Implementing Hyperlink PowerPoint Media for Teaching English as a Foreign Language at Junior High School

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ABSTRACT

This study aims to analyze whether the use of digital media namely Hyperlink PowerPoint is affected or does not affect students’ learning achievement. This research used mix method design which combines both quantitative and qualitative data collection. The population in this study was Junior High School with 2 samples, namely class VIIA and VIID. This study used a post-test only control group design type. The scenario applied in this paper is described as one class (experiment group) was taught using digital media Hyperlink PowerPoint. On the other hand, the other class (control group) is taught using the conventional method.

After several meetings, both classes were given a post-test. The post-test results were analyzed using SPSS 23 for t-test and size effect analysis to show if there was a significant difference between the two samples. The findings in this study are (1) The results of the T-test show that if the effect of the treatment using Hyperlink PowerPoint media gives significant achievement results to experimental students, the large difference measured using Cohen’s size effect shows the number 0.051 or moderate category. (2) Results from the questionnaire showed positive results, namely: first, all students in the experimental group agreed to use Hyperlink PowerPoint media. Second, although there are 2 obstacles to the implementation, the activities can be carried out well. Third, after seeing the results found significant differences, the use of Hyperlink PowerPoint media deserves to be continually used as learning media.

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1. INTRODUCTION

When the world enters the 21st century, teaching is identical to digital teaching systems and the use of media related to the use of technology (Garba et al., 2015; Suwartono & Aniuranti, 2019; Tarbutton, 2018). Utilizing technological advances in the education sector is very important so that we do not fall behind and students can learn in the new era and have the ability to guide students and prepare them for the future (Astuti et al., 2021; Dewanti et al., 2021; Hashim, 2018). But the fact there are still many areas in Indonesia, that are not familiar with the use of technology in the learning process, especially in schools in rural areas, which maintain teaching techniques that are still quite outdated. This is because they still adhere to the old habits of teaching with outdated media, so technological advances are not utilized as well. Considering the era 2021 is the era for Gen Z, as reported by the British Broadcasting Corporation, Generation Z is a relatively young generation and there has significant technological development when they were born, and the characteristic of this generation is they have never known
life without technology (Asyifa, 2020; Dolot, 2018; Septiawan & Masrunik, 2020). To create a balance between gen Z and education, it is necessary to update the learning media; the way is to integrate the use of technology as a learning tool to suit the characteristics of generation Z. In addition, there are several other goals, that our students are not left behind in using technology, so later they can create quality graduates who can compete globally (Barry & Kanematsu, 2020; Kunig, 2018).

A necessary step to pursuing technological developments in the education sector is to switch to using digital media in the learning process (Crossley & McNamara, 2016; Iomäki & Lakkala, 2018; Suryani, 2018). One example is the creation of English learning media using digital learning media called Hyperlink PowerPoint. Hyperlink PowerPoint is a type of PowerPoint that is a higher level than ordinary PowerPoint, we can interact on each slide according to the design of the creator. Broadly speaking, the concept is the same as in applications and games that contain buttons or text that can interact when clicked. In terms of manufacturing, only use the Microsoft PowerPoint application; we can also create some media such as games, puzzles, or others using PowerPoint hyperlinks. Using PowerPoint has many advantages including (1) practical, can be used for all class sizes; (2) provide the possibility of face-to-face and observing student responses; (3) has a variety of presentation techniques that are attractive and not boring; (4) can present various combinations of clipart, pictures, colors, animation, and sound, so that it makes students more interested; (5) can be used repeatedly (Adams Ogirima & Onyiyeche Emilia, 2018; Budasi et al., 2020; Shigli et al., 2016; Suryani, 2018). With the need for more innovation in the field of digital learning media, the use of PowerPoint Hyperlinks can be a good solution. The reason for using hyperlink PowerPoint is first the use of bringing students closer to the use of digital learning media so that the characteristics of Generation Z can be maintained. That is because, of the use of hyperlinks using tools related to media Electronics such as computers, cell phones, and laptops are very suitable for use in learning sessions in the 21st century. The second reason is that Hyperlink PowerPoint is very suitable for learning English because it is flexible and can be adapted to the existing material in learning English. As we know that are 4 basic skills in learning English that contains speaking, reading, listening, and writing (Sadiku, 2015; Sharma & Puri, 2020; Supina, 2018; Zahra, 2019). Based on previous research, shows the effectiveness of using PowerPoint. The results obtained from the use of PowerPoint such as students being more active in learning, students' self-confidence increases, students more easily understanding the material, and the test results obtained by students increase (Bahadur & Boodun, 2013; Hadyanti & Widy, 2018; Siti Kudsiyah & Harmanto, 2017). The other previous study also added that the use of multimedia such as PowerPoint facilitates learning activities, the material displayed through multimedia is more interesting with a combination of images, text, animation, and sound that will foster student interest in learning (Dunsworth & Atkinson, 2007). With multimedia, teachers have more alternatives to make learning more interesting and fun.

