The Effectiveness of TED-ED Videos on Students’ Speaking Skills in Ninth Grade of Junior High School

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Article Info

Abstract

This research aim to find out students’ speaking skills before and after being taught by using TED-ED videos, to discover students’ speaking skills before and after being taught without using TED-ED videos and to investigate whether there is a significant effectiveness on students speaking skills before and after being taught by using TED-ED videos. Then, this study used quantitative data collection conducted with a quasi-experimental design with a nonequivalent (pretest and posttest) control-group design. The population of this study was ninth-grade students of public Junior High School in Cirebon in the academic year 2022/2023. The sample used purposive sampling techniques with two groups: class IX E was the experimental group, and the control group was IX F. Each class consists of 20 students. The data collections were tests and documentations. The researcher used t-tested by using SPSS. The findings based on the table descriptive analysis showed that there were changed in the pretest scores in the experimental and control classes and the posttest scores in the experimental and control classes. Then, in the table paired sample test showed that that there was a significant effectiveness on students’ speaking skills before and after being taught by using TED-ED videos.

INTRODUCTION

Four skills in English, such as listening, reading, speaking, and writing, are essential points that native English speakers should have, especially foreigners when they want to master English. Two of these four skills speaking and writing, are productive, and the other two are receptive, such as listening and reading (Nawaz et al., 2021). Speaking is one of the crucial skills that foreigners should master. Speaking is the preferable method of informing others of the message (Lar & Maulina, 2021). Mastering
speaking allows foreigners to communicate effectively with native English speakers. From elementary schools to tertiary institutions, the Indonesian government has mandated that all students take English as a compulsory subject (Karimah et al., 2022). Alghobashy (2021) stated that the four primary language skills of listening, speaking, reading, and writing must be mastered by the learner. Then speaking is the most crucial English skill that foreigners need of the four primary language skills. Farid (2019) stated that students need to be able to speak while mastering language to communicate and interact well with other people. Meanwhile, Ahn & Lee (2016) stated that the most challenging English skill to master is speaking ability. Riadil (2020) also stated that a lack of vocabulary, poor grammar, and lousy pronunciation is common among students who have difficulty speaking, all of which are linguistics issues. This opinion was indeed proven in the school the researcher had attended during PLP activities, and this was also proven by the opinion of the English teacher who taught at that school that many students were facing difficulty in learning English, especially in speaking English.

When teaching or organizing activities in class, teachers must pay attention to several things in their teaching activities. Binnendijk (2014) stated that sometimes, during the teaching and learning process, the teacher fails to employ an effective strategy to motivate the students to engage in active communication. Hence, students lack interaction in speaking English. Therefore, teachers must have effective methods to improve their students' English problems. This was also proven by the experience of researchers when they wanted to carry out PLP activities, before carrying out teaching activities, researchers were given the opportunity to see the teacher's teaching and learning activities, and researchers found that the teacher was still lacking in activity to improve students' speaking ability. One example of an activity that can improve students' speaking skills is being asked to prepare a topic for the class. Putri (2022) states that the activity of preparing to present a topic that the teacher has given is an effective way that can make students improve their speaking ability by freely expressing their opinion about the topic that the teacher has given.

Learners and teachers must adapt to media that is related to technology. Students who study material using technology as a media for teaching and learning are rarely used because the media students usually use to learn English is a book (Putri, 2022). It was also proven where the researcher used it as a PLP place and this was also proven by the opinion of the English teacher at that place that students need better media such as using technology-based media. In fact, the use of technology-based media today can make it easier for students to learn more effectively. Zahiriani (2018) stated that using media-based technology, students can get much knowledge in learning English, especially speaking, because many learning resources will be accessible to students through media technology. Therefore, technology-based media is effective because it has much information that can make students better understand the material being studied.

