



The Use of Discovery Learning Model and Its Implications to Students' Speaking Ability

Tri Nur Indah Octaviani^{1*}, Taufiqulloh², Anin Eka Sulistyawati³

¹²³English Education Department, Universitas Pancasakti Tegal

*)Corresponding author: Trinurindahoctaviani16@gmail.com

ABSTRACT

The study examines the effects of the discovery learning paradigm on students' speaking abilities in seventh grade SMP N 1 Tegal. The objectives of this research were (1) To find out the use of Discovery Learning Model on students' speaking ability in grade seventh SMP N 1 Tegal, (2) To find out the implication of Discovery Learning Model on students' speaking ability in grade seventh SMP N 1 Tegal. This investigation utilized a quantitative methodology. The design of this study was True Experimental with Pretest-Posttest Control Groups. Cluster random sampling was used to choose the samples for the experimental and control groups. The sample consisted of 63 pupils from two classes drawn from the population of seventh-grade students at SMP N 1 Tegal during the academic year 2021/22. This research utilized a speech test and a questionnaire as its instruments. SPSS was used to analyze the data using the t-test technique. The test results indicated that the experimental group scored higher than the control group. The difference between the Post-Test means of the experimental group and the control group is statistically significant ($22.56 > 18.32$). The results of the questionnaire analysis suggested that the deployment of the Discovery Learning Model for speaking was a success. It may be summarized that the discovery learning paradigm can increase students' descriptive text speaking skills.

Keywords: Discovery Learning Model, Speaking Ability, Descriptive Text

INTRODUCTION

Speaking is one of the four language skills that are important for learning English. Speaking is an important element in learning English as a foreign language, according to Hardiyanto (2018). speaking has an important role in everyday life by directly conveying one's thoughts. It affects a person's performance in many aspects particularly in education. Therefore, someone who has the ability to speak well is someone who can express his thoughts well when interacting with other people.

According to the curriculum that was implemented in 2013, pupils in junior high school should place a significant emphasis on their speaking abilities. Because it is necessary for students to be able to interact effectively in English with other people in order for them to learn how to speak. Students are considered to be able to speak English if

they have these following skills: strong pronunciation, fluency, and mastery of vocabulary; ability to organize words into well-structured sentences so that they can be understood by listeners; and mastery of English grammar.

However, a significant number of kids in junior high school have trouble communicating verbally. Difficulties with pronunciation and memorization of words, as well as a lack of comprehension of grammar and vocabulary, are other common challenges for children who are learning English. There are several reasons why students have trouble speaking English; these reasons include the students themselves, the teaching methods, the curriculum, and the environment. For instance, many students may not have the vocabulary that is required to convey the intended meaning, and as a consequence, they are unable to maintain the engagement. When it comes to studying a foreign language, many students experience anxiety when it comes to speaking in front of the class, particularly when doing so for the first time. This is because they do not have sufficient faith in their own capabilities.

The latest curriculum, curriculum 2013 is a policy implemented by the government which aims to improve creative thinking skills, students learning. There are three types of learning in the 2013 curriculum, namely: problem-based learning, project-based learning, and discovery learning. The discovery learning model is the most effective model for students to apply among the three models recommended in the 2013 curriculum because it encourages students to think at higher level (Higher Order Thinking Skill/HOTS) (Wahyudi, Rukmini, and Bharati 2019 in (Trisna Dwi Jayanti, 2021).

This model is one of the models found by Jerome Brunner (Rasyid et al., 2021) established that the discovery learning model, which asserts that students must take an active role in their learning in the classroom. As a result, discovery can be defined as a teaching technique that encourages students to find ideas and discover their own learning concepts (Hidayati 2017; Khomsiatun & Heri, 2015 ; Khumaedi, 2007 ; Rahman & Maarif, 2014 ; Setiawan, 2015). Discovery learning on the other hand, is a learning approach that does not transfer all material (Husna, 2015).

Furthermore, this model examines students' ability to solve difficulties through curiosity in discovering important aspects of learning. In this model, the teacher's role is limited to only helping student find information they do not have. According to Brunner in (Simamora & Saragih, 2019), the purpose of discovery learning is for teachers to provide opportunities for students to become problem solvers, scientists or mathematicians.

Through this activity, students will apply and find things that are useful for them. Based on definition above, we can conclude that discovery learning is a learning model that directs students to interact, find answers or questions through collaboration, to encourage students to appreciate and participate in speaking English.

Based on the description above, the objectives of this research are (1) To find out the use of Discovery Learning Model on students' speaking ability in grade seventh SMP N 1 Tegal, (2) To find out the implication of Discovery Learning Model on students' speaking ability in grade seventh SMP N 1 Tegal.

