

# A COMPARATIVE STUDY BETWEEN STUDENTS' CRITICAL THINKING SKILL TOWARDS SPEAKING PARTICIPATION

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## Abstract

Penelitian ini bertujuan untuk mengetahui perbedaan partisipasi berbicara dari siswa yang memiliki kemampuan berpikir kritis tinggi dan rendah. Penelitian ini menggunakan desain *comparative study* pada *ex post facto*. Data sampel dipilih dengan menggunakan sistem acak. Sampel diambil dari siswa kelas X SMAN 9 Bandar Lampung yaitu kelas X IPS 2 yang terdiri dari 30 siswa. Pengumpulan data dengan menggunakan kuisioner dan dianalisa dengan menggunakan SPSS pada level signifikan 0,05. Hasil menunjukan ada perbedaan partisipasi berbicara pada siswa dengan kemampuan berpikir kritis tinggi dan rendah dengan nilai  $f$  adalah 16.256,  $N$  berjumlah 30 dan derajat kebebasan ( $dk$ ) =  $n-1$  sementara  $f_{table}$  adalah 3.35 yang berarti  $F_{value} > F_{table}$ . Oleh karena itu hipotesis penelitian  $H_1$  diterima dan hipotesis  $H_0$  ditolak

The objective of this research is to find out the difference speaking participation between students with high and low critical thinking skill. The research design used comparative study design of *ex post facto* design. The samples of the research were selected by using simple random sampling from the students of the first grade of SMPAN 9 Bandar Lampung. Class X IPS 2 was chosen as the sample class of this research which consists of 30 students. The data were collected by means of the questionnaire score and were analyzed by using SPSS at the significant level 0.05. The result showed that there was a difference between students with high and low critical thinking skill towards speaking participation. The result showed that  $F$  value is 16.256 with  $N$  30 and degree of freedom ( $df$ ) =  $n-1$  while  $F$  table is 3.35. Thus,  $F_{value} > F_{table}$ . Therefore, the research hypothesis ( $H_1$ ) was accepted and the null hypothesis ( $H_0$ ) was rejected.

**Keywords:** critical thinking skill, students, speaking participation

## INTRODUCTION

English is used by a great number of people in the world since it has become an international language. As an instrument of communication, English is important for accessing information, absorbing and developing knowledge, technology, and culture to engage relations with other nations (Kepmendiknas, 2006). Therefore, Indonesian Department of National Education declares English as the first foreign language.

Unfortunately, speaking in foreign language is difficult for foreign language learners because effective oral communication requires the ability to use the language appropriately in social interactions. Cook (1989) states that different situations have distinct aspects and thus can influence the way in which the speaker uses language. Meanwhile, there are so many researches that have been conducted to find out the solution of this problem. Most of them focused on studying literary factor as the cause. Whereas, students have learned language since long time ago.

Regarding to observation that has been done by the researcher, she found that there was low interaction between students in speaking class and only few students who actively engaged performance or participate in speaking activity. Some of them tended not to express their own idea because they fear for being wrong and considered that there is nothing to say. It might be caused by the fundamental factor, which most teachers tend to ignore, that is the capabilities of their learners. The teachers are often disregard learners' views and opinions, or suppress them without ever giving the learners the chance to express themselves,

so that the learners would not be able to train and use their thinking skill.

While, related to the using of critical thinking skill in language learning, Kabilan (2000) believes that by only using and knowing the meaning, learners do not become proficient in the target language. He strongly believes that learners can only become proficient language users if they, besides using the language and knowing the meaning, could display creative and critical thinking through the language. This implies that the learners must be creative in their production of ideas, and critically support them with logical explanation, details and examples. To get empirical data about it the writer gave a critical thinking questionnaire and conducted a discussion as speaking activity. For that reason, the writer organized the research to prove the difference between students with high and low critical thinking skill towards speaking participation.

