CO-OP JIGSAW TEAM PROJECTS: A COOPERATIVE TEACHING METHOD TO IMPROVE STUDENTS’ SPEAKING SKILL
(An Experimental Study in a Senior High School)

Diaz Innova Citra Arum
Department of Nursing
STIKes Mahamadiyah Lamongan
Indonesia
diaz.citraarum@gmail.com

Abstract
An effective speaking activity involves active students to participate and create a life communication. The ideal condition of English speaking class involves the students’ effectiveness in participating teaching and learning process. Nevertheless, some problems are emerged and one of them is that they often get nervous to speak in front of many people when they are asked to present their work to their friends. This paper reveals an experiment study in teaching speaking in a senior high school in Lamongan, East Java. It discusses about the effectiveness of cooperative teaching method known as coop jigsaw team projects in teaching speaking. All tenth grade students were used as the population and eighty students were taken as sample being divided into experimental group taught using coop jigsaw team projects and control group taught using direct instruction. Cluster random sampling was applied as the technique to determine sample. To obtain the data of students’ speaking score, a speaking test was conducted. The score was the average score resulted by two independent examiners. The data were analysed through descriptive and inferential analysis using two-sample t-test. The research hypothesised that coop jigsaw will result a better English speaking score rather than direct instruction method. The research finding using 95% significance level shows that coop jigsaw team projects was more effective in teaching speaking compared to direct instruction for the tenth grade students because the activities in coop jigsaw team project pushed the students to be more active and cooperative in learning speaking.

Keywords: cooperative teaching method, coop jigsaw team projects, speaking skill, two-sample t-test

Introduction
An effective speaking activity involves active students to participate and create a life communication. The ideal condition of English speaking class involves the students’ effectiveness in participating teaching and learning process. Besides that, they should be able to master all aspects of speaking, which consist of pronunciation, grammatical accuracy, vocabulary, fluency, and content relevance. It means that the students should be able to pronounce all utterances clearly, speak grammatically correct, master many vocabularies so that their diction is good, speak fluently, and they should be able to understand everything they say.

Practically, teachers must be aware that students still face many problems in learning speaking. There are a lot of problems faced by Indonesian students in learning English especially in speaking skill. Some problems that are faced by many students of tenth grade are they often get nervous to speak in front of many people when they are asked to present their work to their friends. It is a little bit easier when they have to present it by their own language, but they will feel hard when they have to speak English. Some students get anxious symptom when they are asked to show their speaking skill. They are afraid of other’s perception when they make mistakes whether it is on purpose or not.

Based on the problem that most students at tenth grade face, they need some classroom activities which enable them to develop their skills to participate in oral interactions. Besides using different methods from time to time, teachers of English also try to find out the most effective method to help the students master
English easily and effectively. The teacher cannot only deliver the lesson through oral explanation and writing on the board, but also be as creative as possible in choosing method to help them deliver the material of English more effectively.

The researcher gets the idea firstly from getting inspired by Spencer and Kagan that create classic cooperative learning. Cooperative learning can be one of the alternatives to cope with the students’ speaking difficulty.

Based on the problems above, the researcher considers using one of cooperative learning method that called Coop Jigsaw Team Projects to solve the problems since this type of cooperative learning is very suitable method to be applied to tenth grade students of Senior High School using 2013 curriculum because this method is students-centered and integrated skill.

Another method that is used by teacher in teaching speaking is Direct Instruction Method. This method is teacher-centered that is dominated by the teacher to take a part in teaching and learning process.

This research was aimed to find out whether coop jigsaw team projects is effective to be applied to tenth grade students of senior high school and what makes it effective. The result will help teacher of tenth grade students to fulfill the requirement of speaking success of students and it will be best applied for teachers that want their students become more active in speaking.

Research Method

This research was included as an experimental research with quantitative approach since the purpose of this research was investigating some cause-and-effect interactions of a number of variables. It is supported by Fraenkelet. Al., (2009: 261) that experimental research is type of research that directly attempts to influence a particular variable, and when properly applied, it is the best type for testing hypotheses about cause and effect relationship.

In this research, the population was the tenth grade students. The researcher took 2 classes consisting 40 students for each to be experimental group and control group as the sample. To achieve the research finding, the researcher needed data to be analysed. The required data were students’ speaking score to measure the students’ speaking. To obtain the data, it was needed some instruments. They were speaking test to obtain the students’ speaking score and observation sheet to observe the process of teaching and learning process.

The speaking test used in this research was one-way speaking test. It asked the students to present a descriptive text by choosing one of some topics provided. Researcher scored the students’ speaking ability by considering indicators adapted from Haris. Haris’ scoring rubric is used in this research because the language is much more understandable, this scoring rubric is also more complete, compels testers to take a variety of factors into account, and contains the analytic score that the performance is observed separately under the language components: pronunciation, grammar, vocabulary, fluency, and comprehension in 1-5 scale. The researcher uses content instead of comprehension since she wants to score the students in one-way speaking.

