

THE EFFECT OF USING FEYMAN METHOD ON STUDENT'S READING COMPREHENSION AT ELEVENTH GRADE STUDENT OF SMKN 2 KEDIRI IN ACADEMIC YEAR 2021/2022

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ABSTRACT

One of the receptive skills is reading. Identification of word form, sound, and meaning occurs during reading. Reading is a means of written language communication that takes the shape of texts. Many children find it challenging to predict how to pronounce the words while reading, yet they do not truly get the sense of the phrase since they lack vocabulary. They simply used the dictionary to translate the challenging terms one at a time. It took a lot of time; thus, it is ineffective. They also had trouble deciphering texts. Then, it discouraged them from reading lengthy texts. Students need innovative and engaging materials because their study time at school is so limited during this pandemic season. The solution, educators are required to design learning media as innovations by utilizing online media, one of the methods that can be applied in teaching reading comprehension is Feynman Method, Feynman Method can create an enjoyable learning condition by helping the students activate their background knowledge before reading and evaluate their comprehension after reading. The aims of this research are to describe students' reading comprehension before and after being taught using Feynman Method, and to know whether there is any significant effect of using Feynman Method to the students of SMKN 2 Kediri in Academic Year 2021/2022.

This study's methodology is quantitative research, and it employs a quasi-experimental design with two experimental and one control class. This study was carried out at SMKN 2 Kediri. Pupils in second grade serve as the study's subject, and 684 students make up its population. The researcher used two eleventh grade classes, specifically XI AKL 1 as the control group with a total of 36 students, 5 boys, and 29 girls, and XI AKL 2 as the experimental group with a total of 36 students, 36 girls. Prior to therapy, the instructor administered a pretest, and following treatment, the teacher administered a posttest to the pupils. In order to determine whether there is a meaningful effect, the treatment was administered twice in order to know whether a significant effect is of using Feynman method in teaching reading comprehension. The data result got from students' score of pretest and posttest that analyzed using t-test formula. The researcher uses SPSS version 16.0.

KEYWORDS: *reading comprehension, feynman method*

1.0 INTRODUCTION

Reading can help students become more successful in their language learning. Listening, speaking, reading, and writing are the four fundamental language skills that make



up the English language framework. Reading it aloud includes tasks to comprehend the text's information. Students might grasp English well and learn writing skills by reading a variety of publications. Therefore, reading is the process of obtaining meaning from text, according to Cline (2006:2). It implies that students make an effort to comprehend the researcher's perspective, the text's meaning, and their own readings. Nunan (2003:4) adds that reading is a fluid process in which readers weave together details from a book and their own prior knowledge to create the meaning. The act of reading involves more than only the meaning. Reading is a process that tries to create an interaction between the reader and the text in addition to just "reading." This has to do with how readers might interpret textual symbols to transmit meaning to themselves.

Reading therefore requires the ability to recognize type words in order to comprehend researcher ideas or the manner in which readers and writers communicate through written material. Students with strong reading abilities will fare better in reading comprehension tests. According to Duke & Pearson (2001:423), reading comprehension is a process in which the reader creates meaning by using the information on the printed page and the knowledge already stored in the reader's head as the foundation. It requires deliberate thought, and when the reader and the text interact, meaning is created. According to this definition, reading comprehension refers to a student's capacity to comprehend and derive meaning from written and spoken text. Students who are proficient in reading comprehension will comprehend material more effectively than those who are not.

2.0 RELATED LITERATURE

1.1 Teaching Reading Comprehension

Teaching reading comprehension, In order for the students to learn anything, the teacher must guide them. Additionally, show the pupils how to make the text simple to understand. Good reading comprehension instructors also aid their students in becoming strategic, active readers by instructing them on the why, how, and when to adopt specific reading methods that have been proven to be effective readers' tools by Duke & Pearson, (2002). The learner will be able to read aloud, quietly, and with sufficient comprehension of the content. According to this definition, reading comprehension refers to a student's capacity to comprehend and derive meaning from written and spoken text. Students who are proficient in reading comprehension will comprehend material more effectively than those who are not.

In addition, the researcher discovered that the students had trouble understanding the material based on observation during teaching practice in SMKN 2 Kediri. For instance, the students still misunderstood the teacher's instructions, could not really get the meaning of the phrase due to a lack of vocabulary, and was unable to identify the primary idea, particularly when analyzing generic structure. They just used the dictionary to translate each challenging word individually. Many pupils have difficulty understanding what they read while they are reading English-language content, according to Mikulecky and Jeffries (2005:277). Therefore, it has become difficult for researchers to find a solution to the issues pupils have when trying to understand what they are reading.

