



Jurnal Eduscience (JES)

Volume 11, No.1

April, Year 2024

Submit : 20 Mei 2023

Accepted : 21 Maret 2024

THE EFFECTIVENESS OF USING THE DISCOVERY LEARNING MODEL BY USING WORDWALL ON STUDENTS' MOTIVATION

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Abstract

The quality of English language education in Indonesia is low. One factor is the lack of student motivation in learning activities. therefore. This research was carried out to solve this problem by implementing the discovery learning model using Wordwall media. Later, comparison results before and after implementation can be found. This research used pre-experimental research, one group pretest, and post-test design and 34 students majoring in Social Sciences at SMA PGRI 2 Jombang as the sample of this study. The instrument used was a questionnaire given to students as a research instrument with a pretest percentage of 58% and a posttest of 73%. Then, in data analysis using SPSS 26, the results obtained were sig 0.10 > 0.05, which indicated that students' learning motivation in the post-test was higher than in the post-test. All research results show that the hypothesis "there is effectiveness in using the Discovery Learning model using Wordwall on student learning motivation" is accepted.

Keywords: Student; motivation; discovery learning

Abstrak

Kualitas pendidikan bahasa Inggris di Indonesia rendah. Salah satu faktornya adalah kurangnya motivasi siswa dalam kegiatan pembelajaran. Karena itu. Penelitian ini dilakukan untuk mengatasi permasalahan tersebut dengan menerapkan model pembelajaran Discovery Learning menggunakan media wordwall. Nantinya dapat diketahui hasil perbandingan sebelum dan sesudah implementasi. Penelitian ini menggunakan penelitian pre-eksperimental, one group pretest, and post-test design dan sampel penelitian ini adalah 34 siswa jurusan IPS SMA PGRI 2 Jombang. Instrumen yang digunakan adalah angket yang diberikan kepada siswa sebagai instrumen penelitian dengan persentase pretest sebesar 45% dan posttest sebesar 73%. Kemudian pada analisis data menggunakan SPSS 26 diperoleh hasil sig 0,09 > 0,05 yang menunjukkan bahwa motivasi belajar siswa pada post-test lebih tinggi dibandingkan pada post-test. Seluruh hasil penelitian menunjukkan bahwa hipotesis “ada efektivitas penggunaan model Discovery Learning menggunakan Wordwall terhadap motivasi belajar siswa”

INTRODUCTION

According to (Asadullah et al., 2020), who said Indonesia is one of the countries in Southeast Asia that spends a lot of money compared to Vietnam, but Indonesia cannot catch up with the scores obtained by Vietnam. That statement is supported by (Ismawati & Amertawengrum, 2023) and (Syamsuri & Bancong, 2022) based on the results of the survey by

PISA 2018, the quality of education especially students' literacy in Indonesia is low. That problem has some reasons that were influenced by non-linguistic factors such as environment, culture, family background, etc (Pajarwati et al., 2021). This problem must to solved soon, the effective way to solve this problem is to increase the student's learning motivation (Idris, 2021). That statement is supported by (Raharjo & Pertiwi, 2020) and (Krisyanti et al., 2021), who said that motivation is one of the keys to improving learning outcomes.

Motivation is encouragement in the form of attitudes and values for someone to do something happily and try to do their best to achieve their goals (Filgona et al., 2020). Motivation helps the students to increase achievement and learning outcomes by each individual (Dewi et al., 2020). According to Sayuti, motivation is influenced by several factors that can directly or indirectly influence a person's motivation, including education, hope, needs, work, etc (Sujatni, 2024). The elements that influence learning motivation include aspirations, the ability of citizens to learn, the condition of learning citizens, and the atmosphere of the learning environment (Dalimunthe et al., 2021).

Kind of motivation is two, there are extrinsic motivation and intrinsic motivation (Patwary et al., n.d.). Extrinsic motivation is the motivation that comes from the influence of rewards, punishments, and benefits obtained. Then, intrinsic motivation is the natural attraction that creates a feeling of pleasure because of the activity (Kouakou et al., 2023). This study expected the learning motivation of students both intrinsic and extrinsic be better than before.

English is a global language that needs to be learned by the student because it will help the student to communicate anything with someone from each country with different expressions at each stage, those was economy stage, education stage, health stage, agriculture stage, etc (Ilyosovna, 2020). According to (Fitrah et al., 2021) and (Hameed & Ali, 2022) English learning has four skills that must mastered by the students, listening skills, speaking skills, reading skill, and writing skills. This study focused on the last skill is writing skill. The material was implemented Brochure, Pamphlet, Leaflet, and Banner.

To increase the students' motivation, the teacher must use the right learning model and interest media for the students which are the contents based on the curriculum that is used by the school. The curriculum used by the subject of the study is Kurikulum 2013 with students student-centered approach to provide motivation and understanding materials with this approach and also uses discovery learning. From several learning models, this study just focused on discovery learning. Discovery learning is a learning model where the students are more active than the



teacher (Astuti et al., 2023). According to (Janah et al., 2023). Guided discovery learning is a learning model that develops an active way of learning for students to find and explore the information themselves so that the result obtained will be long stored in students' memory. The syntax of this model is stimulation, problem statement, data collection, verification, and generalization (Harahap, 2018). All of the steps in the syntax of discovery learning are suitable to the student's characteristic who many extrovert students (Amin & Harahap, 2023).

