

THE IMPLEMENTATION OF JIGSAW LISTENING TO INCREASE THE LISTENING COMPREHENSION OF THE TENTH GRADE STUDENTS OF SMAN 1 PORONG

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Abstrak

Mendengarkan adalah keterampilan pertama yang diajarkan dalam pembelajaran Bahasa Inggris. Sayangnya, dalam kegiatan mendengarkan, siswa sering mengalami kesulitan. Selain itu, para guru sering fokus ke hasil akhir pembelajaran (tes) dari pada proses pembelajaran. Para guru sering langsung menguji dan menilai siswa tanpa memberikan beberapa praktek mendengarkan kepada siswa. Hal ini menyebabkan siswa merasa takut akan kegiatan mendengarkan. Akhirnya, pemahaman siswa dalam kegiatan mendengarkan semakin menurun. Karena mendengarkan adalah keterampilan pertama yang diajarkan, guru harus membantu siswa untuk mengatasi masalah yang dialami oleh siswa. Ada solusi untuk menggunakan *cooperative listening* (mendengarkan bersama) seperti yang disarankan oleh Patrisius Istiarti Djiwandono. Artikel ini tidak akan menjelaskan penggunaan atau pelaksanaan *cooperative listening*, tetapi pelaksanaan *Jigsaw Listening* yang masih dibawah payung *Cooperative Listening*. Tujuan dari penelitian ini adalah untuk mengetahui apakah *Jigsaw Listening* efektif untuk meningkatkan pemahaman mendengarkan dari siswa kelas X. Penelitian ini merupakan penelitian eksperimental dengan desain satu kelompok pre-test-post-test. Berdasarkan analisis, *t*-nilai lebih besar dari *t*-tabel. Ini berarti ada perbedaan yang signifikan pada pemahaman mendengarkan siswa sebelum dan sesudah pelaksanaan *Jigsaw Listening*. Dengan demikian, *Jigsaw Listening* efektif untuk meningkatkan pemahaman mendengarkan para siswa kelas X SMAN 1 Porong

Kata kunci: Jigsaw Mendengarkan, Mendengarkan, Listening Comprehension

Abstract

Listening is the first skill to be taught. Unfortunately, in listening, students often find difficulties in listening. Beside that, the teachers often focus to the listening product rather than the process. The teachers often directly test and assess the students without giving some listening practices to the students. It causes the students scared of listening. Finally, the students listening comprehension is getting lower. Because listening is the first skill to be taught, the teachers should help the students to overcome the problem experienced by the students. There is a solution to use cooperative listening as suggested by Patrisius Istiarti Djiwandono. This study will not explain the use or the implementation of cooperative listening, but the implementation of Jigsaw Listening which is still in line with cooperative listening. The aim of this study was to find out whether jigsaw listening is effective to increase the listening comprehension of the tenth grade students. This is an experimental study with one group pre-test-post-test design. Based on the analysis, the *t*-value was higher than *t*-table. It means that there was significant difference of the students' Listening Comprehension before and after the implementation of Jigsaw Listening. Thus, it turns out that Jigsaw Listening is effective to increase the listening comprehension of the tenth grade students of SMAN 1 Porong

Keywords: Jigsaw Listening, Listening, Listening Comprehension.

INTRODUCTION

Language is the most important aspect in communication. People need language to communicate even for those people who are unable to speak. They use what it is called "body Language". It is known that there are a lot of languages in this world instead of someone's first language. The more foreign languages could be mastered, the better someone to get a wider communication and information.

Mastering a foreign language especially English is essential at this time. In fact, English language skills both written and oral are important requirements in applying a job. That's why English is taught at all levels from elementary even since kindergartens until high school. Beside that, in Indonesian Curriculum, English is one of the graduation requirements because the subject is tested in the national examination.

Based on the previous explanation, students also need to practice the use of English both written and oral

instead of the theories. There are four skills taught in English, those are listening, speaking, reading and writing. Writing and speaking are productive skills, meanwhile reading and listening are receptive skills. Thus, to be able to write English, someone needs to read English book a lot and to be able to speak English, someone should do a lot of listening to English language.

Listening seems to be the first skill which is needed to be taught before other skills. It refers to someone's speaking development. A baby who learns to speak or communicate begins the process of learning a language by listening first before they could speak. Once they are able to speak, they learn writing through reading before being able to write. It has been applied in arranging English standard competency for Indonesian Curriculum in teaching English where listening is the first skill to be taught and then followed by speaking, reading and writing.