1.2 Feynman Method

The Feynman Method was employed by the researcher to teach reading since it can significantly improve students' reading comprehension. According to Zhao, Miao, and Liu (2020:100) Feynman learning technique relevant theory The Feynman learning method is frequently referred to as "the strongest learning method in history," "the most successful

learning method on the planet," "the ultimate learning approach," etc. It is a method of online learning that a teacher utilized to instruct pupils at home. Students just ask questions about the material they do not comprehend in class. Next, the teacher explained it carefully. They then perform the activity on their own. In other words, pupils learn at home before approaching a teacher or completing an exercise. The learning side also requires the student who have to have a high motivation and push to read the material at home just like they need motivation to read their textbooks and finish their homework.

In addition, Ismail, Darmadi (2020) about The Application of mathematics Learning with Feynman Technique in Class X SMK PLUS SABILUR ROSYAD SIDOARJO. In their research, they focused on effectiveness of learning methods is influenced by the objective factors, student factors, situation factors, the teacher factor itself. Learning with Feynman technique becomes more effective in learning, because it is able to provide an explanation of learning concept in a simply way by making students the center of learning.

1.3 Problem Based Learning

There are numerous issues with this research that can be found. Because online learning is quite different from studying between an instructor and student in person, it might be difficult to comprehend texts when learning English online. According to the background, students typically struggle with learning English in all areas since they still struggle to comprehend the texts that are being taught. Several variables contribute to the difficulty in interpreting text. Students believe that English is difficult, they pay less attention when teachers are explaining the content, and some students are too sluggish to study and learn the information. Students also get bored because of the unchanging environment. The children lack the motivation and reading skills, some students are too indolent to read the material and memorize it. Students also get bored because of the unchanging environment. The kids lack the ability to learn how to readily understand the material since they are too sluggish to read and have problems in understanding the text. All activities must be carried out at home during a pandemic. Teachers should set up a home learning environment. To teach reading comprehension, teachers must develop the proper method.

2.0 METHOD

The Feynman Technique is a four-step process for improving memory, comprehension, and learning. Richard Feynman, a prominent physicist, created it. Richard Feynman, a theoretical physicist regarded as one of the top scientists in the world, developed the technique. The man was brilliant. He even received a Nobel Prize for his work on quantum electrodynamics in 1965.

In addition, Liu, Zhao, and Miao (2020) The Feynman learning method focuses on two main ideas: the first is the output learning principle, which encourages students to "reinterpret this concept fluently," and the second is the output method, which encourages students to "change the representation form of knowledge" by "using simple words to explain and other things to analogize it, so that 10-year-old children can fully understand." Teach others what you have learned, according to Feynman, who set the ability to teach as the benchmark for learning. It consists of these four steps: The Feynman technique consists of the following steps: 1. Pick a concept; 2. Teach the concept; 3. Re-explain and repeat it; 4. Simplify and establish the analogy (continued to sublimate).

Before the researcher did the research, he identified the students' reading comprehension first by using pretest. The test was given on Monday, 23rd august 2021. The



purpose of this test is to quantify students' reading comprehension. The subject of this research was second grade students. The researcher took two classes that is eleventh grade especially for XI AKL 1 class as control class, with total 36 students contain 5 boys and 29 girls and for XI AKL 2 class as experimental class, with total 36 students contain 36 girls. The teacher gave pretest before the treatment, then the teacher gave the posttest after the treatment. Pre-test consisted of 20 questions which multiple choice type. There was one topic on invitation letter, that's invitation letter for friends.

After giving the pre-test, the researcher scheduled two meetings for treatment. In treatment the researcher explains about the effect of Feynman methods to the second-grade students' reading comprehension. The material that used in this treatment is invitation letter. After the writer gave pre-test to the student, the writer gave treatment to the student. It was done for two meetings. For the first meeting in AKL 1 as an experiment class of the treatment was conducted on August 30rd, 2021. and the second treatment was done on September 6th, 2021.

In the first treatment, the researcher gave a material about invitation letter using Feynman method, the researcher started the teaching learning process by explaining more about the topic invitation letter on the google meet. The topic was "invitation letter for birthday". The researcher also asked the students to do the task:

Step 1 the researcher already gave the topic that is invitation letter for birthday then the researcher explains more about it. While the researcher teaches the topic, the students conclude the material according to their understanding.