In this digital era of 4.0, almost all activities of human life rely heavily on technology (Wahyuni & Rezeki, 2024). However, there are some people who do not use technology until maximum in positive things such as increase knowledge of the student in education. For example, there are many students use technology just to play games or other things that are less useful (Picton et al., 2020). Meanwhile, technology can help the teachers to look for the materials, create a learning media, and other things that the teacher needs (Hidayat et al., 2022). So the researcher implemented discovery learning with used media named Wordwall game.

In the previous study, there are some studies that stated that implementing discovery learning. Discovery learning by using different approaches, different media, and different study (Masani et al., 2022) & (Nurkhojin et al., 2022). From all of the explanations before, this study was implemented in SMA PGRI 2 Jombang. This study because this school is one of the private schools that do not use technology in education until maximum. So, this study expected that technology can be useful in the learning process.

RESEARCH METHOD

This study used a pre-experimental study design, with pretest and posttest assessments to measure the effect of discovery learning by using Wordwall media on the student's learning motivation. This study used one group pretest and posttest design. The illustration of one group pretest and posttest was belows.

$O_1 \times O_2$

Information:

O1 : Pretest score

O2 : Posttest score

Steps of one group pretest and posttest in pre-experimental study design according to (Supriyadi et al., 2024) as illustration was follows.

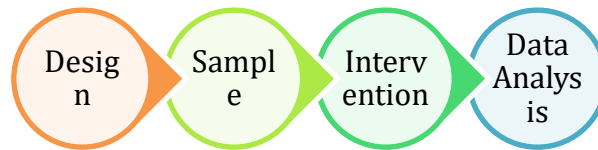


Figure 1. steps of one group pretest and posttest design

The population of this study was students of SMA PGRI 2 Jomabang with students of social science as an accessible population and students of eleventh grade as a sample consist 34 students. This study used a questionnaire for the student to collect data about student's learning motivation. After that, carried out analysis data by using SPSS v.26 with a significant 0.05. in the intervention, some tools are needed, namely a laptop/handphone and proyektor.

RESULT AND DISCUSSION

This study used one instrument is questionnaire. The questionnaire given by the researcher before and after the treatment step is usually called pretest and post-test. The results of the questionnaires for the students can strengthen the results of this research. The result of questionnaires before treatment got a percentage of 63% and after treatment got a percentage of 73%. Then, based on analysis data by using SPSS v.26 the result was significant $0.09 > 0.05$ which showed that there is significant learning motivation by the students.

Design

One group pretest and post-test design, pre-experimental research was used to measure the effect of a discovery learning model by using Wordwall media in the eleventh grade of social science, SMA PGRI 2 Jombang.

Sample

The target population of this study is the students of SMA PGRI 2 Jombang, the accessible population is students of social science and students of 11th grade consisting of 34 people as a sample. The researcher chose this school as the sample for this study because this school is one of the private schools that did not use technology in education until maximum. So, this study expected that technology can be useful in the learning process. In determining the sample of the study, the researcher must do three steps determine the target population, accessible population and the last is a sample. The sample of this study consisted of 34 students in eleventh grade who

enrolled Department of Social Science, SMA PGRI 2 Jombang. The eleventh grade of the department of social science has 4 classes with 120 students. This study chose students from the fourth social science class. The reason for that is that student learning motivation in English is lower than in other classes. The researcher chose eleventh grade because

Intervention

Pretest is a step to measure students' motivation before implementing Discovery learning by using Questionnaires that have a 5 Likert scale and the result of the questionnaires for the students before and after treatment carried out by the researcher was as follows. The students were counted by using the formula Likert scale based on Sugiono 2013 (Putra et al., 2021).

P = Percentage

f = Score

N = Score maximum

Pretest : $P = \frac{f}{N} \times 100 = \frac{1068}{1700} \times 100 = 63\%$

Posttest : $P = \frac{f}{N} \times 100 = \frac{1241}{1700} \times 100 = 73\%$



Figure 2. Wordwall media of this research

The picture shows that the students have tried to do their assignments by using Wordwall. Even if not all the students get a score of 10, most of the students so enthusiastic about learning English, especially in working the assignment by using Wordwall. But, there were the students who were less enthusiastic because they didn't have a quota to access the wordwall so they had to ask other friends for a hotspot to access it.

Data Analysis

This is the last step to measure the effect between pretest and posttest. This study used the level of significance of 0.05 Below are the criteria of motivation on learning that used to measure the

data collected. Significant 0.05 (Mianehsaz et al., 2022). Below is the result of the analysis data using SPSS V.26 two-tailed.

Table 1. Result of T-Test by using SPSS V.26

Pair 1	before treatment - after treatment	Mean	STD	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2- tailed)
					Lower	Upper			
					4.352 94	9.17798			

From the result of the test statistic t-test by using SPSS V.26 the rank of the posttest more higher than the rank of the pretest. So, can concluded that discovery learning by using Worwall is effective in increasing students' learning motivation. Based on the result of the Wilcoxon signed ranks test, and post-test motivation from the table of criteria motivation, the researcher can conclude that there is quite a good increase by obtaining a significant 0.09.

CONCLUSION

Based on data analysis, the result of the pretest shows that students' learning motivation more lower than the result of the posttest. From several steps that have been carried out by researchers, it can be seen that there has been an increase in students' learning motivation in learning English, began 63% became 73% even though it is only 10%. Then, by using SPSS V.26 the researchers got data significant that got was $0.09 > 0.05$. Those were can be concluded that there is a good effect on the student's learning motivation by using discovery learning and Wordwall media.

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