LITERATURE REVIEW

Discovery Learning

Related to definition of Discovery Learning is one type of student-centered learning model (Sahara et al., 2017). Meanwhile according to Van Merrinboer & Kirschner (2017) in (Sarimanah et al., 2019), Discovery Learning includes stimulation where students are faced with something that triggers a lot of desire to learn more. In other words, this learning model requires students to understand information and concepts independently through minimal guidance such as stimulation, feedback, and problem examples provided by the teacher (Alfieri, Brooks, Aldrich & Tenenbaum as quoted in Wahyudi, Rukmini & Bharati, 2019). Based on the opinion above, the Discovery Learning Model is a learning model that can challenge students to think independently, find their own information, analyze problems, and solve problems without the help of the teacher so that, the results obtained will be more durable in memory or not easily forgotten by students. In addition, the role that the teacher plays in this model, which includes directing, motivating, and providing reinforcement based on the responses of the students. A teacher is able to determine whether or not students are being overly precise in their answer acquisition, and if students are able to actually provide answers, the answers are more reliable in terms of comprehending the findings.

Furthermore, according to (Siagian, 2018), Discovery Learning Model integrates the principles: (1) Problem Solving. Teacher should guide and motivate students to seek for solutions by combining existing and new acquired information as well simplifying knowledge. (2) Student Management. The teacher must allow students to learn with groups, because it makes students feel flexibility in the static series of learning. (3) Analysis and Interpretation of Information. This is a process oriented and not content-

oriented; it means students learn to analyze and interpret the information obtained. (4) Failure and Feedback. The goal of discovery learning is not to arrive at the best possible outcome; rather, the emphasis is placed on the new information that is obtained throughout the learning process. And it is the job of the instructors to provide feedback, since it is necessary for each of us to assist others in the learning process.

Speaking

Speaking is the most important aspect in learning a second language, and success is measured by the ability to have conversations in that language based on Nunan (1991:39) cited in (Wilany, 2019). In addition, according to Tarigan in Budiarto Iwan (2017) (2005a:15), speaking is the ability to pronounce articulation sounds or words that express, and convey thoughts, ideas, and feelings. In speaking, students learn how to organize thoughts, structure sentences and communicate language in spoken form with correct and clear pronunciation and understanding. From those definitions, it can be said that speaking is an ability that requires students to talk and communicate with other people or make more active interactions with respondents in conveying or expressing meaning.

Furthermore, the main purpose of speaking is to convey information. Speaking is a crucial tool for communicating or delivering mental information about what the speaker will say to their culture. This is way communication are important and critical. There are four essential aims of speaking (Tarigan, 2008:30-36); to inform, to entertain, to persuade and to discuss. In other words, it is possible to draw the conclusion that a person can inform their feeling, find out others' feeling, and make certain decisions through speaking by asking him in their communication about how they feel.

According to Brown and Yule's framework (2001:140) in (Siregar, 2017) there are three functions of speaking. First, speaking refers to an interaction in the form of a conversation or can be called social. When people meet, they exchange greetings, talk, share their experiences, and so on. The focus is more on the speaker's actions and how they want to present themselves to others. Second, talks as performance. It refers to public speaking, such as presentations, public announcement, and speeches that convey information to the audience. Next is talks as transaction. This refers to situations in which the focus is on what is said or done.

Furthermore, there are four components of speaking skills, such as: pronunciation, grammar, fluency, and vocabulary (Syakur in Mora, 2010, P. 3) in (Chye & Han, 2018; Tika, 2021). Pronunciation is the way students produce clearer language when they speak. It deals with the phonological process, which consists of the parts and concepts that control

how sounds and patterns are produced in a language. Grammar is an essential component of language acquisition. Grammar and speech are inextricably linked. Learners must be taught grammar structure system in addition to sound system. Learners must be taught about word order, inflection, and derivation as well as other important aspects of the English language. It will assist students in speaking English properly. Fluency determines a student's ability to talk clearly and fluently. Fluency refers to how quickly students speak English and how much they say without pausing. It implies that fluency is the ability to speak English fluently or without doubt. Another one of the successes in using a second language is mastering vocabulary. Students cannot communicate effectively or express their ideas to other students if they do not master the vocabulary. If students master more vocabulary, it will be easier for students to express their ideas through speaking.