TED Talks is educational resources that students can access on laptops or mobile devices and watch offline or online. TED Talks videos cover various topics brought by native speakers that can be found on the YouTube platform (Tilwani et al., 2022). YouTube is a digital media platform that is much needed by many in this era (Pamungkas et al., 2022). YouTube contains a wide variety of channels to implement in real life. The implementation of YouTube in real life is a video-based learning media (Sari, 2022). Several channels of TED Talks videos, including TED, TED Talks in 3 Minutes, TEDx Talks, TED-ED, TED Institute, TED Translators, and TED Blog Video can be found on YouTube (Sanhmyatav & Sumiya, 2020). Therefore, many channels regarding TED talk videos on YouTube are tailored to the audience's needs. Then, ED-ED video is one of the TED Talks videos that focus on education and provides learning resources to make learning more innovative and exciting because of the animations in the videos shown (Damayanti & Sumarniningsih, 2022). Therefore, using TED-ED video as a learning resource to implement in teaching English,
especially to overcome students’ problems in speaking English is helpful.

Based on the background above, this study addressed issues related to the previous researches that conducted by Sailun & Idayani (2018), entitled “The effect of TED Talks videos towards students’ speaking ability at English study program of FKIP UIR”. The aim of this research was to investigate a significant effect of using TED talk videos on English students’ speaking of third semester English Study Program students at FKIP UIR. The researchers were using quasi-experimental design with random sampling technique. The results showed that were significantly impact by the TED Talks videos of third semester English Study Program students at FKIP UIR.

Aziz & Ngandiron (2019), entitled “The effectiveness of TED Talks towards students’ proficiency level”. The aim of this research was to investigate the effectiveness of using English videos from TED talks to improve students’ proficiency levels. The researchers were using quasi-experimental design with purposive sampling technique according to the judgment from the lecture. The results show that using TED talks to improve students’ proficiency levels are effective.

Apriani et. al. (2022). "The effectiveness of YouTube video on students’ speaking achievement of the eleventh grade of SMAN 1 Sarolangun". The aim of this research was to investigate the significant difference on students’ speaking skills before and after being taught by using YouTube at tenth grade of junior high school students at SMAN 1 Sarolangun and to investigate the significant difference on achievement of speaking skills between the class that taught by using YouTube videos and the class who were not taught by using YouTube videos. The researcher used a quasi-experimental design with purposive sampling. For the result, there were a significant difference on students’ speaking skills before and after being taught by using YouTube at tenth grade of junior high school students at SMAN 1 Sarolangun and significant difference on achievement of speaking skills between the class that taught by using YouTube videos and the class who were not taught by using YouTube videos.

Putri (2022) with the title “The influence of using TED Talks videos with subtitle on students’ speaking skills (experimental research at students association ESCO of UIN Fatmawati Sukarno Bengkulu in academic year 2022/2023)”. The aim of this research was to investigate a significant influence of using TED talks as learning media with subtitle on English students’ speaking skills of UIN FAS Bengkulu in academic year 2021/2022. This study used quasi experimental design in time series design with purposive sampling technique that conducted by one group. In this study shows there was a significant influence of using TED talks as learning media with subtitle on English students’ speaking skills.

Middeleyin (2022), with the title “The influence of using TED-Talk media on students’ speaking skill”. The aim of this research was to investigate the significant difference on students’ speaking skills before and after being taught by using the TED Talk media. A pre- and post-test on a single class was employed in this study as part of the pre-experimental research with using purposive sampling technique. This study found that there was significant difference on students’ speaking skills before and after being taught by using the TED Talk media.

Hadi et. al. (2021), with the title “The TED Talks as a learning tool in teaching”. The aim of this research was to investigate how using the TED Talks application has improved speaking skills. A pre- and post-test on a single class was employed in this study as part of the pre-experimental research with using purposive sampling technique. This study found that using the TED Talks application improved speaking skills.

Guato & Aracelly (2020), with the title “TED Talks in the speaking skill”. The aim of this research was to investigate the significant difference on students’ speaking skills before and after being taught by using the TED Talk. In this study, the pre-experimental research used with using purposive sampling technique. This study found that there was significant difference on
students’ speaking skills before and after being taught by using the TED Talk.

Dinillah (2021), with the title “The use of TED Talks to improve students' speaking skill at EFL classroom in Muhammadiyah university of Makassar”. In this study, the researcher wanted to know the increase in students' accuracy and fluency in speaking English after using TED-ED. A pre- and post-test on a single class was employed in this study as part of the pre-experimental research with using purposive sampling technique. This study found that watching TED Talks videos improved the students' accuracy and fluency in speaking in the third semester at Muhammadiyah University of Makassar.