Based on the interest in combining learning media with technology by using PowerPoint Hyperlinks, it is encouraging to conduct a study on the use of PowerPoint Hyperlinks in school SMP Negeri 2 Sukasada. A short introduction about the school, SMP Negeri 2 Sukasada is a public school located in the southernmost of Bualem. The specific position of Pancasari village. Based on observations through a short interview, the results obtained if the media teaching English subjects at the school still used books and other ancient media. Therefore, the writer’s interested in implementing technology-based learning by using PowerPoint Hyperlinks to teach at the school. Besides that, the writer also intends to provide education to teachers in schools on how to create technology-based media that is using Hyperlink PowerPoint as a medium for learning English at Sekolah Menengah Pertama Negeri 2 Sukasada. The problems related to the media that they used to learn English were found: only using student worksheets, and textbooks. Because it uses outdated media, theoretically it affects students’ ability to learn. This causes students to be lazy to learn because the media is less attractive. This affects the basic skills of students such as reading, writing, and speaking, especially in learning English. Theoretically, that is because effects such as lack of language experience affect the number and types of languages they know (Lutviana & Mafulah, 2021). The inability of students understand the meaning of a word. After all, they perceive words they do not know as foreign and the implementation of lesson plans is not good with an inappropriate learning platform.

2. METHOD

This research is classified as mixed-method research. Mixed-Method Research is a combination of quantitative and qualitative methods which aims to produce a better and more complete understanding of the problem being studied (Almeida, 2020; Dawadi & Giri, 2021; Lindsay-Smith et al., 2018). In this research, a mixed-method design is conducted by collecting and analyzing the quantitative first, and then equipped with qualitative data. In collecting data, the researcher used the post-test-only control group design type. The scenario is to use 2 classes that are chosen randomly, to make sure the ability in both classes is equal, a test is given and the results of the test are analyzed to see normality and homogeneity to ensure that the student's abilities are not significant. After knowing that the student's abilities in both classes are equivalent, it will be continued to the next stage, namely experimenting with the use of learning media (Flannelly et al., 2018; Gopalan et al., 2020; Hastjarjo,
In the experiment, the group class was taught to use the Hyperlink PowerPoint media. Meanwhile, the Control group class will be taught using conventional media. The material taught in the experimental class and the control class is the same, namely "Procedure Text". After the treatment is given for several weeks, both classes will be given a post-test related to the material (the questions for both classes are the same), the post-test results were analyzed using SPSS 23.0 to see if there is a significant difference between the two samples. This study also used three questionnaires. First questionnaire about what are students' opinions about using PowerPoint Hyperlinks as learning media. Next, the second questionnaire was about what difficulties or challenges teachers found when implementing Hyperlink PowerPoint as media in the learning process. Then the third questionnaire is about is there the use of PowerPoint Hyperlinks possible to continue as a learning medium after knowing the results after being tested. Questionnaire one will be filled out by students, while questionnaires two and three will be filled out by researchers.

