

## **INQUIRY LEARNING: A METHOD TO TEACH SPEAKING FOR THE TENTH GRADE STUDENTS**

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### **ABSTRACT**

The objective of this research was to find out the effect of using inquiry learning method on students' ability in speaking. This research was conducted at SMK Abdi Negara Binjai. The population of this research was the tenth grade students in academic year 2021-2022. There were 2 classes consisting of 55 students. The sample with total number of 20 students were taken by using random sampling with lottery technique. The sample was divided into 2 groups. Experimental group consisted of 10 students was taught using inquiry learning method and control group consisted of 10 students was taught using conventional method. The instrument for collecting the data was a speaking test. Each group was given a pre-test, treatment, and post-test. The result of this research showed that the mean of post-test in experimental group (51.6) was higher than control group (44.2) and the value of U-observed (25) was smaller than the value of U-table (30). The testing of hypothesis showed that  $H_0$  was rejected and  $H_a$  was accepted. It meant that there was a significant effect on students' speaking ability taught by using inquiry learning method.

**Keywords:** Inquiry Learning Method, Teaching Speaking, Speaking Ability

### **ABSTRAK**

*Tujuan penelitian ini adalah untuk mengetahui efek penggunaan inquiry learning method terhadap kemampuan berbicara siswa. Penelitian ini dilaksanakan di SMK Abdi Negara Binjai. Populasi penelitian ini adalah siswa kelas sepuluh tahun akademik 2021-2022. Ada 2 kelas yang terdiri dari 55 siswa. Sampel penelitian berjumlah 20 siswa diambil menggunakan sampel acak dengan teknik lotere. Sampel dibagi menjadi 2 kelompok. Kelompok eksperimen terdiri dari 10 siswa diajar menggunakan inquiry learning method dan kelompok kontrol terdiri dari 10 siswa diajar menggunakan metode konvensional. Instrumen pengumpulan data adalah tes berbicara. Setiap kelompok diberikan pre-tes, perlakuan, dan pos-tes. Hasil penelitian ini menunjukkan bahwa nilai rata-rata pos-tes di kelompok eksperimen (51.6) lebih tinggi dari kelompok kontrol (44.2) dan nilai U-observed (25) lebih kecil dari nilai U-table (30). Uji hipotesis menunjukkan bahwa  $H_0$  ditolak dan  $H_a$  diterima. Ini berarti bahwa ada efek signifikan terhadap kemampuan berbicara siswa diajar dengan inquiry learning method.*

**Kata kunci :** Inquiry Learning Method, Pengajaran Berbicara, Kemampuan Berbicara

### **A. Introduction**

The objective of this research was to find the answer of the research question whether teaching using inquiry learning

method has significant effect on students speaking ability of the tenth grade students at SMK Abdi Negara Binjai academic year 2021-2022. Based on observation conducted prior to the main research, there were

problems identified concerning with the speaking ability in this school. It was seen that even the students obtained three years teaching of English, they still could not speak it well. Moreover, the students did not understand the structure (grammar) to create good speaking sentences. Rizqina, Zulkarnain, and Rahmawati (2022) also revealed that there are problems occur during the teaching learning of speaking such as students cannot speak English because of not knowing how to say correct words (lack of vocabulary), do not understand grammatical sentence, make mistake in pronunciation, lack of self-confidence. Moreover, Cahyono (2010) mentioned that students are usually worried in making mistakes fearful of criticism or losing face, or simply shy of the attention that their speech attracts. In addition, it was known that the teaching method used was less appropriate to support the activities to practice speaking English. This finally lead the students have low English speaking ability. Therefore, based on the identified problems, it was decided to conduct research regarding the teaching method for speaking ability.

The key point here is to use an appropriate learning method in order to give effect to the students' speaking ability. Rizqina, Zulkarnain, and Rahmawati (2022) mentioned as well that teacher should apply appropriate media, method, or strategy to fulfill the need and interest of the students. Many literature and research have proved some learning method to teach speaking effectively. This research was decided to test the inquiry learning method to teach speaking for students. There were certain reasons as well when decided to apply this method for the tenth grade students. First, speaking is one of the productive skills in English which is important to be mastered by students. Second, some of the students in senior high level still difficult to practice speaking. Third, appropriate method needs to be taken for the successful in teaching and practicing speaking. Forth, inquiry learning method can be applied to make students easy to practice speaking in order to improve their ability in speaking skill. This assumption is in line with Andriani (2016)

that there should be a learning system chosen for teaching and learning strategies and it can be the "inquiry" learning model that is expected to be able to improve students' learning outcome.

