pair-share is the strategy that requires a pair in solving the problems. This strategy also needs responses between students’ pairs because the students’ responses are very important during the learning process. Similarly, San Tint and Nyunt (2015) assumed that think-pair-share strategy is the activity that prompts students to reflect on an issue or problem and then to share that thinking with others. The students are encouraged to justify their stance using clear examples and clarity of thought and expression. They extend their conceptual understanding of a topic and gain practice in using other people’s opinions to develop their own San Tint & Nyunt, (2015:1). Moreover, Raba added that the think-pair-share strategy reinforces students’ communication skills. Each student takes the chance to speak, discuss and participate which has many positive effects on the whole group where students feel more self-confident and more active in the class Raba, (2017:13).

Yuliasri describes the three-step of Think-Pair-Share strategy. The first step allows individuals to think silently about a question/task posed by the instructor. The second step suggests individuals pair up and exchange thoughts. In the third step, the pairs share their responses/ideas with other pairs, other teams, or the entire group Yuliasri, (2013:15). Another relevant article about the Think-pair-share and speaking ability was conducted by some researches, such as Ardhy (2018), Hajhosseini (2016). Ardhy (2018) conducted research about the application of think-pair-share strategy in improving students’ speaking ability. The research was conducted at the English Language Education Study Program at Palopo University. The results showed that the students’ performance level was influenced by the think-pair-share strategy. The mean score of the pretest of the students who applied the think-pair-share strategy was 2.16 while the post-test score was 4.02.

Research about critical thinking and social interaction in active learning
focusing on the Iranian students’ perspectives demonstrated that the students who implemented discussion strategy got more benefits for their social interaction during the learning process. It also gives an effect on the dynamic cultures.

Meanwhile, Ardhy (2018) reported that the think-pair-share strategy influenced students’ speaking skill as viewed from the pre and posttests results. Another study conducted by Afshar and Rahimi (2014) investigating the influence of critical thinking on speaking skills of EFL students suggested that critical thinking has a relationship with speaking skill. However, the exploration of whether the students applying both strategies mediated by critical thinking obtain higher scores of their speaking performances still receives little attention.

Therefore, this study aims to investigate the influence of discussion and think-pair-share strategies mediated by critical thinking on EFL students’ speaking skill. To obtain adequate findings, the driving research questions are: 1) To what extent the English speaking performances of the students with discussion strategy and think-pair-share strategy differ? 2. To what extent the English speaking performances of the students with discussion strategy and think-pair-share strategy mediated by high critical thinking differ? 3. To what extent the English speaking performances of the students with discussion strategy and think-pair-share strategy mediated by low critical thinking differ? 4. How is the relationship between learning strategies and critical thinking on the students’ English speaking skill?

**RESEARCH METHODOLOGY**

This research was conducted on the third semester in academic year 2018/2019 of The English Department of Swadaya Gunung Jati University which located in Cirebon, West Java. The research was conducted for four months. The method of the research used the experimental research with factorial design 2x2 and used ANOVA data analysis alpha 0.05 significance level. The reason for choosing the settings is based on the preliminary study by interviewing half of the subjects as the sample of the interview. The results demonstrated the causes of the difficulties to speak English from the students: 1) students lack vocabulary 2) students have some of the difficulties to arrange the sentences based on the true grammatical 3) students repeated the words when speaking, so make the sentences not effective 4) students have difficulties to think critically to solve some of problem 5) the lecturer did not implement a learning strategy to teach speaking
The researcher used cluster random sampling to take the sample. The sample is the third-semester students (N=60) divided into two groups. The first group (N=30 students) was taught by discussion strategy. Regarding the division of students with high and low critical thinking, this study used Guilford's theory in which 27% of them (N=16) were tested and selected to reach a conclusion that eight (8) students belong to the high-critical-thinking group, while the other eight students belong to the low-critical-thinking group. The second group (N=30 students) was taught by the think-pair-share strategy. The division of students with high and low critical thinking conforms to the first group.

To collect the data, the researcher used two instruments: a critical thinking test and speaking performance test. The normality and homogeneity tests were also conducted. The critical thinking test consists of 30 multiple-choice questions about a reading text. The sources of the instrument of critical thinking test were from the text of TOEFL exercise. The reading exercise as the instrument test of critical thinking, because contains of how students to think critically based on the critical thinking assessment. The speaking performance test was in the form of individual conversation with five (5) themes about the phenomena of life. It comprised five questions each of which is under one theme. The instrument of the speaking performance test was created by the researcher validated by the expert.