In fact, students often find difficulties in listening. In listening test, they do not find visual aids like in speaking. Meanwhile, visual aids could help them understand what they hear through the gestures, facial expressions and perhaps they could decode the sounds by looking at the movement of the speakers' mouth. The difficulties often cause the students could not hear the sounds well. As the result, the students' listening comprehension is low.

Beside that, teachers often focus to the listening product rather than the process. The teachers often directly test and assess the students without giving some practices. It causes the students scary of listening. Although the teachers already give them some practices before giving the students a listening test, the students often fail in the listening test. Perhaps the failure is caused by the students' strategy in listening. It is stated that "it is important not only to give them lots of practice before the exam, but also to build up their confidence by making sure that they are armed with strategies which are likely to lead to success" (Burgess et.al 2005:79).

Remembering that listening is the first skill to be taught, the teachers need to address and help the students to overcome the listening difficulties experienced by the students to help the students improve their listening comprehension. There is one solution using a cooperative listening as suggested by Patrisius Istiarto Djiwandono in his article entitled *Cooperative Listening as a Means to Promote Strategic Listening Comprehension*. Activities in cooperative listening emphasize students to work in a group discussion before they perform individually. Because of this reason, the researcher wants to know whether it is true that the implementation of cooperative listening could improve the students' listening comprehension.

Unlike Patrisius' research which focuses on the advantages of implementing cooperative listening toward a group of learners at intermediate-level of English proficiency, this study will focus on the effectiveness of cooperative listening by implementing jigsaw listening which is still under the umbrella of cooperative listening. The subject in this study will be tenth grade students. The choice of research subjects in this study is supported by Brown's suggestion which is said that to teach teens who search for their identity, need for self-esteem and need to be valued, the teachers should decrease competition among the students and lead them to work in small-group (Brown, 2007:106).

The aim of this study is to find out the effectiveness of Jigsaw listening to improve listening comprehension of tenth grade students in SMAN 1 Porong.

Jigsaw Listening

Jigsaw listening is a teaching technique which lets the students work by making discussion and studying in a group or pair. Each group or pair will be given different parts of the recording. It has an audio information gap activity which requires the student to exchange information with other pair or group to compose the full version or complete listening task. Jigsaw listening is also described as an activity which involves different level of students and requires the students to listen to different parts of a text so that they can then arrange the whole text in groups (Harmer, 2007:167).

The Implementation of Jigsaw Listening in Teaching Listening

Generally, in pre-listening stage, the teachers prepare the students with vocabularies that the students will hear in the recording. After that, the students are tested and asked to answer some comprehension question. Finally, the students compare or check the answer and get the feedback from the teachers. Fewer practices make the students gain the target of listening comprehension difficulty. Meanwhile, many practices are better. It is stated that students' confidence need to be built up by giving them many listening practices rather than testing their listening abilities (Harmer, 2001:231). That's why the teachers should make the students engage in many listening practices before the test.

In this study, jigsaw listening is applied in all stages in listening especially whilst listening stage. The details of the implementation of jigsaw listening are written as follows:

1. The teachers ask the students to sit in a group of five or six. The researcher names the groups as home groups.

2. Each group member will listen to a different recording and answer the questions they can get from their recording.
3. Each group sends one or two students to the other groups with different parts of recording. They will make a new group with students from different home groups. The researcher names the new groups as topic groups. In topic groups they share information.
4. Then, they return to home group and share the information with each other.
5. After that, they are individually tested, but the score of each member in one group will be accumulated. By adding the accumulated score, each student will be encouraged to do the best to make their home group get the highest score (Larsen and Freeman, 2000:165-167)

The researcher greatly expects that the findings in this study will be useful for English teachers, English book authors, educational practitioners, and other researchers. For English teachers, this study will give a better suggestion on listening teaching technique. For English book authors, this study will help to develop listening activities which do not only have the students to listen to the recording but also do activities which are in line with cooperative learning method or jigsaw listening technique which engage the students to listen in group. For educational practitioners and researchers, this study will be a reference for the other researchers on teacher's teaching technique.

