APPLICATION OF WORDWALL APPLICATION IN LEARNING *WECHSELPRÄPOSITION*

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Article Info

Abstract

The difference in grammatical characteristics between Indonesian and German is one of the factors that cause students to have difficulty in learning Grammar. One example is in the use of prepositions. In German, prepositions are followed by several cases, namely Präposition mit Akkusativ, Präposition mit Dativ, Präposition mit Genitiv, and Wechselpräposition, while in Indonesian it is different. To overcome this problem, a study in the use of the Wordwall application in Wechselpräposition learning was conducted. The aims of this study were to determine: 1) students' mastery in Wechselpräpositionen before using the Wordwall application, 2) students' mastery in Wechselpräpositionen after using the Wordwall application, 3) the differences in students' mastery in Wechselpräpositionen before and after using the Wordwall application, and 4) the effectiveness of the Wordwall application in Wechselpräpositionen learning. The design used in this study is a Nonequivanlent Control Group Design, which is part of the quasi experimental. The population of this research were all students of class XII SMA Negeri 3 Palu who studied German and the samples of this research were class XII IPS 2 as the experimental class and class XII IPS 3 as the control class. The techniques for collecting data in this study were a test questions and questionnaires in the form of a Likert scale. The test was carried out twice as pretest and posttest. The test consists of 30 questions and the questionnaire of 15 statements. Based on the result of the data analysis, it can be seen that: 1) students' mastery in Wechselpräpositionen in the experimental class and control class before using the Wordwall application can be categorized as "failed", 2) students' mastery in Wechselpräpositionen in the experimental class after using the Wordwall application is included in the "good" category, while the control class is in the "sufficient" category, 3) there is a significant difference in students' mastery in Wechselpräpositionen before and after using the Wordwall application. This can be seen from the average pretest and posttest scores of the experimental class of 37.50 and 68.34, and 4) the Wordwall

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application is effectively applied in Wechselpräpositionen learning. This is evidenced by the result of the t-test that shows the value of Sig. = 0.002 < 0.005. In other words, there is a significant difference in mastery between the experimental class and the control class. In addition, the result of the data processing is supported by the results of the questionnaire containing positive student responses to the use of the Wordwall application in Wechselpräposition learning. Therefore, the Wordwall application can be used as an alternative learning media in Wechselpräposition learning.

Keywords: *Learning media, Wordwall application, Wechselpräposition*

1. INTRODUCTION

The Covid-19 pandemic has resulted in changes in the learning implementation process. During the pandemic, learning is conducted remotely. Teachers interact with students through video conferences or through social media such as WhatsApp. The changes in the form of learning activities resulted in the emergence of obstacles and problems in the learning process, ranging from constraints related to internet networks, student attendance, to declining student learning outcomes.

Observations made during the implementation of the Education Unit Introduction Program (PPLSP) show that the decline in student learning outcomes is due to a lack of student interest and motivation. Students have difficulty in understanding *Grammatical* or grammatical material which is considered difficult. In addition, students also rarely repeat the material that has been learned so that student learning outcomes have decreased significantly during distance learning.

In German, there are four language skills that must be mastered, namely listening (*Hörverstehen*), speaking (*Sprechfertigkeiten*), reading (*Leseverstehen),* and writing (*Schreibfertigkeiten)*. To master the four language skills, a good mastery of grammar is required. This is because mastery of grammar is the basis for mastering language skills. However, the differences in grammatical characteristics between Indonesian and German make it difficult for students to understand grammatical materials.

One example of the difference in grammatical characteristics between Indonesian and German is about prepositions. Prepositions in Indonesian have many types which are divided into basic prepositions, affixed words, and combined prepositions, while in German, prepositions are distinguished by case, namely *Präposition mit Akkusativ, Präposition mit Dativ, Präposition mit Genitiv,* and *Wechselpräposition.*

Learning media is not always pictures or videos. Learning media can also be in the form of interactive and educational games. In this era of technological development, there are many interactive and educational games in the form of websites or applications, one of which is the Wordwall application.

Wordwall is an interactive game application with games that can be created and modified according to learning needs. Users can create games from a variety of available templates, such as true or false, group sort, game show qiuz, match up, word search and others. Wordwall also has a printable feature so that students who learn by using Wordwall can repeat the subject matter that has been learned without using the internet network. The application of this application is assumed

to be able to help students in learning German due to its various features. In this study, Wordwall application will be applied to German language learning, namely *Wechselpräpositionen* material.