In addition, teaching speaking for a second language or foreign language for junior high school is very challenging for a teacher. Therefore, the aim of teaching and learning English is to develop communicative skills which include listening, speaking, reading and writing skills proportionally. Therefore, the teacher should give speaking assignments to students and give them the opportunity to use the target language to communicate with others. (Al-sibai, 2014) in (Siswita, F. Hafizh, 2014) states that the use of English as a second language (ESL) or foreign language (EFL) in spoken communication is, without a doubt, one of the most common but very complex activities to consider when teaching English. Language mainly because we live in a time where the ability to speak English fluently has become a must, especially for those who want to advance in certain fields of human endeavor. The focus of teaching speaking is to improve students' oral production.

Therefore, language teaching activities in the classroom should aim to maximize individual language use. Speaking is the most important skill among the four skills (listening, speaking, reading, and writing) because people who know a language are called speakers of that language. Speakers of that language. Scrivener (2005) states this shows that using a language is more important than just knowing it because there is no point in knowing much about a language if you can't use it. Then, according to Scott Thornbury (in Harmer, 2007: 123), the success of teaching speaking depends on the culture of the speaking class and it becomes a speaking class. Both of these speaking cultures must be in English for the class to be a speaking class. With the above activation, students' speaking skills will improve and they are more confident to speak English than before. It can be said that to support children's development in learning, teachers must develop communicative learning

that provides opportunities for students to talk and share with others and also teachers must create a good atmosphere in the classroom so that children will feel happy in the learning process and they will never think that the subject is complicated for them.

There are a few processes involved in applying the Discovery Learning approach, which are as follows: stimulation, problem formulation, data collecting, data processing, verification, and generalization. Using the Discovery Learning Model to teach speaking involves all of these steps. Observing, inquiring, testing, associating, and sharing are some of the stages that are included in the scientific method in the Curriculum 2013. They have been synchronized with the application of Discovery Learning, and as a result of this collaboration, some strategies have been developed. These strategies include observing through stimulation, questioning through problem statement, experimenting through collecting data, associating through processing data, communicating through verification, and drawing generalizations or conclusions, all of which were suitable with his lesson plan. The teacher began to apply Discovery Learning method in teaching speaking relating to Syah (2004:244) in Irmayanti (2015).

METHOD

The researcher utilized a true experimental research design in this work, along with a control group design that included both a pre-test and a post-test. A quantitative methodology was utilized for this study. The participants in this study were students who were enrolled in the seventh grade at SMP N 1 Tegal during the academic year 2021/2022. In this experimental research, the researcher used a technique called cluster random sampling. Both the experimental class, which was taught using a discovery learning model, and the control class, which was taught using a lecturing learning model, went through a series of different treatments that were carried out by the researchers. After that, each class was given a pre-test as well as a post-test. A speaking test and a questionnaire are the two components that make up the research instrument that is utilized by researchers in the process of data collection.

RESULTS AND DISCUSSION

The data analysis of the students' performance on the pre-test, mid-test, and post-test revealed that their speaking ability had improved in a manner that was reasonably consistent throughout the process of applying Discovery Learning Models. The overall performance of the students on the test, both before and after they were exposed to the

Discovery Learning Models, is the subject of the test's final result. The results of the pre-test revealed that the pupils had difficulties with all aspects of their speaking abilities. In a nutshell, they had very poor control over their pronunciation, and they were unable to create fluent sentences. Inconsistency in the use of terminology was another source of the difficulty. It indicates that the use of different vocabularies was not adequate to convey the meaning of the statement. It had an effect on the result of the understanding component, but the students weren't able to display a performance that met the expectations of the instructor.

Students who were taught and treated by applying the Discovery Learning Model for eight meetings showed better results than students who were taught by the Lecture Learning Model (Conventional Model), which is a way of teaching in which the posttest value of the experimental group is greater than the control group by obtaining an average score 1 point higher. These findings are based on research that was conducted using Statistical Product and Service Solution (SPSS) version 26 IBM for windows. After therapy, the data were acquired.

The researcher provided an explanation of the activities that took place in the classroom in addition to the explanation of the results of the research that was conducted using SPSS. This research was carried out over the course of eight encounters, the first of which involved the researcher presenting stimulation in the form of a number of images and passages of text that were connected to the text description material. During this assignment, students will be requested to look at some instances of text and images that are presented on a power point slide. The pupils are then given a brainstorming activity in the form of many questions concerning the text or image that has been provided to them after they have seen the picture. This is done in order to strengthen kids' creative thinking skills so that they can be better equipped to find solutions to problems and be more motivated to actively participate. This is in accordance with the opinion of Al-Maghrawy, 2012 namely brainstorming activities carried out at the beginning of learning to help find creative ideas related to the problems (phenomena) presented can improve creative thinking skills.