Yada, et al, (2005) found that critical thinking gave their students an opportunity to think aloud, be motivated and conduct discussions from various perspectives. Then, they believe that critical thinking is a very useful means to activate students to speak in English, by looking at ideas from different perspectives, deepening students' views and providing them with motivation and energy to introduce their ideas verbally. As a result of this, they could stimulate each other and communicate well.

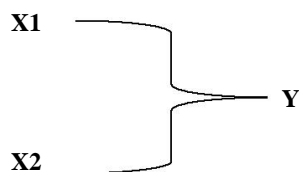
In addition, according to Shirkhani, et al (2011) the promotion of critical thinking into the foreign language teaching classrooms is of high significance for several reasons. Firstly, if language learners can take charge of their own thinking, they can monitor and evaluate their own ways of learning more successfully. Second,

critical thinking expands the learning experience of the learners and makes the language more meaningful for them. Thirdly, critical thinking has a high degree of correlation with the learners' achievements (Rafi, 1999). Different studies have confirmed the role of critical thinking in improving ESL writing ability (Rafi, 1999); language iciency (Liaw, 2007); and oral communication ability (Kusaka, et al, 2006 ). The learners may become proficient language users if they have motivation and are taught the ways of displaying critical thinking in foreign language usage, which signifies that the learners must have reflection on their production of ideas, and they may critically support those ideas with logical details (Rafi, 1999).

Therefore, this study proposes to investigate the difference between students with high and low critical thinking skill towards speaking participation. Based on explanations above, the researcher wanted to find out the difference because of this is very important to be done in order to improve the success of English teaching learning.

## **METHOD**

This research is quantitative research because it is focused on the project ( result of the test ) not the process of teaching learning and the objective is to find out whether there is a difference speaking participation between high and low critical thinking skill students. In this research there is no control and no treatment to the subject, thus ex post facto design is used in this research.



**X1** : Students with high critical thinking skill

**X2** : Students with low critical thinking skill

**Y** : Students' speaking participation

The population of this research is the first year students of SMA Negeri 9 Bandar Lampung. There are eleven classes of grade X in 2013/2014 academic year and each class consists of 30 students. In this research, the researcher determined the sample by using simple probably random sampling and grade X IPS 2 was the chosen as the sample of the research.

The statistical analyses were calculated by using the Statistical Package for Social Sciences (SPSS). In order to reveal whether there was a difference speaking participation between high and low critical thinking skill students the One Way Anova was used.

The hypothesis of this research becomes:

1. Ho : There is no difference speaking participation between high and low critical thinking skill students.
2. H<sub>1</sub> : There is a difference speaking participation between high and low critical thinking skill students.

## **RESULTS AND DISCUSSIONS**

### **Result of Critical Thinking Questionnaire**

To know the result of students' critical thinking skill, the researcher distributed 40 items of questions which consist of 11 indicators of critical thinking skill and it was Critical Thinking Students Assessment which is the work of the Critical

Thinking Pilot Group at Central Piedmont Community College. The result could be seen at the table.

**Table 1. The frequency of students critical thinking skill**

<b>Interval Score</b>	<b>Category</b>	<b>Frequency</b>	<b>Percentage</b>
120 – 160	High	9	30%
80 – 119	Medium	18	60%
40 – 79	Low	3	10%

Based on the table above, the result showed that score interval was 120-160, categorized as high group, frequency was 9 and the percentage was 30%. Score interval was 80-119 categorized as medium group, frequency was 18 and the percentage was 60%. Meanwhile, score interval was 40-79 categorized as low group, frequency was 3 and the percentage was 10%.

### **Result of speaking participation**

To know the result of students' speaking participation, the researcher conducted discussion activity which consists of interpretation, analysis, evaluation, inference, explanation, and self-regulation stages.

**Table 2. The frequency of students' speaking participation scores**

<b>Interval Score</b>	<b>Category</b>	<b>Frequency</b>	<b>Percentage</b>
75 – 100	High	6	20%
50 – 74	Medium	18	60%
25 – 49	Low	6	20%

Based on the table, the result showed that score interval was 75-100 categorized as high group, frequency was 6 and the percentage was 20%. Score interval was 50-74 categorized as medium group, frequency was 18 and the percentage was 60%. Meanwhile, score interval was 25-49 categorized as low group, frequency was 6 and the percentage was 20%.

