The Implementation of Numbered Heads Together Technique in Improving Speaking Ability

Amirullah*1, Pocut Ernawati1 and Nurul Inayah1

1Syiah Kuala University, Banda Aceh

*Corresponding author: amirullah1393@gmail.com

Abstract

This study is meant to figure out whether the implementation of Numbered Heads Together can improve students’ speaking ability in terms of descriptive text. The writer conducted an experimental research by using one group pretest-posttest. Total sample of students was 20 students and they were chosen by using purposive sampling technique. The instruments used to measure students’ speaking achievement by using oral performance test. There were three meetings for the treatments. The students’ pre-test mean score was 75.40 and posttest 80.70. Each aspect was improved after the treatment, i.e. Vocabulary 16 or (10.0%), fluency 17.6 or (9.50%), pronunciation was17.1 or (4.50%), comprehension 16 or (1.50%), grammar 14 or (1.00%). The writer used 5% (a=0.05) as significant value. The t-test result, i.e. t_{value} (2.34) was higher than t_{table} (1.73) suggesting that H_{0} is accepted. This finding shows that the implementation of Numbered Head Together Technique improved second grade junior high school students’ speaking ability (vocabulary, fluency, pronunciation, comprehension, grammar) in terms to describing people, places or things orally. Therefore, it is suggested that teachers who want to develop their students’ speaking ability use this technique.

Keywords: Numbered heads together technique, Descriptive text, Speaking ability

1. INTRODUCTION

Speaking is a tool that used by people for communicating. It is an activity to express our ideas in oral communication form. Learning speaking skill will definitely be useful for the learners because it is a simply common way to communicate with others. Florez (as cited in Brown, 2001, p. 3) defines that speaking is an interactive process of constructing meaning that involves producing and receiving, as well as processing information. Furthermore, Nunan (1991, p. 39) stated that to most people, mastering the art of speaking skill is the single most important aspect of learning a second or foreign language.
and the success of which is measured in terms of the ability to carry out a conversation in language. It concludes that speaking is viewed as means of communication that consists of simple or complex symbols between two speakers or more in transferring information. The symbols can be in form of ideas, thoughts, perspectives, feelings and opinions.

2. LITERATURE REVIEW

2.1 Speaking

As a language user, we can define speaking as an activity in delivering, processing and responding information between language users verbally. According to Simon & Schuter (as cited in Maulana, 2015), speaking can be seen as a way to express or communicate opinions, feeling, and ideas by talking. Meanwhile, Chaney & Burk (1998, p. 13) states that speaking is about structuring understandable sentences in commanding, sending information, whether in an oral or written form in varies of topics.

Speaking is one of skills in English which is purposed to teach students how to communicate using spoken language. Speaking has also become object of study of many experts. Therefore, there are some definitions of speaking proposed by them. Brown (2001, p. 140) defines speaking as a productive skill that can be directly and empirically observed. Those observations are invariably colored by the accuracy and effectiveness of a test-taker’s listening skill, which necessarily compromises the reliability and validity of an oral production test. It concludes that speaking is viewed as means of communication that consists of simple or complex symbols between two speakers or more in transferring information. The symbols can be in form of ideas, thoughts, perspectives, feelings, and opinions.

2.2 The Elements of Speaking

There are several speaking components that should be paid attention by the language users. Vocabulary, grammar, pronunciation, fluency, as well as listening ability are some important components that should be mastered by second or foreign language learners, as stated by Ano (2004, p. 2), generally, elements of speaking can be divided into two parts, fluency and accuracy. Thus, it can be concluded that accuracy which consist of vocabulary, grammar, pronunciation and fluency are among some important elements should be mastered by students in learning speaking. However, since speaking involves two speakers or more and it happens in a real context, it is also necessary to have a good listening comprehension so that the conversation can take place. Vocabulary is considered as one of the most important elements in mastering speaking. Vocabulary, also known as lexical, enables learners to speak in variety of contexts. According to Bauer (1998, p. 2) vocabulary is about how words change, relate and be used in context. So, vocabulary adequacy determines the students’ success in carrying on conversation.