According to Trna, Trnova & Sibor (2012) inquiry learning model requires students to solve problems through investigation activities that increase the skills and knowledge independently. While Andriani (2016) concluded that inquiry model is a method used in the learning process aiming students to have the ability to ask questions, examine, or investigate something which involves all students' ability to search and investigate in a systematic, critical, logical, analytical, so that they can formulate their own. Moreover, Guido (2017) wrote that inquiry-based learning is learning and teaching method that prioritizes student questions, ideas and analyses. He also added that it needs to understand this method from two perspectives: the students and the teacher. From students' view, inquiry-based learning focuses on investigating an open question or problem where the students are required to use evidence-based reasoning and creative problem-solving to draw a conclusion they must defend or present. While from the teacher's view, inquiry-based teaching focuses on moving students beyond general curiosity into the realms of critical thinking and understanding. The teacher is required to encourage students to ask questions and support them through the investigation process, understanding when to begin and how to structure an inquiry activity. Shanmugavelu, Parasuraman, Ariffin, Kannan, and Vadivelu (2020) also explained that inquiry method emphasizes four main aspects such as process oriented-not content, concept-not facts, student-centered, and non-passive learning. Other than that, during the teaching and learning process inquiry method also emphasizes reflective investigations and interesting findings.

Thus, the inquiry learning is a learning process begins with activities to formulate problems, develop hypotheses, gather evidence, test hypotheses, draw tentative conclusions, and test tentative conclusions come to a conclusion that is

believed to be true. The most important thing in teaching through inquiry is the ability to organize a learning environment for facilitate students' activities and provide sufficient guidance to ensure that every step of the activities can find concepts and principles.

The implementation of inquiry learning method focuses on the active learners in the learning process as stated as well by Shanmugavelu et.al. (2020) that the inquiry method emphasizes that students no longer accept only what the teacher provides, but instead guide students to learn the right information. During inquiry learning process, learners not only learn the concepts and principles, but also undergo a process of learning about self-direction, responsibility, and social communication in an integrated manner. The students can develop and think critically in response the problem; the students can also facilitate the performance ability to speak from the formulation the problem, observation to completion of a problem. This method is to develop creativity in understanding concepts and solving problem. The teachers only give orders to the development of facilities and materials appropriate school curriculum or the learning plan. The inquiry method can still the basics of scientific thinking on students; thus, speaking students in the learning process focuses more self-study, develop creativity in understanding concepts and solving problems. Although in practice the application of inquiry learning is methods vary considerably, it also depends on school's circumstances. In other hands, inquiry method not only learns the concepts and principles, but it also learns about self-direction, responsibility, and social communication in an integrated manner.

Sanjaya (2014) wrote that there are several main characteristics in inquiry learning.

1. Inquiry emphasizes maximum students' activities to seek and find. Students not only act as recipients of the lesson through the teacher's verbal explanation in the learning process, but students also play a role in find the essence of the subject matter itself.

2. All activities carried out by students are directed to find the answer themselves and something that questionable, so it is hoped that it can foster attitudes confident (self-learning). Inquiry learning method places the teacher not as a learning resource but as a facilitator and motivator of students' learning.
3. The purpose of using inquiry in learning is to develop the ability to think systematically, logically and critically or develop intellectual abilities as part of the mental process. Students are not only required to master the subject matter in the inquiry method; however, how students can use their abilities optimally owned.

Bauld (2022) described the essential components of inquiry-based learning.

1. Orientation/Observation  
The teacher introduces a new topic or concept. Students explore the topic through research, direct instruction, and hands-on activities.
2. Question/Conceptualize  
Students develop questions related to the topic, make predictions, and hypothesize.
3. Investigation  
This is the lengthiest part of inquiry learning. Students take the initiative, with appropriate teacher support, to discover answers, to find evidence to support or disprove hypotheses, and to conduct research.
4. Conclusion  
Having collected information and data, students develop conclusions and answers to their questions. They determine if their ideas or hypotheses prove correct or have flaws. This may lead to more questions.
5. Discussion/Sharing  
All students can learn from each other at this point by presenting results. The teacher should guide discussions, encouraging debate, more questions, and reflection.