2. LITERATURE REVIEW

The word media comes from the Latin medius which is the plural form of medium which means intermediary or introducer. Anitah (in Setiawan, Putria and Suryani, 2018, p. 2) states that "the media is generally an intermediary conveying messages/information from the message source to the message recipient" in line with this opinion, Roigk (2010, p. 6) argues "*Mit Medien werden im allgemeinen alle Verfahren und Mittel benannt, die zur Informationsverbreitung genutzt werden*". This quote roughly means 'media are all actions and tools used to disseminate information'. Based on these quotes, media can generally be interpreted as anything that is used as an intermediary to convey information or messages from the message source to the message receiver.

Media used in learning is referred to as learning media. Arsyad (2017, p. 4) argues "If the media carries messages or information that has instructional purposes or contains teaching purposes, the media is called learning media." In line with this opinion, Petko (in Petko, Kiel, Herzih, Maier & Sandfuchs, 2019, p. 1) explains that "*Im didacticchen Kontext lassen sich Medien als Werkzeuge der Speicherung, Übermittlung und*". Verfuchs, (2019, p. 1) explains that "In the *didactic context, we can use the media as a tool for teaching, Übermittlung und Verarbeitung von lern- und unterrichtsrelevanten Informationen verstehen, die individuelle Denk- und soziale Kommunikationsprozesse unterstützen können*". This quote roughly means 'in the context of learning, media can be understood as tools for storing, conveying and processing information relevant to teaching and learning that can support individual thinking and social communication processes.'

The development of learning media is inseparable from the times and technology. Developments in learning media give rise to a diversity of types and forms of learning media. Rusman (2018, p.145) categorizes learning media into five types, namely:

(1) Visual media is media that can only be seen using the sense of vision which consists of media that can be projected and media that cannot be projected which are usually in the form of still images or moving images.

(2) Audio Media, which is media that contains messages in auditive form that can stimulate the thoughts, feelings, attention and willingness of students to learn teaching materials. Examples such as sound cassette programs and radio programs.

(3) Audio-Visual Media, which is a combination of audio and visual or commonly referred to as see-and-hear media. Examples of this media are educational video/television programs, instructional video/television and sound slide programs.

(4) Presenting Media Groups which according to Donald T. Tosti and John R. Ball are grouped into seven types, namely: (a) the first group; graphics, printed materials and still images, (b) the second group; silent projection media, (c) the third group; audio media, (d) the fourth group; audio media, (e) the fifth group; live image / film media, (f) the sixth group; television media and (g) the seventh group; multimedia.

(5) Object Media and Computer-Based Interactive Media: Object media is a three-dimensional media that conveys information not in the form of presentation, but through its own physical

characteristics, such as its size, shape, weight, arrangement, color, function and so on. This media can be divided into two groups, namely actual object media and substitute object media, while computer-based interactive media is media that requires students to interact in addition to looking and listening. Examples of computer-based interactive media are interactive programs in computer-based learning.

Levie & Lentz (in Setiawan et al., 2018, p. 13) suggest four functions of learning media, especially visual media, namely:

(1) Attention function, which serves to attract and direct students' attention to concentrate on the content of the lesson related to the visual meaning displayed or accompanying the text of the subject matter.

(2) Affective function, serves to arouse students' emotions and attitudes through images or visual symbols.

(3) Cognitive function, serves to facilitate the achievement of goals to understand and hear information or messages contained in visual images or symbols.

(4) Compensatory function, functions to help students who are weak in reading or understanding text by providing context so that it is easier to organize and recall information in the text.

In foreign language learning, especially German, learning media functions as a tool to encourage the achievement of student competence in order to achieve the language skills set. In addition, learning media in German language learning also serves to motivate students in learning and provide new learning stimuli. Erdmenger (1997, p. 5) states the function of learning media in foreign language learning as "*Motivation, Motivierung zur Teilnahme und Mitarbeit im Unterricht und zum Lernen, Wissensvermittlung, Vermittlung von Informationen, also Sachwissen oder Verfahrenskenntnissen, Anleitung zur Arbeit, z.B beim Üben und Lösen von Aufgaben, Anreiz zum Sprechen, zum Besprechen von Sachverhalten, Meinungen und Gefühlen, Kontrolle, Feststellung von Ergebnissen des Unterricht.*"

The above statement can be interpreted that learning media has a function 1) to motivate students to participate and cooperate in class and motivate to learn, 2) to transfer knowledge and information in the form of both specialized knowledge and empirical knowledge, 3) as a guide to work, for example when practicing and doing assignments, 4) as a stimulus to talk, discuss problems, opinions and feelings, 5) as a control, determination of learning outcomes.