Grammar is the rules about how words change their form and combine with others to make sentences. Nunan (2005, p. 154) stated that grammar is generally thought to be set of ruler specifying the correct ordering words at the sentence level. The grammatically correct sentences will enable students to undergo a meaningful conversation. The sound produced while speaking is called pronunciation (Nunan & Carter, 2001). This aspect is important because
it is proven that unclear pronunciation can lead to misinterpretation. Thus, the components should not be neglected. An ability to speak a language well without stopping or making mistakes is called fluency. Hieke as quoted by Mutchnin (2012, p. 10), defines fluency as an ability to use long sentences with few pauses, in coherence in topic, creative, and imaginative.

Furthermore, Richards (1999, p. 75) states that fluency is a capability to produce a comprehensible discourse, easy to follow, and free of errors and breakdowns in communication. Comprehension is the understanding between two speakers who both talking in the same language. Theoretically, listening comprehension is an individual active process focuses on selected aspect, constructs meaning from passages, and relates what they hear to the existing knowledge (O’malley et.al, 2012). In short, listening comprehension is an ability to understand completely what the interlocutor is saying.

2.3 Numbered Heads Together

Numbered heads together can be described as a technique to involve students more in reviewing the materials covered in the lesson and check their their understanding toward the contents of the lesson. This technique also beneficial for reviewing and integrating subject matter. After direct instruction of the material, the group supports each member and provides opportunities for practice, rehearsal, and discussion of content material.

Thus, In this technique the students are placed in group and each person get the numbers, the students put their heads together to figure out the answer. Numbered heads together also has many definitions, but it can conclude that Numbered heads together is one of components in cooperative learning technique that is use number as media to apply this method when discussion process.

Kagan, (1992, p. 17) Numbered Heads Together a simple four-step cooperative learning structured as follows:
1. Numbering
2. Students number off within groups. If students are groups of four, every student will be either, 1, 2, 3, or 4.
3. Questioning
   Pose a question or a problem to the class.
The teacher poses a question or problem to the class and all members of the group have a specific amount of time to come to consensus on an answer.
4. Discussing
   Students work cooperatively in a form of group work to discuss the question issued by the teacher. The teacher calls a number from one to four. Then, the student which is called based on his/ her number should answer the question given by the teacher.

As stated by Kagan (2002, p.7), there are some advantages of using NHT in teaching speaking. the NHT can give students interdependence which means that it gives students a chance to learn in group in order to ensure that they have the positive input. Secondly, NHT also offers students an individual accountability. Each members of the group has a responsibility of the success of his/ her partners. Furthermore, equal participation will also be gained.
NHT enables students to have the same opportunity to speak. The other positive side is simultaneous interaction. Students will be actively involved in the activity taking place in the classroom.

Besides its advantages, Kagan (2002, p.8), also points out that this technique also has its drawbacks or disadvantages. Having group discussion like NHT will automatically require more time than other techniques.

This technique seems unsuitable for students with low socializing skill. Moreover, as the nature of group discussion, the technique seems suitable to improve collaborative skill yet it automatically limits individual contributions. Finally, sometimes it is a bit hard for teacher to keep the discussion well-managed and sometimes some students pay less attention to the learning process.

2.4 Descriptive Text

Descriptive text is a text which is written to describe particular thing, place, or person. This text usually consists of two main parts called identification and description. Identification tells readers or listeners about the general information of the topics.

3. METHOD

The participants of this research were 20 students of the second year students of SMPN 16 Banda Aceh in academic year of 2015/2016. The writer conducted this study at SMPN 16 Banda Aceh which is situated in Makam Pahlawan Street, Peuniti, Banda Aceh. The population of this study was 86 students. Then, for the purpose of research, the writer only used one class as the experimental class. The writer chose VIII/2 with 20 Students, and the sample of study using purposive sampling technique because students in that class have an equal English competence compared to another class.

Sugiyono (2008, p. 11) elaborates the procedure of one group pretest-posttest thus the writer divided this experiment into three stages. Firstly, the writer conducted pretest (O₁) to find out students’ initial ability in speaking skill. In this stage, students were asked to speak about 2 and half minutes on a given topic in a form of oral performance test. Then, in the second stage, treatments (X) were given by applying NHT technique. In this study, the researcher used oral test for the pretest and the posttest. Each student was given a set of animal pictures and they were asked to describe Person, places or things verbally. The test was used both for the pretest and posttest.