The researcher also used inter-rater in this speaking test to avoid subjectivity. Inter-rater means that there are more than one scorer of speaking test. However, observation sheet was used to observe the process of teaching learning in the used of CJTP and DI both to get the weaknesses and the strengths.

In techniques of analyzing data, the researcher used descriptive and inferential analysis. Descriptive analysis was used to know the mean, median, mode, and standard deviation of the students’ scores in speaking test. Inferential analysis was applied to test the hypothesis that the Coop Jigsaw is a more effective method to increase students speaking ability rather than the direct instruction method. Before that, it was necessary to know the data’s normality and homogeneity. The researcher, then, tested the hypothesis using two-sample t-test with 95% level of significance.

Finding And Discussion

The assumption of normality and homogeneity of the data collected is prominent to be checked. It is due to the use of t-statistics that requires the normality of the data. Moreover, the homogeneity assumption is important in order to fairly compare two independent samples.

| Table 1. Summary of Normality Test |
|-----------------------------|---------|-------|-----------|
| No | Group | Obs | AD | P-value | Distribution |
| 1 | Experimental | 40 | 0.398 | 0.352 | Normal |
| 2 | Control | 40 | 0.442 | 0.275 | Normal |
The Anderson Darling Statistics from both groups are smaller than 1.96 which come from the normal table with 95% level of significance which can be concluded that both experimental and control group data are under normal distribution. The p-value that is larger than the 5% tolerance (0.05) is also an indicator that the hypothesis of normality is failed to be rejected.

The variance of both experimental and control group data are considered to be homogeneous since the value of F-test is smaller than the $F_{1937:39,0.05}$ which is 1.704 and the Levene’s test is smaller than $F_{1,78,0.05}$ which is 3.963. Both values indicate that there is not enough evidence to reject the null hypothesis and under the 95% level of significance, it can be concluded that the variance of both data groups are homogenous.

**Table 2. Summary of Homogeneity Test**

<table>
<thead>
<tr>
<th>No</th>
<th>Group</th>
<th>Test Statistics</th>
<th>P-value</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>F Test</td>
<td>1.24</td>
<td>0.500</td>
<td>The variance is Homogenous</td>
</tr>
<tr>
<td>2</td>
<td>Levene’s Test</td>
<td>0.37</td>
<td>0.545</td>
<td></td>
</tr>
</tbody>
</table>

Two-sample t-test was run since both assumptions of normality and homogeneity are fulfilled. The null hypothesis tested for the research was that the control group have the same ability of speaking score with the experimental one, otherwise the alternative hypothesis stated that the experimental group resulted higher speaking score rather than control group.

**Table 3. Summary of Two-Sample t-Test**

<table>
<thead>
<tr>
<th>T</th>
<th>df</th>
<th>P-Value. (1-tailed)</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2.508</td>
<td>77</td>
<td>0.007</td>
<td>-3.200</td>
</tr>
</tbody>
</table>

Table 3 shows that the t value of one-tailed t-test is larger than the value of $t_{77,0.05}$ in which it is equal to -1.665 from the student-t table distribution. It indicates that the null hypothesis is rejected for the alternative hypothesis and it can be concluded that the coop-jigsaw method used by experimental group is more effective to increase student speaking ability. It is due to coop jigsaw team project triggers the students to be brave to speak. CJTP has a chronological steps allowing students to think individually, share it to the group and present it to the larger one that ease the students having difference characteristics to learn speaking much better. The steps of conducting CJTP are dividing the students into some teammates in which each teammate will get team topics and each student in it will have an expert topic to be discussed. After discussion, teammates will have a chance to present their last project in front of the class. Based on the steps of Coop Jigsaw Team Projects, the students are claimed to be more and more active.

On the contrary, Direct Instruction method emphasizes in the teaching direction on classroom activities. This method is teacher-centered that is dominated by the teacher to take a part in teaching and learning process. Students do not have many chances to show their speaking skill. According to Arends (2000: 264), Direct Instructional model is a teaching model that is aimed at helping students learn basic skills and knowledge that can be taught in a step-by-step fashion. From the definition above it can be concluded that Direct Instruction takes learners through the steps of learning systematically, helping them see both the purpose and the result of each step. The teacher usually spends some time lecturing, breaks the problems down into some steps, and gives students problems that should be accomplished on their own. Students totally take a concern on teacher’s explanation. In this case, teacher has an important role in the implementation of Direct Instruction method. She takes control of the class condition.

So, from the discussion and the result of this research, it can be concluded that Coop Jigsaw Team Projects is more effective than Direct Instruction in teaching speaking for tenth grades students.

**CONCLUSION**

As the research result and the discussion elaborated above, the finding is Coop Jigsaw Team Projects is more effective than Direct Instruction to teach speaking at the tenth grade students since students work well in cooperative group, moreover this method do not leave the phase of thinking individually in which became the strength of this method.

**References**