METHODOLOGY

The research design of this research was experimental study with one-group pre-test-post-test design. In this design, the researcher compared the students' listening scores in pre and post test. There was no control group in this design. The design can be seen below:

Pre-test	Independent	Post-test
Y_1	X	Y_2

Table 1 The Design of One Group Pre-post-test Experimental

This study consisted of three phases including pre-test, treatment and post-test. The steps of Jigsaw listening in this study are written as follows:

1. Before this study began, the researcher conducted a try out to gain the data in form of scores used to

measure the validity, the reliability, the difficulty level and the discriminating power of each test item of the pre and post-test. The try out was held to the class which was not engaged in this study. In this study, the try out was given to the X5 students of SMAN 1 Porong.

2. And then, the researcher conducted a pre-test. In this stage, the researcher asked the students to listen to the monologues and asked them to answer all questions individually.
3. Then, the researcher conducted the treatment stages.

The procedures are written as follows:

- a. The researcher divided the students into groups to make home groups of which consisted of five to six students.
- b. The researcher gave the students pre-listening session.
- c. The researcher told the students that each group was going to listen to different recordings. Because the recording was different between one group to the other groups, not all questions could be answered by the groups.
- d. The researcher guided the home groups to send one or two students to the other groups with different recordings. They will make new groups with the students from different home groups called topic groups. In the new groups, they must share information.
- e. The researcher asked them to return to the home groups and share the information they get from the other groups, so that they can answer all questions completely.
- f. Each group must report the answers of the listening task.
- g. After that, the researcher tested the students individually in whilst-listening session.
- h. The researcher told the students that the score of each student would be accumulated.
- i. After that, the researcher guided them in post-listening session by checking the answer together.
- j. This treatment was repeated in three meetings each of which lasted for one and a half hours.

4. The researcher conducted the post-test stage. In this stage, the researcher told the students to listen to the same recording given in the pre-test and asked them to complete all questions.

In this study, the population was the tenth grade students of SMAN 1 Porong. There were nine classes of tenth grader in SMAN 1 Porong. The researcher used random assignment to choose which class that was involved in this study. The subject chosen was X-6. The researcher only used one class in this study because the researcher used one-group pre-test-post-test design.

The instrument used by the researcher to gain the data in this study was test. Test is a measuring tool in form of questions or exercises used to measure skill, knowledge, intelligence, of and individuals or group of people. (Arikunto, 2004: 139) The test used in this study was objective listening test. It consisted of twenty items covering some indicators listed as follows:

1. Identifying the topic of the descriptive text.
2. Identifying certain information of the descriptive text.
3. Identifying explicit information of the descriptive text.
4. Identifying implied information of the descriptive text.
5. Identifying the sentence meaning in the descriptive text.

The test was given twice in the pre-test and post-test. In the post test, the students had to answer questions based on the recording given. While in the post-test, the students had to do the same thing as that in the pre-test, but after being given a treatment using jigsaw listening. Before the test used on the test, the researcher must measure the variability, reliability, difficulty level, and the discriminating power of the test.

The data needed in this study was the students' listening test scores. To gain the students' listening test scores, the researcher conducted listening test administered twice in the pre and post test. The data was in form of number.

The scores of the listening test were analyzed by computing the *t*-test. The type of *t*-test in this study was paired sample test. It means two sets of data from the same subjects. The analysis depends on the difference (*D*) of each pair of data. If *t*-value is more than *t*-table *E* ($p > .05$), it means that there is significant difference between the students' listening comprehension before and after the use of jigsaw listening.

RESULT AND DISCUSSION

The aim of this study is to find out whether jigsaw listening is effective to improve the listening comprehension of the tenth grade students in SMAN 1 Porong. To be able to answer the research question of this study, the researcher must take the students' pre and post

test scores. But, before taking the students' pre and post test scores, the researcher did try out in class X-5. The aim of the try out was to gain the data in form of scores used to analyse the test items. The item analysis included the variability, the reliability, the difficulty level and the discriminating power of the test. The result of the try out and the pre-post test will be explained below.

The result of the try out

1. The Test of Variability

The variability used in this study was content-related variability. To measure the variability, the researcher compared the test items to the the Learning Objectives written in lesson plan derived from standard competency for English lesson in Indonesian curriculum. The standard competency used in this test was the standard competency for the tenth graders number 8 which is written as follows:

Understanding the meaning of short functional text and monologues in form of narrative, descriptive and simple news item related to the environment

The basic-competency used in this study was written as follows:

Responding to the meaning of simple monologue text with different dialect accurately, fluently and acceptable related to the environment in form of; narrative, descriptive, and news item.