3. RESULT AND DISCUSSION

Result

This section provides the results of the analysis post-test experimental group and control group. Before carrying out the t-test test and size test, a Prerequisite Analysis (normality and homogeneity) is performed. The normality analysis shows the significance of the experiment group is 0.304, while the significance for the control group is 0.354. Because the significant value of the two samples above is higher than 0.05 (0.354 > 0.05), it is concluded that the post-test results of the two samples are normal. Then homogeneity test, the significance value of both classes is 0.351. Because 0.351 is higher than 0.05 or (0.351 > 0.05) it indicates the post-test variable in the experimental group and control group is homogeneous. The results of the t-test and effect size will be presented in Table 1 and Table 2.

Table 1. T-test Analysis

<table>
<thead>
<tr>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>Std. Error Difference</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.108</td>
<td>65</td>
<td>0.039</td>
<td>5.902</td>
<td>2.799</td>
<td>0.311 - 11.492</td>
</tr>
<tr>
<td>2.096</td>
<td>62.109</td>
<td>0.040</td>
<td>5.902</td>
<td>2.815</td>
<td>0.274 - 11.529</td>
</tr>
</tbody>
</table>

Table 2. Effect Size Analysis

<table>
<thead>
<tr>
<th></th>
<th>Cohen's d</th>
<th>Grass's delta</th>
<th>Hedges' g</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.514</td>
<td>0.550</td>
<td>0.515</td>
<td></td>
</tr>
</tbody>
</table>

Based on Table 1, the result of the t-test, sig value (2-tailed) is 0.039 and 0.040. Because 0.039 and 0.040 are less than 0.05 or (0.039-0.040 <0.05), as the basis for the decision in the independent sample t-test, it can be concluded that H0 is rejected and Hα is accepted. Thus, it can be concluded that there is a significant difference between the average learning outcomes of experimental students and also control students. Based on Table 2, the result of the size effect of Cohen’s d between the experiment and control group is 0.514 or 0.51. Referring to the Cohen’s d effect value category table if 0.51 is higher than 0.50 (0.50.51 < 0.20), The conclusion is that it can be said that the Effect Size between the experiment group and the control group is moderate.

Questionnaire

The result of the first questionnaire, from the total opinions given by experimental students, almost all students in the experimental group agree with the use of Hyperlink PowerPoint as a media. Half of the students said that they liked Hyperlink media because learning is more organized and neat so it is easy to learn. Then the rest argue that it is fun to use because it contains games and can be linked to the Quizizz site. Result of the second questionnaire, there are two problems that the researcher found; the first is that the class does not contain a projector that is used to display slides. The solution that the researchers did was to ask students to use smartphones to display media. Then the second challenge is that there is some students' smartphone that cannot be used to display media, the solution that the researchers did was to give students the option to pay attention to the slides on the projector or join friends. A smartphone can be used to display media and most students prefer to join other friends. Then the result of the third questionnaire which is the Score post-test of the experimental group was higher with a score of 68.71, while the control group was 62.81. From these results, there was a greater increase in experimental students and there is a significant difference when analyzed by the T-test. So, in conclusion, Hyperlink PowerPoint media deserves to be continued or recommended as a learning media.

Implementing Hyperlink PowerPoint Media for Teaching English as a Foreign Language at Junior High School
Discussion

The research was conducted at the Sekolah Menengah Pertama Negeri 2 Sukasada through face-to-face learning. The general result of this study revealed that there was a significant influence on the applications of Hyperlink PowerPoint for learning English as a foreign language. Based on the post-test results, the average score of the experiment group was 68.71, while the average score of the control group was 62.81. This shows that the average score of the experiment group taught using Hyperlink PowerPoint is higher than the control group taught using the conventional method. In the treatment process, the experimental group was taught using the Hyperlink PowerPoint media. Starting from the opening, students are given treatment using pictures on the slide, and then students are given a Hyperlink PowerPoint file which contains material about procedure text, starting from definitions, generic structures, language features, and also examples of text. After the first file has been discussed, students will be given a second Hyperlink PowerPoint file which contains a cooking game. Students will learn in real while getting to know the vocabulary in the game. As for the control group, they are taught according to the general method used at the school, first opening students will be asked stimulating questions related to learning such as asking the name of the food and how to make it. Then it will be continued to provide material through textbooks by way of lectures in front of the class, and then proceed with the practice of analyzing examples and practice questions.