Zahriani (2018), with the title “Utilizing TED Video to improve students’ speaking skills for academic purpose”. This research investigated how watching TED Talks videos helped students develop public speaking skills for academic purposes. A pre- and post-test on a single class was employed in this study as part of the pre-experimental research with using purposive sampling technique. This study found that watching TED Talks videos helped students develop their skills in speaking in public for academic purposes.

Sari (2022) "The impact of using YouTube channel “speaking English with Tiffani” in increasing student’s speaking skills”. The aim of this research was to investigate the significant difference between the class that taught by using YouTube Channel “Speaking English With Tiffani” videos and the class who are not on achievement of speaking skills. The researcher used a quasi-experimental design with purposive sampling that certain characteristics in the study. For the result, there was a significant difference between the class that use YouTube Channel “Speaking English With Tiffani” videos as a learning resource and classes that did not use Channel “Speaking English With Tiffani” videos as a learning resource for speaking skills.

It can be observed that using media-based videos to improve speaking in English is effective. One of the effective learning resources for speaking English based on video media is the TED Talks video. Due to this, the researcher wants 1). to find out students’ speaking skills before and after being taught by using TED-ED videos. 2). to discover students’ speaking skills before and after being taught without using TED-ED videos. 3). to investigate whether there is a significant effectiveness on students speaking skills before and after being taught by using TED-ED videos.

METHOD

This research used quantitative data analysis with a nonequivalent pretest-posttest control-group design. A nonequivalent pretest-posttest control-group design was a design in a quasi-experimental without using the random assignment and in which only the experimental class will be given treatment in data collection activities (Creswell, 2014). Here, describes in detail how the study was conducted. A complete description of the methods used enables the reader to evaluate the appropriateness of the research methodology.

The researcher selected 40 students for two classes using purposive sampling based on the teacher's assessment at the final test in the first semester's assessment, which had scores above the standard score and below the standard score in English lessons of that two classes and the researcher used purposive sampling to ensure that the sample was not distracted by other classes. According to Johnson & Christensen (2014), in the use of purposive sampling techniques, the researcher determines the sample according to the sample characteristics that interest the researcher for research. The experimental group was IX E and the control group was IX F. Johnson & Christensen (2014) state that the experimental class is the class that is given treatment to determine the effect of the independent variable on the dependent variable. Then, at the same time, the control group was not received treatment.

The researcher used tests and documentation to collect the data. The data was collected in five meetings, each meeting taking 80 minutes. According to Johnson & Christensen (2014), the pre-test activity is carried out to get
students' first results before treatment and post-test activities is carried out to get student results after treatment. In the pretest and postest, the researcher asked students to do oral test using text. While using the pretest and postest, the researcher used inter-rater reliability. Inter-rate reliability in speaking assessment gauges how consistently two or more raters view a given data collection and the second examiner usually simultaneously adds an attitude value to the sample being assessed (Apriani, 2021). The researcher was the first assessor and the English teacher from the class was the second assessor. As the second assessor, the English teacher assessed the results of the pretest and postest assessments that the researchers conducted by examining the scores and attitudes of each sample.

According to Ahyar et al. (2020), documentation activities support research with information in writing or pictures. In this study, researchers was carried out data collection activities with documentation where researchers always took photos of every pre-test, treatment, and post-test activity in class.

Research Design

The researcher used a quasi-experimental design in this study. Researchers used a purposive sampling technique. The following was a quasi-experimental design in research studies (Creswell, 2014).

**Table 1. Quasi Experimental Design**

Nonequivalent (Pretest and Posttest Design)

<table>
<thead>
<tr>
<th>Group A</th>
<th>O1</th>
<th>X</th>
<th>O2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group B</td>
<td>O2</td>
<td>-</td>
<td>O2</td>
</tr>
</tbody>
</table>

(Creswell, 2014)

Notes:
O1 = Pre-Test (Test before applying treatment)
O2 = Post-Test (Test after applying treatment)
X = Treatment on the experimental class using TED-ED videos

Population Sample

The population of this research was students in ninth grade at SMP Negeri 2 Plered. The researcher selected ninth grade students of SMP Negeri 2 Plered as the population, with 340 students. The population was IX A until IX I in the academic year 2022/2023.