The sub-basic-competency used in this study was written as follows:

Responding the meaning of simple monologue text with different dialect accurately, fluently and acceptable relating to the environment in form of descriptive.

The Learning objectives were:

1. Being played the recording of descriptive text, the students can identify the topic of the descriptive text.
2. Being played the recording of the descriptive text, the students can identify certain information of the descriptive text.
3. Being played the recording of the descriptive text, the students can identify explicit information of the descriptive text.
4. Being played the recording of the descriptive text, the students can identify implied information of the descriptive text.

5. Being played the recording of the descriptive text, the students can identify the sentence meaning in descriptive text.

Based on the analysis of the contents of the test, it turned out that the test was valid.

The Test of Reliability

The reliability formula used in this study was KR21. To measure the reliability, the scores of all students should be accumulated and the result was 356. After that, each score should be squared. And then, all the squared scores were accumulated and the result was 4166. The mean and the standard deviation should be measured too. The mean was 10.47 and the standard deviation was 12.91. After that, the reliability can be measured. The reliability of the test in this study was .65. Referring to the criteria to interpret the reliability coefficient written in chapter 3, the reliability of the test in this study was high.

The Test of Difficulty Level

There are three levels of difficulty; easy, medium, and difficult. The proportion of a good test should be 30% easy, 40% medium and 30% difficult (Sriyati: —). The test used in this study consisted of 20 items. It means there should be 6 easy items, 8 medium items, and 6 difficult items. Based on the analysis, there were 6 easy items, 8 medium items, and 6 difficult items in the test used in this study.

The Test of Discriminating Power

The discriminating power of a test should be measured to know whether the test could differentiate the high level students and the low level students. The first step, the researcher divided the students into two categories based on the students' try out scores, high level students or upper group and low level students or lower group. Most of researcher used the percentage of 27% to divide the upper and lower students especially when N (the total subject of the test) ≥ 100 (Sulistiyono: —). It is also supported by Sriyati who said that the minimum range of using 27% is 40 people (—). Because there were 34 students who joined the try out, the researcher used median technique (Sulistiyono: —) to divide the students into the upper and the lower groups. It means that 50% of the total students put into the upper group and 50% of the total students put into the lower group. After that, the number of students who answered correctly in the upper group will be subtracted by the number of students who answered correctly in the lower group and then multiplied by the number of the students. The analysis showed the test consisted of 10 items with excellent discriminating power, 6 items with good

discriminating power, and 4 items with fair discriminating power.

The Result of pre and post test

The subject of this study was class X-6. The researcher used one class because the design was one group pre-test-post-test design. In the pre-test, the researcher distributed the test papers to the students and asked the students to listen to the monologues and to answer all of the questions individually. After finishing the pre-test, the researcher gave some treatments to the students.

After conducting the pre-test and the treatments, the researcher administered the test again in the post-test session. Because the researcher used pre-post-test design, the researcher compared the students' score in pre and post test. After gaining two sets of data in form of students' pre and post test scores, the researcher could compute the scores to measure the t -test. The t -test from the data called t -value. After that, the t -value would be compared to the t -table. If t -value is lower than t -table E ($p > .001$), it means that there is no significant difference between the students' listening comprehension before and after the use of jigsaw listening. If t -value is higher than t -table E ($p > .001$), it means that there is significant difference between the students' listening comprehension before and after the use of jigsaw listening.

Before looking at the t -table, the df (degree of freedom) should be measured. The formula to count the df is N (the number of the students) - 1. There were 30 students in the study. So, the df is 29. The t -table with $df=29$ is 3.396. The t -value of this study was 14.67. It means that t -value is higher than t -table. Thus, jigsaw listening is effective to improve listening comprehension of the tenth grade students in SMAN 1 Porong.

Discussion

In the treatment stage, the researcher told the students about the aim, the scoring system, and the rule of the activity. One of the rules was keeping speaking in English. Beside that, the researcher told the students that the researcher had a right to subtract the score when the students broke the rule. The aim of explaining the rule and the aim of the activity are to make the students aware of the activity. When the students are aware with the activity, the students would be more willing to the activity. It is in line with the suggestion from Patrisius who said that low cooperation in cooperative learning could be caused by members with contrast learning style in one group. He also suggested making the students aware of the purpose of cooperative learning (2006:36). It is also supported by Anne Hammond Byrd who stated that the students would be more willing to do cooperative

learning when the students were aware of the purpose and the benefit of learning in groups (2009: 20).