Step 2 researcher give the task to the student for teach the material with someone or something in their home as like the brother, friend, toy so as like become the teacher and student know about the topic more than the other and teach it, think if they don't know anything like a child.

Step 3 after teaching the topic in someone or something. The students must identify any gaps in their understanding. It means if the student thinks if they difficult to explain about the topic so they must read the material more about the topic or they can search the topic in the google and conclude again until they believe if they understand well about the topic after that do step 2 again.

Step 4 after the students understand well about the material, they can simplify the material on the paper they know the way to understand the material with simple language not always what the teacher teaches.

In the second treatment, in the while activity the researcher asked the students to explain the material with their simple language, every student has different comprehension, but they can explain with their language and they can analyze the part of invitation letter, social function, and language features.

3.0 RESULT AND DISCUSSION

The purpose of the research to find the answer of the questions research about the effect of Feynman method to each aspect of reading skill and effect after using Feynman Method on students' reading comprehension of second grade student at SMKN 2 Kediri in academic year 2021/2022.

It has been established through studies that using the Feynman technique has a considerable impact on pupils' reading comprehension. Support for it comes from Ronnel Lan According to A Ambion, Rainer et al. (2020), a student's class status before to the experiment was utilized to determine the purpose of the sample. Following the experiment, a ten-item

evaluation of the evolution of horses was conducted. The student post-test results showed that the experimental class had the highest score of 90, whereas the control class had the highest score of 75. The control class average was 61, 25, and the experimental class average was 76, 53. The outcome demonstrates that the pupil's post-test rating in the experimental class is greater than student's post-test score in the control class.

In the second grade at SMKN 2 Kediri in the academic years 2021–2022, the use of the Feynman method in teaching reading comprehension enables the students to be more involved in teaching and learning reading comprehension. Finding the primary idea, the supporting details, and extracting the implicit and explicit information from the texts are challenges for them.

Here, the researcher presented about the result data analysis from student pretest and posttest using SPSS version 16. There are data output as the following Paired Sample Statistic.

Paired Samples Test

	Paired Differences					T	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 Pre-Test Experiment - Post-Test Experiment	-14.306	11.158	1.860	-18.081	-10.530	-7.692	35	.000
Pair 2 Pre-Test Control - Post-Test Control	-.694	6.671	1.112	-2.952	1.563	-.625	35	.536

Based on the output above Pair 1 obtained sig. (2-tailed) $0.000 < 0.005$, it can be concluded that there is a difference between the mean for the pre-test and post-test of the experimental class. While Pair 2 obtained dsig.(2-tailed). $536 > 0.005$, it can be concluded that there is no difference between the mean for pre-test and post-test in the control class. It can be concluded that Pair1, which is the experimental class data, has an effect on the students 'post-test

4.0 CONCLUSION

After analyzing the data for pre-test and post-test, the researcher got some findings from this researcher which have been explained in the previous chapter. First, students have low reading skill before being taught Feynman method. This can be seen from the average pre-test scores of the class received low pre-test scores. In line with that, the students' reading comprehension are increased after being taught by using Feynman method.

The analysis of the data shows also indicate that employing the Feynman approach increased students' interest in reading or had a positive impact on their reading comprehension. The students also comprehend texts more easily. In other words, the researcher concludes that utilizing the Feynman method has a considerable impact on students' reading comprehension



at SMKN 2 Kediri pupils in the academic year 2021–2022. As a result, the reader can utilize this research to guide other investigations utilizing the Feynman technique.

REFERENCES

- Cline, F., Johnstone, C., & King, T. 2006. *Focus Group Reaction to Three Definition of Reading (as Originally Developed in Support NARAP Goal 1)*. Minneapolis, M.N.: National Accessible Reading Assessment Project.
- Elengvert, P. Reyes. (2021). Feynman Technique as a Heutagocical Learning strategy for independent and Remote Learning
- Mickulecky, Beatrice S, and Jeffries. (2005). *Reading Power*. New York, USA: Pearson Education.
- Nunan, David. (2003). *Practical English Language Teaching*. McGraw Hill Companies.
- Yingnazhao, Tianguimiao, Jayu Liu. (2020). *Exploration and Research Feynman Learning method in Higher Education Teaching Reform*