**DISCUSSION**

**To what extent the English speaking performances of the students with discussion strategy and think-pair-share strategy differ?**

1. Description score of English speaking performances of students with discussion strategy (A1)

   The students who learned with discussion strategy have a range of scores 0-25, with the lowest score 19.3 and the highest score 25.0. The average score is 22.5 with the standard deviation 1.85, the mode 23.5 and the median 22.80. The distribution of the frequency distribution of the scores of the students who learned with discussion strategy can be seen in the following histogram.
2. Description of scores of English speaking performances of students with think-pair-share strategy (A2)

The data of the English speaking performances of students studying with think-pair-share strategy demonstrated a score range of 0-25, with the lowest score is 15.3 and the highest score of 25.0. The average score is 19.5 with the standard deviation 2.91, the mode 19.93 and the median 19.6. The distribution of the frequency distribution of the scores of the students who learned with the think-pair-share strategy can be seen in the following histogram.

Based on the statistical data above, it can be concluded that there was an influence of learning strategies (discussion strategy and think-pair-share strategy) on the students’ speaking skill. The students with discussion strategy got a score higher than those with think-pair-share strategy.
To what extent the English speaking performances of the students with discussion strategy and think-pair-share strategy mediated by high critical thinking differ?

1. Description of scores of English speaking performances of students with high critical thinking (B1)

The data of the English speaking performances of students with high critical thinking skills exemplified a range of scores 0-25, with the lowest score of 18.0 and the highest score 25. The average score is 22.0 with a standard deviation 2.239, the mode 23.9 and the median 22.6. The distribution of the frequency distribution of the scores of the students with high critical thinking can be seen in the following histogram.

Figure 3. Histogram of English speaking skill of students with high critical thinking (group B1)

2. Description of scores of English speaking performances of students with low critical thinking (B2)

The data of the English speaking performances of students with low critical thinking have a range of scores 0-25, with the lowest score 15.0 and the highest score 25. The average score is 19.8 with a standard deviation of 3.04, the mode 15.75 and the median 17.70. The distribution of the frequency distribution of the scores of students with low critical thinking can be seen in this histogram.
Based on the statistical data above, it can be seen that there was an influence of students’ critical thinking on the speaking skill. The average score of the students with high critical thinking was 22.0. Meanwhile, those who have high critical thinking got the average score of speaking skill as much 19.8.

To what extent the English speaking performances of the students with discussion strategy and think-pair-share strategy mediated by high critical thinking differ?

1. Description of scores of English speaking performances with discussion strategy and high critical thinking (A1B1)

   The data of the English speaking performances of students with discussion strategy and high critical thinking have a range of score 0-25, with the lowest score 23.0 and the highest score 25. The average score is 23.8 with a standard deviation 0.717, the mode 22.79 and the median 23. The distribution of the frequency distribution of the scores of the students studying with discussion strategy and high critical thinking can be seen in the following histogram.

Figure 4. Histogram of English speaking skill of students with discussion strategy and high critical thinking (group A1B1)
2. Description of scores of English speaking performances of students with discussion strategy and high critical thinking (A2B1)

The data of the English speaking performances of students with think-pair-share strategy and high critical thinking have a range of score 0-25, with the lowest score 15.0 and the highest score 25. The average score is 17.6 with a standard deviation of 1.42, the mode 17.45 and the median 17.27. The distribution of the frequency distribution of the scores of the students studying with think-pair-share strategy and high critical thinking can be seen in the following histogram.

**Figure 5. Histogram of English speaking skill of students with think-pair-share strategy and high critical thinking (A2B1)**

Based on the statistical data above, it indicates that the students who learned with think-pair-share strategy and high critical thinking got a higher average score of speaking skill. In other words, the implementation of discussion strategy and think-pair-share strategy mediated by high critical thinking has an influence on speaking skill.

3. Description of scores of English speaking performances with discussion strategy and low critical thinking (A1B2)

The data of the English speaking performances of students with discussion strategy and low critical thinking exhibit a range of score 0-25, with the lowest score 21.3 and the highest score 25. The average score is 23.5 with a standard deviation 1.82, the mode 24.03 and the median 23.50. The distribution of the frequency distribution of the scores of the students studying with discussion strategy and low critical thinking is presented in the following histogram.
Figure 6. Histogram of English speaking skill of students with discussion strategy and low critical thinking (A1B2)

4. Description of scores of English speaking performances with think-pair-share strategy and low critical thinking (A2B2)

The data of the English speaking performances of students with think-pair-share strategy and low critical thinking projected a range of score 0-25, with the lowest score 21.0 and the highest score 25. The average score is 22.5 with a standard deviation of 0.648, the mode 21.80 and the median 22.6. The distribution of the frequency distribution of scores of the students studying with think-pair-share strategy and low critical thinking can be seen in the following histogram.