In the pretest, the students were given a topic about famous person. Each student was asked to speak about two and half minutes. After being taught by using Numbered Heads Together, the students were tested in the posttest. In the posttest, the students needed to complete the task as in the pretest. The students speaking performance were assessed by using the speaking rubric proposed by Brown (2001, p. 172).
<table>
<thead>
<tr>
<th>Category</th>
<th>Grammar</th>
<th>Vocabulary</th>
<th>Comprehension</th>
<th>Fluency</th>
<th>Pronunciation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Errors in grammar are frequent.</td>
<td>Speaking vocabulary inadequate to express anything but the most elementary needs.</td>
<td>Within the scope of his very limited language experience, can understand simple questions and statements if delivered with slowed speech, repetition or paraphrase.</td>
<td>Unidentified because of speaking in L1 frequently.</td>
<td>Errors in pronunciation are frequent.</td>
</tr>
<tr>
<td>2</td>
<td>Can usually handle elementary constructions quite accurately but does not have thorough or confident control of the grammar.</td>
<td>Has speaking vocabulary sufficient to express himself simply.</td>
<td>Can get the gist of most conversation of non-technical subjects. (i.e., topics that require no specialized knowledge).</td>
<td>Can handle with confidence but not with facility most social situations, including introductions and casual conversations about current events.</td>
<td>Accent is intelligible though often quite faulty.</td>
</tr>
<tr>
<td>3</td>
<td>Control of grammar is good. Able to speak the language with sufficient structural accuracy to participate effectively.</td>
<td>Able to speak the language with sufficient vocabulary to participate effectively.</td>
<td>Comprehension is quite complete at a normal rate of speech.</td>
<td>Errors never interfere with understanding. Accent may be obviously foreign.</td>
<td>Can participate effectively but need some repetitions.</td>
</tr>
<tr>
<td>4</td>
<td>Able to use the language accurately on all levels normally pertinent to professional needs.</td>
<td>Can understand any conversation within the range of his experience.</td>
<td>Able to use the language fluently on all levels normally pertinent to professional needs.</td>
<td>Errors in pronunciation are quite rare.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Produces complete and accurate sentences.</td>
<td>Speech on all levels is fully accepted.</td>
<td>Equivalent to that of an educated native speaker.</td>
<td>Has complete fluency in the language.</td>
<td>Speaks in FL intelligibly and has few traces of foreign accent.</td>
</tr>
</tbody>
</table>

Based on the above scoring guidance, the writer formulated the data into numbers. These five components are divided into 5 categories with clear explanation which represents students’ speaking proficiency. The maximum score of each area is 20 which is gained by multiplying obtained score by 4. So, if
a student can get 5, as the perfect score, in all components, he/she will get 100 points.

Then, to prove the hypothesis, writer used some statistical procedures by Arikunto (2006, p. 81). Arithmetic Mean, commonly known as mean, is the average result that is received from the students’ achievement. Mean score is an average score of the student. This score is obtained based on the total score of the students divide with the total number of students. In this case, mean score has to be found in order to compare both pre-test and posttest results. T-score is a score to indicate significant or the difference the score of the two tests. To determine whether the hypothesis can be accepted or must be rejected, the writer used the following formula to examine the hypothesis, the writer compared the result of statistical analysis above to limit score in the measurement table of t-scores. For the significance, the writer used significant value of 5% (α=0.05). According to Johnson and Christensen (2008, pp. 5-7), the 5% significant value is used when the data obtained from the study were not high in accuracy and that is why the social and educational studies commonly used such measurement. There are two rules to compare the t-score and \( t_t \).

4. FINDINGS AND DISCUSSION

Relating to the design of study, the writer used quantitative approach with experimental design. Morrel and Carrol (2010, p. 13) defined experimental design as a way used by researcher to test a particular variable. The writer chose one group pretest-posttest. According Arikunto (2006, p. 86) one group pretest-posttest design is an experimental research which is carried out without a control group. Noor (2011, p. 115) also stated that One Group Pretest – Posttest Design is about looking into the effectiveness of treatments by comparing the samples’ achievement from pretest and posttest given.