After students observe the text or image, students are asked to analyze the text or image that has been given. then, students are asked to present the results of the answers in front of the class, the researcher gives the opportunity for other students to provide feedback, criticism, suggestions or input regarding the results of the presentations of students who have appeared. in this activity students conduct discussions where this can

improve students' critical thinking, self-confidence, and student motivation to improve speaking skills. this is in accordance with the opinion of Ernawati, 2020; Karyadi, 2017, The application of the discussion method will be able to generate interest and motivation in student learning. Therefore, the use of efficient and effective discussion methods has a close relationship in attracting students' attention and enthusiasm (O'Hare et al., 2020; Sirait, 2018). The discussion method focuses on developing knowledge and understanding as well as actions and even students' direct experiences in forming skills, appreciation, and applying values (Pakaya, 2019; Syafruddin, 2017; Widiarsa, 2020).

In the next meeting, students were given several texts and then students were asked to compare the two texts according to the social function, text structure, and linguistic elements of the descriptive text that had been given. After students find the differences between the two texts, students are asked to present the results of the answers that have been obtained. Then other students provide feedback about the results of other students' answers. This activity is carried out so that students can solve problems with their creative abilities in developing main ideas in comparing two texts. this agrees with Abdul Majid (2015) saying that the problem-solving method is a method that is centered on solving a problem by optimizing the ability to think. Then according to Nana Syaodih Sukamdinata and Erliana Syaodih (2016) said that the problem solving method is one method that can develop high-level thinking in solving problems.

After the activity of analyzing and comparing students better understand and understand what parts are in the descriptive text so that at the third meeting students are asked to be able to explain or find information or concepts about some parts of the text related to descriptive text material such as language features, structure – text structure, definition and purpose. In this activity students are given the opportunity to find out information related to the material from various sources, such as: textbooks, internet or find information from various other sources. In this activity students are required to speak in English. this motivates students to learn English and motivates students to improve their speaking skills and this activity fosters curiosity and confidence in speaking in front of the class, students can develop their own ideas and knowledge. so that students can better understand and easily understand the learning material. By learning to find out for themselves, students will be able to better understand and remember concepts and knowledge learned by themselves, so that student learning outcomes can increase. This is in line with the opinion of Wardani Naniek Sulistya (2016: 22) asserting that discovery

learning is a student-centered learning approach, the teacher provides opportunities and freedom for students to find, explore and construct their own knowledge.

In the fourth and six meeting, students are given tasks related to descriptive text material. This activity is carried out to support learning and measure students' abilities and understanding of the descriptive text material that has been studied. This agrees with Nunan (2004) which states that assignments are part of class work that involves students in understanding, manipulating, producing or interacting in the target language where their attention is focused on knowledge of grammar to express meaning rather than the language itself.

At the following gathering, the students were given the assignment to write and create descriptive texts based on phrases that had been constructed in accordance with the aspects of structure and language. Students will practice beginning to produce the first phrase and organizing their ideas into full paragraphs as part of this activity, which makes use of a technique called an intrinsic breakdown. in order for the kids to have an understanding of the basic structure of the story. This is in agreement with what Buzan has to say about the matter (2010:13) The method of parsing intrinsic elements is a tool for creative thinking that mimics how the brain uses all images and their associations in radial and network patterns. This is how the brain was built because it is how it is always utilized on the inside.

In the last meeting, students were asked to describe the picture. At this stage students are given several pictures, then students are asked to describe one of the pictures. this is done to improve student observation, critical thinking and also creative in describing pictures. after students describe, students conclude about the learning that has been obtained during the learning takes place. This activity also makes students actively participate in learning.

Based on the results of the research and analysis above, it can be said that the discovery learning model is effective in improving students' speaking skills in descriptive text material for seventh grade students of SMP N 1 Tegal. This is also supported by the results of the questionnaire answers which show 60% of the experimental class agrees the use of discovery learning models helps students in practicing speaking in learning English, helps students add new vocabulary, makes it easier for students to understand learning materials independently, makes students not afraid to ask questions, and increase students' motivation to learn English in class VII students in the even semester of the academic year

2021/2022.

CONCLUSION

The conclusion of this study is that the results showed that the average speaking skill test scores of students who were taught using the Discovery Learning Model were higher than those of students who were taught using a method that did not utilize the Discovery Learning Model. This conclusion is based on an analysis of the data.

It can be seen from this that the implementation of the Discovery Learning Model is shown to be more effective in enhancing the students' ability to communicate verbally. This is permissible because participating in learning activities based on the Discovery Learning Model encourages students to acquire knowledge not only from themselves but also from the process of gaining knowledge through the conversation with their other friends. And with the discovery learning model, students participate more actively in learning, more often express ideas, opinions, or suggestions to their friends, and students have more opportunities to take advantage of their knowledge where students with low abilities can respond to problems in their own way or in their own way on the other hand, the teacher also participates in developing and convincing students' mindsets. Moreover, with the discovery learning model, students have more opportunities to take advantage of their knowledge.