Figure 7. Histogram of English speaking skill of students with think-pair-share strategy and low critical thinking (A2B2)

Based on the statistical data above, it can be concluded that the students with discussion strategy and think-pair-share strategy mediated by low critical thinking got lower scores lower than their counterparts. Thus, critical thinking can determine the level of effectiveness of implementing the learning strategies toward the development of students’ speaking skill.
How is the relationship between learning strategies and critical thinking on the students' English speaking skill?

The results of validity test

The result of the validity calculated by the Product Moment formula, which has a correlation of reliability. The result of reliability is reliable, based on the r-table with the alpha 0.05 and the r table 0.722 > 1.02 so, the result reliability is very high. The conclusion of the instrument of critical thinking test is reliable for the research. The instrument of the speaking test was calculated by the inter-rater reliability which scored by two experts. Based on the result of the reliability between two experts, the result is 0.722>0.997, so the instrument of speaking is reliable as the instrument of the test. The research also has the result of Liliefors (Normality Test), Barlett Test (Homogeneity Test). Based on the normality test can be a result that the data is normally and homogeneity. The data continued by the calculated hypothesis based on the Two-Way ANOVA.

Before the researcher conducting the hypothesis testing, the research would be tested by normality testing and homogeneity testing. The normality test aims whether the data is normally distributed or not. First, the calculation of the normality of the data. Data on the ability to speak English students are tested by normality test, to find out the data is normal with a significance level of α = 0.05. The hypothesis proposed in this normality test is as follows: H0 = accepted if the L count ≤ L table; means that data is normally distributed. H0 = rejected if L count> L table; means that data is not normally distributed.

<table>
<thead>
<tr>
<th>No</th>
<th>Data Group</th>
<th>N</th>
<th>L Count</th>
<th>L Table</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A1</td>
<td>16</td>
<td>0.1075</td>
<td>0.220</td>
<td>Normal</td>
</tr>
<tr>
<td>2</td>
<td>A2</td>
<td>16</td>
<td>0.1318</td>
<td>0.220</td>
<td>Normal</td>
</tr>
<tr>
<td>3</td>
<td>B1</td>
<td>16</td>
<td>0.1217</td>
<td>0.220</td>
<td>Normal</td>
</tr>
<tr>
<td>4</td>
<td>B2</td>
<td>16</td>
<td>0.0818</td>
<td>0.220</td>
<td>Normal</td>
</tr>
<tr>
<td>5</td>
<td>A1B1</td>
<td>8</td>
<td>0.2422</td>
<td>0.300</td>
<td>Normal</td>
</tr>
<tr>
<td>6</td>
<td>A2B1</td>
<td>8</td>
<td>0.1112</td>
<td>0.300</td>
<td>Normal</td>
</tr>
<tr>
<td>7</td>
<td>A1B2</td>
<td>8</td>
<td>0.2314</td>
<td>0.300</td>
<td>Normal</td>
</tr>
<tr>
<td>8</td>
<td>A2B2</td>
<td>8</td>
<td>0.1230</td>
<td>0.300</td>
<td>Normal</td>
</tr>
</tbody>
</table>

The information from the table above shows that all groups of data tested
for normality with the Liliefors test have a calculated L value < L table. Thus, it can be concluded that all data on the English speaking abilities of students are normally distributed. Second, To find out the data on the ability to speak English is homogeneous with a population or not, a homogeneity test was carried out using the Bartlett test with a significance level of α = 0.05. The hypothesis proposed in this homogeneity test is as follows: H0 = accepted if χ² count < χ² table; means that the data comes from a homogeneous population H0 = rejected if χ² count ≥ χ² table; means that the data comes from a non-homogeneous population. Homogeneity testing in this study was conducted on three groups of data, including: (1) data A1B1, A2B1, A2B2; (2) data A1 and A2; and (3) data B1 and B2. After calculating the three groups of data.