The researcher was free to choose a class because class IX has quite limited study time because, at that time, class IX will face a midterm exam and then a school exam. The researcher chose two classes held by different teachers by selecting them using the same average score in English subject in-class IX E and IX F at SMP Negeri 2 Plered. Each class consisted of 20 students for the experimental group and 20 students for the control.

**Instruments**

The researcher used texts as instrument in this research to do tests. Tests were employed in this study to evaluate students' speaking skills growth during the teaching and learning process using TED-ED videos. To evaluate the students' oral exams, the researcher used a research rubric obtained according to Hughes' study (as cited in Putri, 2022) the assessment contains the components of speaking namely grammar, vocabulary, comprehension, pronunciation, and fluency.

**Data Analysis**

In this study, data analysis was carried out from the posttest results, which showed whether or not the use of TED-ED videos affected ninth grade students' speaking skills. the researchers used a t-test which was calculated using IBM SPSS Statistics 22. Here were some steps to analyze the data.

1. **Descriptive Analysis**

   The purpose of descriptive analysis is to describe research data such as means and standard deviation.

2. **Prerequisite Test**

   In this research, the research just took normality test because the researcher wanted to do paired sample test on t-test.

3. **T-Test**

   The researcher used paired sample test and an independent sample test. The researcher analyzed the results of the pretest and post-test results on the experimental class in the paired sample test.
4. N-Gain Score

The researcher completes the data analysis activities by identifying the effectiveness of treatment in the experimental class using N-Gain score.

RESULTS AND DISCUSSIONS

This topic presents the findings and discussion of the activity in response to some of the research questions. Data collection activities were done through pretest and posttest in the experimental class and the control class. This topic consists of description about the students’ speaking skills before and after being taught by using TED-ED videos, the students’ speaking skills before and after being taught without using TED-ED videos and the significant effectiveness on students speaking skills before and after being taught by using TED-ED videos.

Research Findings This chapter consists of description about the students’ speaking skills before and after being taught by using TED-ED videos, the students’ speaking skills before and after being taught without using TED-ED videos and the significant effectiveness on students speaking skills before and after being taught by using TED-ED videos. The researcher used IBM SPSS Statistics 22 to ensure the pretest and posttest results in the experimental and control class. The data were as follows:

Table 2. Descriptive Statistics

<table>
<thead>
<tr>
<th>Description Statistics</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std Deviation</th>
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<tbody>
<tr>
<td>Pre Test-Experimental Class</td>
<td>20</td>
<td>50</td>
<td>10</td>
<td>49.70</td>
<td>13.94</td>
</tr>
<tr>
<td>Pre Test-Control Class</td>
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<td>40</td>
<td>10</td>
<td>69.50</td>
<td>15.59</td>
</tr>
</tbody>
</table>

From the data table above, there were 20 samples in the experimental class and control classes. The average pretest value in the experimental class was 48.50, with a standard deviation of 13.964. Then, the average pretest score in the control class was 49.50, with a standard deviation of 11.344. Furthermore, the posttest average value in the experimental class was 78.50, with a standard deviation of 11.821. Next, the average posttest score in the control class was 69.50, with a standard deviation of 8.569. This means that there were changed in the pretest scores in the experimental and control classes and the posttest scores in the experimental and control classes.

The researchers also did normality test for the prerequisite t-test or hypothesis test. Then, the data were analyzed using paired sample tests.

Table 3. Test of Normality

<table>
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The data showed that the pretest significance value of the Kolmogorov Smirnov in the experimental class was 0.2 and in the control class was 0.2. Then, the significant posttest value on Kolmogorov Smirnov in the experimental class was 0.2 and the control class was 0.118. The significance value in the pretest and posttest for each class was more than 0.05. In conclusion, the data in the experimental and control classes were normally distributed.