Rahma (2019) wrote that in Curriculum 2013, the inquiry based learning can be applied under 5 processes, namely observing, questioning, collecting information or experimenting, associating or information processing, and communicating.

Observation happens when students are given material and they sense through looking, hearing, and reading the material. This can create a situation where students make conversation each other and with the teacher. Questioning happens when students ask the teacher any questions regarding the material during learning process. It aims to enhance students' creativity, curiosity, and ability to conduct critical thinking of the learning material. Gathering information happens when students are given the opportunity to explore and collect the data then make experiment to investigate their hypothesis. Teacher involves students to be an active participant. Associating happens when students evaluate the experiment and to decide next step. Students can work in groups and teacher can give feedback to them to verify; thus, communication occurs when students explain their works. Communicating activity has a goal to improve students' ability in speaking skills based on individual or group result.

Speaking itself is an important tool to express the idea that composed an improved on the basis of the spoken needs (Rizqina, Zulkarnain, and Rahmawati, 2022). While according to Lestari, Zulkarnain, and Prihatini (2022), speaking skill is the core of the language learning process at school because by learning to speak, students can communicate inside and outside the classroom according to their mental development. Added more by Telaumbanua (2019) that speaking skill serves the students to be able to communicate their opinion, feeling and expression, with no limitation of different native language, culture or country.

Teaching speaking means to guide learners in practicing and pronouncing the English words correctly and structurally. Teacher needs to guide and facilitate the learning, enable learners to learn and set condition to act the speaking. There are five aspects of speaking skill: 1) pronunciation, 2) vocabulary, 3) fluency, 4) grammar, and 5) comprehension (Brown, 2001 in Wahono, 2021). Thus, English speaking skill is not as simple as we thought that it can be learned in a short time. Speaking demands more than just knowledge of grammar and pronunciation of the words, it also requires

practice continuously with many opportunities. As stated by Dipriyansyah (2017) that inquiry based learning is useful for the students especially in build a concept about something because the students prefer in doing activity or practice then build a concept. Therefore, it is assumed that inquiry learning method can be experimented to prove its effectiveness to teach speaking.

## **B. Research Method**

This research was conducted by applying experimental design to find out the significant effect of inquiry learning method on students' speaking ability of the tenth grade at SMK Abdi Negara Binjai, Medan. There were two groups involved in this research, namely experimental and control groups. The experimental group was taught by applying inquiry learning method and control group was taught using conventional method. Both of the groups were given pre-test and post-test. The procedures of the research were shown below.

**Table 1 Research Design**

<b>Group</b>	<b>Pre-test</b>	<b>Treat-ment</b>	<b>Post-test</b>
Experiment	X1	√	X2
Control	Y1	-	Y2

The population was 55 students consisting two parallel classes, namely X-1 TKDJ and X-2 TKDJ. The class X-1 TKDJ consisted of 28 students and the class X-2 TKDJ consisted of 27 students. From the whole population, it was taken 20 students randomly using lottery technique as the sample. Since the test in the form of speaking performance test, the small sample size was intended to prevent bias students' scores. 10 students out of 28 was taken from class X-1 TKDJ and 10 students out of 27 from class X-2 TKDJ. Cluster random sampling technique was applied in determining the group. It was obtained that X-1 TKDJ as the experimental group and X-

2 TKDJ as the control group. The population and sample is illustrated as below table.

**Table 2 Population and Sample**

No.	Class	Population	Sample
1	X-1	28	10
2	X-2	27	10
	Total	55	20

In collecting the data, speaking test was given to both groups. The test was given twice as pre-test and post-test. The pre-test was implemented in order to know the students' preliminary ability in speaking before receiving inquiry learning method and the post-test was implemented to know the students' speaking ability after receiving inquiry learning method in the learning process for experimental class. The pre-test and post-test for experimental and control groups were the same. In the pre-test and post-test, the students were asked to do an oral test in 5 minutes to speak. The oral test was measured to determine students' speaking scores based on the rubric of speaking skill.