Table 2. The Homogeny Result of Influence Learning Strategy and Critical Thinking on Speaking Ability

<table>
<thead>
<tr>
<th>No.</th>
<th>Data Group</th>
<th>degree of freedom</th>
<th>χ² count</th>
<th>χ² table</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A₁B₁, A₂B₁, A₁B₂, A₂B₂</td>
<td>3</td>
<td>4.948</td>
<td>7.815</td>
<td>Homogeny</td>
</tr>
<tr>
<td>2</td>
<td>A₁ and A₂</td>
<td>1</td>
<td>3.173</td>
<td>3.841</td>
<td>Homogeny</td>
</tr>
<tr>
<td>3</td>
<td>B₁ and B₂</td>
<td>1</td>
<td>1.276</td>
<td>3.841</td>
<td>Homogeny</td>
</tr>
</tbody>
</table>

Based on the table above, it can be seen in the group of data tested for homogeneity, the value of χ count < χ table. Thus H0 is accepted. It can be concluded that all data comes from a homogeneous population. Because the analysis prerequisite test (normality and homogeneity test) has been tested, the analysis can be continued by testing the research hypothesis. Testing the research hypothesis of students’ English speaking ability was carried out using a two-way analysis of variance (2-way ANOVA). Then, if there is interaction, then the analysis is continued with the Tukey test to find out which groups are superior.
Table 3. Summary of ANOVA Two Way Calculations

<table>
<thead>
<tr>
<th>Variance</th>
<th>db</th>
<th>JK</th>
<th>RK = JK/db</th>
<th>Fh = RK/RKD</th>
<th>Ft</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row (b)</td>
<td>b-1 = 1</td>
<td>42.8</td>
<td>42.8</td>
<td>11.0</td>
<td>4.20</td>
</tr>
<tr>
<td>Column (k)</td>
<td>k-1 = 1</td>
<td>102</td>
<td>102</td>
<td>26.4</td>
<td>4.20</td>
</tr>
<tr>
<td>Interaction</td>
<td></td>
<td>1x1</td>
<td>1</td>
<td>52.5</td>
<td>4.20</td>
</tr>
<tr>
<td>(b x k)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In</td>
<td>28</td>
<td>10825</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduced (R)</td>
<td>31</td>
<td>10845</td>
<td>6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

After the two-way ANOVA test, the data analysis of students' English speaking ability was continued with the Tukey test which aims to determine which strategies and thinking abilities have advantages.

Table 4. Summary of Tukey Test Data Analysis

<table>
<thead>
<tr>
<th>Data</th>
<th>N</th>
<th>Q count</th>
<th>Q table</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1 – A2</td>
<td>16</td>
<td>12.5</td>
<td>3.00</td>
<td>Very significant</td>
</tr>
<tr>
<td>B1 – B2</td>
<td>16</td>
<td>9.16</td>
<td>3.00</td>
<td>Very significant</td>
</tr>
<tr>
<td>A1B1 – A2B1</td>
<td>8</td>
<td>12.9</td>
<td>3.26</td>
<td>Very significant</td>
</tr>
<tr>
<td>A1B2 – A2B2</td>
<td>8</td>
<td>2.08</td>
<td>3.26</td>
<td>Not Significant</td>
</tr>
</tbody>
</table>

To answer the first hypothesis, the data was calculated based on two way ANOVA analysis between rows and line, shows that the price of F count (A) = 12.5 > F table (4,20) on the significance α = 5%. So, this is means H0 is rejected and H1 is accepted. And based on the average of the score, students who had implemented by the discussion strategy (A1) is 22.5 higher than students who implemented by the Think-pair-share (A2) an average value of 19.5. Based on the result, can be concluded that Discussion Strategy is better than Think-pair-share Strategy.

To answer the second hypothesis, the data was calculated based on two-way ANOVA analysis between rows and line, shows that F Count (B) = 26.4 > F table (4.20) on the significant α = 5%. So, this is means H0 is rejected and H1 is accepted. The second hypothesis is about measuring students who have higher critical thinking ability and lower critical thinking ability. Students who had higher
critical thinking the score of average is 22.0 and students who had lower critical
thinking ability the score of average is 19.8. So, as a result, students who had higher
critical thinking ability is better than students who had lower critical thinking ability.