According to the findings of the processing and analysis of scores that the authors carried out: To begin, the Discovery Learning Model has the potential to improve the learning outcomes for students' speaking skills. This is demonstrated by the fact that the post-test score of students' speaking skills when utilizing the discovery learning model is greater than the score when not using the discovery learning model for post-testing. $16,50 > 15,00$). Second, there is evidence that the Discovery Learning Model is successful. This is demonstrated by the fact that the score of learning outcomes that make use of the discovery learning model is significantly higher than the scores of those learning outcomes that do not make use of the discovery learning model. Third, when it comes to the learning outcomes of students' speaking skills, there is a significant divide between those educators who implement the discovery learning model and those educators who do not implement the discovery learning model. When using the discovery learning model, it has been demonstrated that a higher difference can be found between the average score and the learning outcomes for students' writing skills.

The questionnaire scores were both experimental (using the discovery learning model) and the control group (not using the discovery learning model). The results of the

questionnaire answers showed 60% of the experimental class agreed to use the member discovery learning model to help students practice speaking in English learning. So that it can be seen that the application of the discovery learning model in the experimental group is effective. This means that the increase in students' speaking skills learning outcomes using the discovery learning model is better than those who do not use the discovery learning model.

As a result of the findings presented in the previous section of research, the author offers some recommendations to English teachers regarding the utilization of the Discovery Learning Model in the course of teaching learning activity, particularly in the teaching of speaking, because this model can assist students in improving their ability to communicate orally.

The researcher also offers advice to other authors who will be conducting research that is related to their own. It is believed that the findings of this study would be able to assist researchers who are interested in conducting research that is comparable with other researchers with helpful feedback. Through the utilization of the Discovery Learning Model, more researchers are in a position to carry out studies with the purpose of enhancing the oral communication abilities of students. The author, on the other hand, has high expectations that further authors will find this research useful and will use it as a reference and guidance in their own writing.

REFERENCES

- Anggraini, R. W. (2019). *The Discovery Learning in Teaching Writing Skill in Junior High School*. 8(2), 52–56.
- Dewi, R. S., Kultsum, U., & Armadi, A. (2016). Using Communicative Games in Improving Students' Speaking Skills. *English Language Teaching*, 10(1), 63. <https://doi.org/10.5539/elt.v10n1p63>
- Jusuf, H. (2018). the Models of Checklist Method in Evaluating Elt Textbooks. *Al-Lisan*, 3(2), 17–35. <https://doi.org/10.30603/al.v3i2.422>
- Masyi'ah, Nur, A. (2014). *Improving the Speaking Ability of Grade Viii C Students of Smp Negeri 3Depok Yogyakarta Through the Use of Video*. 297.
- Rasyid, Y., Syarif, H., & Agustina. (2021). The Effect of the Discovery Learning Method On Students' Learning Results Understanding Speaking Materials. *Proceedings of the*

4th International Conference on Language, Literature, and Education (ICLLE-4 2021), 604, 335–339. <https://doi.org/10.2991/assehr.k.211201.050>

- Sarimanah, E., Dewi, F. I., Efendi, R., Suhendra, S., Nurul, M., & Soeharto, S. (2019). The Implementation of Discovery Learning Models in Enhancing Speech Script Writing Skills for Students. *Lingua Cultura*, 13(2), 145. <https://doi.org/10.21512/lc.v13i2.5613>
- Simamora, R. E., & Saragih, S. (2019). *Improving Students' Mathematical Problem Solving Ability and Self-Efficacy through Guided Discovery Learning in Local Culture Context*. 14(1), 61–72.
- Siregar, S. (2017). *The Influence Of Dialect*, Syahreni Siregar, 27-36. 5(1), 27–36.
- Siswita, F. Hafizh, M. . (2014). Using the game of truth in teaching speaking to junior high school students. *Journal of English Language Teaching*, 1(2), 292–300.
- Srn, F. (2020). *STUDENTS' SPEAKING ABILITY AND MOTIVATION AT*.
- Tika, H. (2021). *English education study program faculty of tarbiyah and teacher training uin sulthan thaha saifuddin jambi jambi 2021*.
- Trisna Dwi Jayanti, I. A. M. (2021). The Use of Discovery Learning in Improving Students' Critical Thinking Ability. *The Art of Teaching English as a Foreign Language*, 2(1), 12–16. <https://doi.org/10.36663/tatefl.v1i2.100>