After that, the students were asked to make group of five called home group. The students were free to choose the member of the group. The researcher allowed the students to choose their group freely to make them feel comfort to work within the group. It is supported by Chan Kim wing (2004) that sometimes the composition of a group can be revised to support the implementation of cooperative learning. He explained in his research entitled '*Using "Jigsaw II" in Teacher Education Programme*' that there was a male participant in his study looked uninterested in the group discussion because the man actually preferred to join the other groups whom members he knew. After joining the new group, his performance was increased.

There were six home group named A1, A2, B1, B2, C1, and C2. The researcher told that the students would listen to different parts of monologue. After that, the researcher guided the students in pre-listening session by asking some follow up questions related to the topic of the monologue to activate the students' background knowledge. After the students ready, the researcher played the recording. Each group listened to the recording alternately. To use the time effectively, the researcher informed the students about the numbers that must be answered by each group and asked the students to predict the answer of the question of the other groups while waiting for the listening turn. It would help them during the next stage.

The next stage, each group might determine the students that would stay in the group and the students that would be sent to the other groups. The positive interdependence and the interaction of each student to the other students were highly forced in this session. In topic group discussion, each student performed maximally to help his or her group to do the listening task. The students were actively shared information, tried to talk in English to prevent score subtraction. Beside that, because the students knew that their individual test scores would be accumulated as a group during the treatment activities, the students worked well during the individual test.

Then, the researcher guided the home groups to make topic groups. Finally, all students would make new groups called topic groups. In these groups, they must share information. To minimize the trouble during this step, the researcher made two jigsaw groups. Groups A1, B1, and C1 would shared information one to the other and groups A2, B2, and C2 would shared information one to the other. After several minutes' discussion, the researcher asked them to return to the home groups and share the information they get from other groups to complete the task. Each group must report and submit the

work. This activity enhances the students' individual accountability.

The individual accountability of each student also forced in the next stage where the researcher tested the students individually. The researcher told the students that the test score of each student in the same group would be accumulated since the first until the last treatment. The group with highest score would get a reward. This treatment was repeated in three meetings each of which lasted for one and a half hours. In the end of the first treatment, the researcher asked some questions to the students about something the students did individually and something the students did in group. Beside that, the researcher also asked about something the students could do better in group.

At the end of the activity, the researcher asked about something the students could do better in group. This session made the students aware of the social value in cooperative learning or the cooperative learning's culture. At the end of the activity, the students' social skill developed. It is in line with the notion of cooperative learning that the implementation of cooperative learning develops the students' motivation, performance, and social skill in group work (Chan Kam Wing, 2004:96)

Conclusion

Many studies on the implementation of cooperative learning especially jigsaw has been conducted. Jigsaw was widely used to teach reading, but it was rarely found a study on jigsaw to teach listening. Meanwhile, both reading and listening are receptive skills. This study has explained the implementation of jigsaw to teach listening. This study has answered the research question in this study that jigsaw listening is effective to improve the listening comprehension of the tenth grade students. The implementation of jigsaw listening gave a chance to the students to practice listening before they were tested individually. Each student studied together in a small group to reach the group's success. The implementation of jigsaw listening reflected the custom of cooperative learning. They are positive interdependence, face-to-face interaction, individual accountability, social skill, and group processing. It does not only improve the students' listening comprehension but also develop the motivation, performance, and the social skills of the students' in group work. Beside that, referring to the students' characteristic as teenagers, the students' need on self-esteem was completed during the activities in jigsaw listening.

Suggestion

After the researcher did this study, the researcher suggests the English teachers to use jigsaw listening to teach listening skill because in this study, the students'

listening comprehension was improved after the use of jigsaw listening. In addition, the researcher suggests that this strategy is implemented in handling individual participation and interest. The teacher should allow time for the participants to appreciate the concept of learning together. Second, to support the implementation of jigsaw listening, the teacher should allow the students to choose their group freely.

It is suggested for the next study that the researcher conduct a study on the implementation of jigsaw listening with another level of students for example the eleventh or twelve graders or probably junior high school students.

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