To answer the third hypothesis, the data was calculated based on two-way
ANOVA $F_{C} = 13,6 > F_{table}(4,20)$ on the significance of $\alpha = 5\%$. So, this is
means $H_0$ is rejected and $H_1$ is accepted. The third hypothesis stated that there is
an interaction between the learning strategy and the critical thinking ability. As a
result, there is the interaction between the implementing of learning strategy of
discussion and think-pair-share of the critical thinking ability through the speaking
ability of students of Swadaya Gunung Jati University.

To answer the fourth hypothesis, the data was calculated based on the
Tukey Test for groups A1B1 and A2B1, $Q_{Count} = 2,08$ and $Q_{table} = 3,26$ on the
significance of 0.05. This means that $H_0$ is rejected and $H_1$ is accepted. The fourth
hypothesis stated that there are have differences in the speaking ability for
students who learn by the discussion strategy and higher critical thinking ability with
the think-pair-share strategy and higher critical thinking ability. Based on the result,
it was calculated by the average of speaking ability that learning by discussion
strategy (A1B1) is 23.8 higher than the average score of speaking ability by the
think-pair-share strategy (A2B1) is 17.6. Based on the result, that the ability to speak
for students who have higher critical thinking ability who studied by the discussion
strategy is better than students who learn by the think-pair-share strategy.

To answer the fifth hypothesis, further, the test used the Tukey test for A1B2
and A2B2 groups, $Q_{Count} = 2,08$ and $Q_{table} = 3,26$ on the significance 0.05. So,
this is means $Q$ count lower than the $Q$ table. So, $H_1$ is rejected and $H_0$ is
accepted. Based on the result, there is no significant difference between the
English speaking skills of students who study with Discussion strategies higher than
students who learn with think-pair-share strategies in groups of students who have
low critical thinking. The average of the students who have lower critical thinking
ability through think-pair-share strategy is 23.5 and the average of students who
have lower critical thinking ability through think-pair-share strategy is 22.5.

Discussion

In this research, the researcher has implemented two learning strategies (i.e.
discussion and think-pair-share strategies) mediated by the students’ critical
thinking to investigate the influence on their speaking skill. The research found that
there is significance between learning strategy and critical thinking toward speaking skill. The results of the research found that the students who were taught by discussion strategy and think-pair-share strategy can improve their speaking skill including those who also have high critical thinking. On the other hand, the students who have low critical thinking do not project similar results because they cannot have enough ability to solve the assigned problem or task from the teacher. The similarity of research was conducted by (Ardhy, 2018), the research was investigate student’s speaking ability through Think Pair Share strategy. The results of the research that have an influence in mean score of student’s speaking skills, before researcher implemented Think Pair Share, the mean of the student’s speaking skill was 2.16 and after implemented the strategy, student’s speaking skills score were increased 4.02. Not only based on the result of the speaking test, but also the result of the questionnaire were students have a positive response of the think pair share strategy. The results of the present study are relevant to (Ardhy, 2018).

The novelty of this research lies in the explanation of the relationship between learning strategy and critical thinking toward the students' speaking skill. It demonstrates that the students taught with think-pair-share strategy obtain the average score of pretest 2.16 and the average score of posttest 4.02. Previous research only focuses on implementing discussion strategy for the improvement of the Iranian EFL students as well as their critical thinking (Hajhosseini, Zandi, Hosseini Shabanan, & Madani, 2016). The results of the present study extend that critical thinking might mediate a better process of activating discussion strategy in the EFL classrooms. Third, the research were conducted by Baroroh, Arif and Ashlihah (2017) the result of the research, students gain a positive response through the think-pair-share strategy on English speaking. The results of this research show that the students taught by think-pair-share strategy gain a positive effect on their speaking skill. Fourth, the research conducted by Soodmand and Rahimi (2014) were investigated the critical thinking, emotional intelligence, and speaking skill of Iranian EFL learners. The results show that critical thinking influences speaking skill.

CONCLUSION AND SUGGESTION

Based on the result of the research, it could be concluded that were a significant difference between the students with discussion strategy and think-pair-
share strategy mediated by critical thinking toward speaking skill. On the other hand, students who have low critical thinking obtain lower score although they employ discussion and think-pair-share strategies as well.

Furthermore, this study suggests that students who learn language especially at the speaking subject should implement the learning strategy mediated by critical thinking to improve speaking skill. Students will habitually to think critically to investigate the information from an informant. Meanwhile, discussion strategy and think-pair-share strategy also build the responsibility of students on their group to answer the questions based on the authenticity of the information. Hence, future research may replicate the research with a different and larger sample and in other levels of education.

REFERENCES