The findings as well as interpreting the data, the use of Hyperlink PowerPoint media helps experiment students improve their achievements in the post-test score. The results from the t-test analysis show the sig (2-tailed) is 0.039 and 0.040, because the value sig (2-tailed) is less than 0.05, as the basis for the decision it concludes that H0 is rejected and Ha is accepted. The effect size shows that there is a significant difference between experimental students and control students with a score of 0.51 which can be categorized as moderate based on Cohen's formula. The results of the questionnaire showed positive results from students, from a total of 32 students in the experiment class, all of the students agreed with the use of Hyperlink PowerPoint media. Although there are found two challenges when implementing Hyperlink PowerPoint, the final result obtained being a significant difference obtained using Hyperlink PowerPoint media is suitable to continue. This is in line with the previous study which analyzed the effectiveness of PowerPoint Presentation on Students' Cognitive Achievement (Gambari et al., 2015). Technical Drawing concepts in Basic Technology were determined using a pretest-posttest, non-equivalent, non-randomized experimental group design. Results revealed that the students taught with PPT performed better than their counterparts taught with ordinary learning (Chalkboard method). Then, high achievers performed better than medium and low achievers respectively. The PPT was found also to be gender friendly. Based on the findings, it was recommended that the use of PPTs should be encouraged in schools. Similar previous studies also support this finding. This research investigated whether students liked and learned more from PowerPoint presentations than from manual learning without PPTs (Bartsch & Cobern, 2003). The researcher asserts that PowerPoint presentation technology must appeal to as many students' senses as possible, otherwise, the use of media solely for the benefit of utilization will never make it effective and effectiveness means the extent to which the media plays a role for students to bring about the changes they have.

Two factors affect students' achievement in the experimental group and the control group, namely: Internal and External factors. Internal factors are factors that affect students' abilities from within themselves (Abdulkadhum Jabor AL-Muslimawi & Adhiem Hamid, 2019; Angraini et al., 2016; Nurrokhmanti et al., 2016; Pertiwi et al., 2015). The Internal factors include interest in learning, motivation, and basic abilities of students. The first is Interest; in this research students' English interest is still relatively low. The second is motivation. The success of learning can be seen in the motivation shown by students when carrying out teaching and learning activities (Julhadi, 2021). In this research, the motivation of the two sample classes in learning a language is moderate. Then the third is the basic ability of students, there are some students not understand the vocabulary at all. External factors are factors that come from outside that give effect/influence the learning process (Ramli et al., 2018). Internal factors include teaching methods, classrooms, and close friends. The first is the teaching method; this research compared the conventional method used by the control group with the teaching method using PowerPoint Hyperlinks by the experimental group. The results show experimental group got better results. The second is the classroom, in this study, the second sample classroom was comfortable and neatly arranged. Third are close friends, according to external factors that affect learning achievement is close friends, because friends influence themselves and the nature of students in the learning process. In this study, in each class, there are one to three people who have good traits and that plays a very important role in making other students want to compete and that is a positive thing (Nurhamidah et al., 2018).

4. CONCLUSION

Based on the findings of the researcher from the results of the t-test analysis and effect size, it can be concluded that there is a significant effect on students' understanding of the material being taught between students who are taught with PowerPoint Hyperlink media and students who are taught using conventional. Based on
Cohen’s formula the difference of significance is 0.51 or a moderate category. From the results of the questionnaire, the response given by experimental students using Hyperlink PowerPoint media is positive. All students in the experimental class agreed with the use of Hyperlink PowerPoint and the students seemed to enjoy learning more. After seeing the results obtained, it is recommended for teachers to use digital-based media such as Hyperlink PowerPoint in teaching. The use of technology is very important in learning so that we are not left behind in the digital world and also the 4.0 revolution in the field of education.

5. REFERENCES