Based on the calculation, the researcher found that there was a difference speaking participation between high and low critical thinking skill students at first grade of SMAN 9 Bandar Lampung. The summary of the calculation was presented below.

**Table 3. Result of ANOVA**

ANOVA					
Speaking Participation					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	2797.143	2	1398.571	16.256	.000
Within Groups	2322.857	27	86.032		
Total	5120.000	29			

Result of variance analysis above shows that the  $F_{\text{value}}$  was higher than  $F_{\text{table}}$  ( $F_{\text{value}} = 16.256$ ,  $F_{\text{table}} = 3.35$ ,  $F_{\text{value}} > F_{\text{table}}$ ). Then the analysis also shows that each group has different mean and each mean has also different standard deviation. Thus,  $H_0$  is rejected and there is a difference speaking participation between high and low critical thinking skill students with the coefficient significant 0.000 ( $p = 0.000$ ,  $p < 0.05$ ) by using comparative study (One Way Anova).

In addition, the researcher analyzed to follow up one way ANOVA by post hoc

scheffe test. This test aimed to investigate the significance of mean difference for each level of critical thinking. Due to it has same variance according to homogeneity of variances test, the researcher used Bonferroni as further test.

The result is the most significant mean difference is showed by low critical thinking group students and high critical thinking skill group of students with the coefficient significant about 0.000 ( $p = 0.000$ ,  $p < 0.05$ ). Thus, it is clear that there is a difference speaking participation between high and low critical thinking skill students.

**Table 4. Result of Post Hoc Tests**

Multiple Comparisons						
Dependent Variable: Speaking Participation						
Bonferroni						
(I) Critical Thinking Score	(J) Critical Thinking Score	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Low	Medium	-10.33333	4.68891	.109	-22.3016	1.6349
	High	-29.14286*	5.43108	.000	-43.0055	-15.2803
Medium	Low	10.33333	4.68891	.109	-1.6349	22.3016
	High	-18.80952*	4.13156	.000	-29.3552	-8.2639
High	Low	29.14286*	5.43108	.000	15.2803	43.0055
	Medium	18.80952*	4.13156	.000	8.2639	29.3552

\*. The mean difference is significant at the 0.05 level.

Then, we find that students with high critical thinking skill achieved fluency and problem mastery aspects better than other aspects. Meanwhile, the students with low critical thinking skill gained better achievement in encouragement aspect. The results are presented on the next table.



**Table 5. Mean Score of Each Participation Aspect**

Aspects	Group of students	
	High	Low
Encouragement/spirit	71.4	55
Fluency	82.1	45
Clarity/word choice	53.5	50
Problem mastery	82.1	40
Opinion	71.4	45

## CONCLUSIONS AND SUGGESTIONS

Based on the results of data analysis and discussions, the researcher draws the

conclusion and suggestion as follows :

1. There is a difference speaking participation between all group of students due to critical thinking skill which is showed by the  $F_{\text{Value}}$  tha was higher than  $F_{\text{table}}$  ( $F_{\text{Value}} = 16.256$ ,  $F_{\text{table}} = 3.35$ ,  $F_{\text{Value}} > F_{\text{Table}}$ ). The coefficient significant 0.000 ( $p = 0.000$ ,  $p < 0.05$ ) by using comparative study (One Way Anova).
2. The biggest difference mean showed by high and low critical thinking skill students. Thus, there is a difference speaking participation between high and low critical thinking skill students. Then students with high critical thinking skill have better participation than students with low critical thinking skill.
3. The students with high critical thinking skill gained better achievement in

fluency and problem mastery aspect. Meanwhile, the students with low critical thinking skill gained better achievement in encouragement aspect because they were being stimulated by other students.

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