The data obtained from the test were then calculated using Mann Whitney U-test formula. The data analysis used U-test (Rank sums). The test was non parametric test. It took two kinds of sample from the same population. The following was the formula used.

$$U1 = N_1N_2 + \frac{N_2(N_2 + 1)}{2} - \sum R_1$$

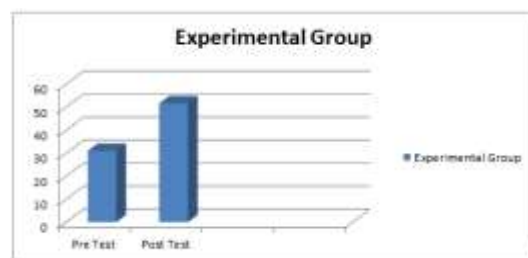
$$U2 = N_1N_2 + \frac{N_1(N_1 + 1)}{2} - \sum R_2$$

**C. Result and Discussion**

Based on the data analysis, it was found that the mean score of both groups were different. The mean of post-test of experimental group was higher than of control group (51.6 > 44.2).

The students' mean score of pre-test and post-test acquired by experimental group were presented on below figure.

**Figure 1 Mean Experimental Group**



Based on the students' score achieved in experimental group, the mean score of pre-test was 31. It meant the students' achievement in speaking skill before accepting inquiry learning method was categorized as low. The mean score of post-test was 51.6 which meant there was an increasing number. The significant improvement of the students' speaking ability in experimental group can be seen in below figure.

The students' mean score of pre-test and post-test acquired by control group were presented on below figure.

**Figure 2 Mean Control Group**



The above diagram showed that the mean score of pre-test was 25.6 while the mean score of post-test was 44.2 and this meant the students' achievement in speaking ability was categorized as sufficient.

The data of mean score obtained from both groups were analyzed in order to find out whether the inquiry learning method significantly affected students' achievement in speaking ability or not. The data then were calculated by using Mann Whitney U-test as follow.

$$U1 = N_1N_2 + \frac{N_2(N_2 + 1)}{2} - \sum R_1$$

$$U1 = 10(10) + \frac{10(10 + 1)}{2} - 130$$

$$U1 = 100 + \frac{110}{2} - 130$$

$$U1 = 100 + 55 - 130$$

$$U1 = 155 - 130$$

$$U1 = 25$$

$$U2 = N_1N_2 + \frac{N_1(N_1 + 1)}{2} - \sum R_1$$

$$U2 = 10(10) + \frac{10(10 + 1)}{2} - 66$$

$$U2 = 100 + \frac{110}{2} - 66$$

$$U2 = 100 + 55 - 66$$

$$U2 = 155 - 66$$

$$U2 = 89$$

After obtaining the value of U-Test, testing the hypotheses was done in order to know whether the hypotheses determined previously were accepted or rejected. Based on Mann Whitney table with  $N_1=10$  and  $N_2=10$  at t-critical 0.05 the figure of 30 was obtained. If the value of U-observed and U-table was compared, it revealed that the value of U-observed was smaller than the value of U-table ( $25 < 30$ ). It meant that  $H_a$  was accepted and  $H_o$  was rejected. Thus, it could be concluded that inquiry learning method significantly affected students' speaking ability of the tenth grade at SMK Abdi Negara Binjai, Medan academic year 2021- 2022.

Based on the testing hypotheses above, it could be seen that by applying inquiry learning method, students' ability in speaking can increase seeing from the mean score and the U-test value. This research showed that students were brave to speak English. After practicing inquiry learning

method, they were able to pronounce the English words correctly. Before applying inquiry learning method, some students were afraid of speaking English and they did not understand how to speak English. After teaching learning process using inquiry learning method, they were interested in speaking.

Inquiry learning method was proved through this research as an effective way to teach speaking. Through inquiry learning method, students felt more confidence and became brave to speak English. Furthermore, the students' speaking achievement improved by applying inquiry learning method.

#### D. Conclusion and Suggestion

To conclude, there is significant effect of applying inquiry learning method to teach speaking. It was proved the mean score of both experimental group and control group as well as the value of U-test and hypothesis testing. The students who were taught by inquiry learning method were categorized as good. Thus, it can be concluded that this method gives effect to the students' speaking ability.

In line with the conclusion, some suggestions can be given to English teacher. First, teachers may apply inquiry learning method to expand their teaching of speaking. Second, teachers must prepare the material and know the entire material well. Third, teachers should give clear explanation and instruction in directing their students particularly in teaching speaking.

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