In this result, the writer presented the descriptions of data and the analysis of data in order to find out the improvement of students’ speaking ability in describing people, animal or things before and after experiment was given. The comparison scores between pretest and posttest were needed to measure the students’ speaking achievement.

These two tests were measured based on speaking scale proposed by Brown (2001, p. 172). There are five assessed aspect in this research namely grammar, vocabulary, comprehension, fluency, and pronunciation. There are two rules to compare the t-score and \( t_t \), according to Sudijono (2006, p. 260): If t-score is equal or higher than \( t_t \), the null hypothesis is rejected and the alternatives hypothesis is accepted. If t-score is lower than \( t_t \), the null hypothesis is accepted, and the alternatives hypothesis is rejected.

The pretest result is used to find out students’ initial ability in speaking before the treatment. The students’ average score in the pretest is 75.4. Meanwhile, the average score of the post test is 80.7. Furthermore, the differences of the average score of each criterion in the pretest are grammar with 13.8, vocabulary 14.0, comprehension 15.7, fluency 15.7, and pronunciation with 16.2. Meanwhile, in the posttest can be seems that the technique are succeeded to lead students to develop their speaking ability in describing People, Places or Things with slightly improvement in all assessed area with grammar 14.0, vocabulary 16, comprehension 16.7, fluency 17.6, and pronunciation with 17.1.
From the data presented above, it can be seen clearly the most significant improvement is vocabulary. Meanwhile, grammar only increases marginally with 1.00% of improvement. In overall, 5.30% is the number that indicates the influence of the implementation of Numbered Heads Together to enhance second grade students of SMPN 16 Banda Aceh. In discussion, the writer gives interpretations based on the presentations of data and analyses the data based on the theories. In addition, this section also presents the hypothesis testing.

The data gained from statistical analysis shows that NHT can improve students’ speaking ability. The area where students get the highest improvement is vocabulary. This finding perhaps is led by the reason that the subject which was taught during the experiment is descriptive text. Therefore, students are expected to obtain sufficient vocabulary in order to describe the given topic especially adjectives. It is also supported by the stages of lesson plan which requires teacher to do reinforcement after the learning process and one of reinforcement form is done by reviewing all vocabularies found during the learning process. 10% of improvement indicates that the use of NHT in teaching descriptive text is beneficial for students to boost up their vocabulary mastery. It is perhaps true that this is a slight improvement but the researcher does believe that if students were given the same treatment for a longer period they would be much better in this area.

The statistical analysis also shows that students who were taught using NHT in learning descriptive text had their fluency improved by 9.5% in average. A possible explanation for the finding is that wide chance to speak which was given to the sample students had resulted in encouraging their confidence to speak more fluently. Numbered Head Together can be categorized as one of students centered-learning which enables students to learn more independently and it enables students to reduce fears to speak in front of public and to have a good confidence to speak (Nasir, et al.,2016).

A positive outcome can also be seen in pronunciation aspects. The technique used had succeeded to give 4.50% of improvement. During the teaching and learning process, this technique allows students to find unfamiliar words about the given topic then they are asked to register those words and find out how to pronounce it. In the end of session of learning process, students were always asked to reregister each of those words and its pronunciation. However, teaching pronunciation seems rather difficult if students only practice during the formal class. by providing outside class environment for drilling, they
probably will get a better result. So, the slight improvement in pronunciation aspect indicates that NHT is still can be seen as a satisfactory tool to enhance students’ pronunciation ability.

5. CONCLUSION AND SUGGESTION

This study deals with use of Numbered Heads Together to improve students’ speaking ability. This study is meant to investigate whether there is any improvement in students’ speaking ability in terms of grammar, vocabulary, fluency, and pronunciation after being taught using NHT.

The results indicate that the students’ score were improved. The students’ average in the pretest was 75.4 and in the posttest was 80.7. It suggest that the implementatio of NHT improved students’ speaking ability in terms of describing animals. It can be concluded that NHT can give possitive contribution to help students to develop their speaking ability. However, the improvement can only significantly observed in vocabulary, fluency, pronunciation, as well as comprehension. The NHT cannot work well in improving students’ grammar.

REFERENCES