Table 4. Paired Sample Test of the Experimental Class

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<tr>
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The table showed that the significance value (2-tailed) was 0.000. Furthermore, the Tcount was 18.974, the df was 19, and the Ttable was 2.093. Therefore, Ha was accepted because Tcount was higher than Ttable (Tcount>Ttable). Then, it can also be seen that the significance value (2-tailed) was less than 0.05, meaning that Ho was rejected and Ha was accepted. It could be assumed that there was a significant difference in students' speaking skills before and after being taught by using the TED-ED videos.

The researcher used the N-gain score to ensure the effectiveness on students’ speaking skills between students who taught by using the TEDED videos and were taught without using TED-ED videos.

Table 5. N-Gain Score of SPSS IBM Statistics 22

<table>
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<tr>
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The researchers also did normality test for the prerequisite t-test or hypothesis test. Then, the data were analyzed using paired sample tests.
It can be concluded from the table above that the n-gain score in the experimental class was effective enough, with a mean value of 61.7592. Then the n-gain value in the control class was ineffective, with a mean value of 39.0644.

Discussion

The finding show there were students who have low levels of English speaking skills at school. It is supported by researchers named Zahriani (2018) and Putri (2022) who states that the general factor that makes it difficult for students to master speaking English is the lack of motivation to learn English at school. According to Dinillah (2021) and Hadi et. al. (2021), the inhibiting factor for students who cannot master the ability to speak English is the lack of learning activities to improve students’ speaking skills, therefore students are not confident when speaking English and students need more vocabulary. Another factor is because the media still makes students bored while studying (Sari & Meddeliyen, 2022).

The researcher also found evidence that the implementation of TED-ED on the speaking skills of students in grade nine was effective. In accordance with Apriani (2022) stated video-based media can help someone increase motivation to speak English. Many researchers claimed that using TED Talks videos as a learning resource for students' speaking skills is effective. It is relevant to Sailun & Idayani (2018), a nonprofit organization called TED (Technology, Education, and Design) exists to spread ideas through simple, influential talks. Aziz & Ngandiron (2019) also stated that the use of video base-based media that uses TEDED as learning resource is an appropriate resource for learning in the classroom. According to Zahriani (2018), Aracelly (202), Dinillah (2021), Hadi et. al. (2021), and Middeleyin (2022), watching TED videos are very effective way to improve students' English language proficiency. TED video has many various channels according to the topics on YouTube. YouTube is a social media with exciting channels for various groups (Sari, 2022). One of the channels commonly used to learn English is the TED Talks channel. Putri (2022) stated that using TED Talks videos on YouTube with subtitles can influence students' speaking skills.

Based on the research findings of this study using SPSS IBM Statistics 22 to calculate hypotheses data, there was a significant difference on students speaking skills before and after being taught by using TED-ED videos. This is relevant to Hadi et al. (2021), Meddeleyin (2022), Aracelly (2021), Putri (2021) who investigated significant difference on students speaking skills before and after being taught by using TED-ED videos. The findings show that there was a significant effectiveness on students speaking skills before and after being taught by using TED-ED videos. Then, in this study, the researcher were more detailed in explaining the results of the research, the researcher also used n-gain to ensure the results of pretest and posttest in the experimental class and the control class. According to the N-gain score, TED-ED videos on students’ speaking skill in ninth grade of junior high school was effective enough. Meanwhile, students were taught by without using TED-ED videos in learning activities on speaking skills in ninth grade of junior high school was ineffective.

CONCLUSION

After carrying out activities to research the effectiveness of using TEDED videos on the speaking ability of ninth grade students, the researcher concluded that the average pretest value in the experimental class was 48.50, with a standard deviation of 13.964. Furthermore, the posttest average value in the experimental class was 78.50, with a standard deviation of 11.821. Then, the average pretest score in the control class was 49.50, with a standard deviation of 11.344. Next, the average posttest score in the control class was 69.50, with a standard deviation of 8.569. It was proven using SPSS IBM Statistics 22 calculations, that there were changed in the pretest scores in the experimental and control classes and the posttest scores in the experimental and control classes. Furthermore, it was proven using SPSS IBM Statistics 22 calculations on paired sample test that there was a significant
effectiveness in students’ speaking skills before and after being taught using TED-ED videos.
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