Wordwall is an interactive game application launched in 2016. The creation of this application was inspired by Wordwall media which was then developed into a web-based application, making it easy to use and accessible to everyone. Through this application, users can create interactive games that can be tailored to learning needs. This application provides 18 types of game templates that can be used and accessed for free, such as true or false, group sort, game show qiuz, match up, Word search, and so on. Users can switch from one game template to another easily. In addition, games that have been designed by users can be shared easily by copying the link provided. This app offers various features that can facilitate learning activities. One of the features is that this application can be accessed through the website or can be downloaded on Google Play for Android users and Apple Store for Iphone users. The games that have been made can also be downloaded and printed on paper, so that students who want to repeat the learning material do not need an internet network and the results of the game can be transferred to Microsoft Excel, this feature makes it easier for teachers to analyze student learning abilities.

Wechselpräposition is a preposition followed by two cases, namely *Akkusativ* and *Dativ* cases. This preposition is included in the *Locale Präposition* or preposition that is useful to show the position or location of an object or person. The case following a *Wechselpräposition* can be determined by the questions *Wo*? 'where?' or *Wohin*? 'where to?'. In this regard, Hauschild (2014, p. 150) states that "*man benutzt Wechselpräpositionen mit dem Akkusativ bei Verben der Bewegung, oder für eine Bewegung zu einem Ziel hin. Man fragt: wohin...? und man benutzt den Dativ, um einen Zustand oder eine Situation zu beschreiben".* The quote can be interpreted that 'one uses the *Wechselpräposition* with the *Accusativ* case when using verbs that indicate movement or to indicate movement towards a goal. One asks: where to...? and *Dativ* is used to show or describe a state or situation.' To be clear, the difference in the use of *Wechselpräposition* case can be seen from the subject. If the verb indicates a change of place, the case used is *Akkusativ*, whereas if the verb does not indicate a change of place, the case used is *Dativ*. Example that is given by Hauschild (2014, p. 150) is:

- *Ich habe das Buch auf den Tisch gelegt. (Akkusativ)*
  'I have put the book onto the table.'
- *Das Buch liegt auf dem Tisch. (Dativ)*
  'The book is lying on the table.'

The preposition that will be discussed in this study is *Wechselpräposition*. In this study, students are asked to use *Wechselpräposition* to describe *wo und wohin* 'where and where' when they are on vacation.

3. METHODOLOGY

This research is a quantitative research using the *Nonequivalent Control Group Design*. This design is included in the quasi-experimental research design or pseudo-experiment. Research using this design involves two sample groups, namely the experimental group and the control group. In addition, this design has similarities with Pretest-Posttest Control Group Design in pure experiments. However, what distinguishes the two is how to determine the experimental group and control group. In Nonequivalent Control Group Design, the experimental group and control group are not randomly selected. The steps of the Nonequivalent Control Group Design can be described as follows:

Table 1. Nonequivalent Control Group Design

| O_1 X O_2 |
| O_3 O_4 |

Source: Sugiyono (2019, p. 138)

Description:
O1 and O3: Pretest
X: Treatment given to the experimental group
O2 and O4: Posttest

In the picture above, it can be seen that in this design there are two groups that have been selected as experimental groups and control groups, then the two groups are given a pretest to determine the initial state of the group. In this study, the pretest was used to test students' mastery of *Wechselpräposition* material. After being given a pretest, the experimental group was then given treatment, while the control group did not get treatment in the form of applying Wordwall application. As the last step, both groups took the posttest as a tool to measure the ability of the experimental group after treatment and the ability of the control group.

The research was conducted at SMAN 3 Palu which is located at Jalan Dewi Sartika No.104, South Birobuli, Palu City, Central Sulawesi. The research was conducted in the odd semester of 2021/2022 academic year. The population of this study was all XII grade students who studied German at SMAN 3 Palu, which consisted of 5 classes with a total of 176 students and the samples used in this study were 2 classes, namely XII IPS 2 class as the experimental class and XII IPS 3 class as the control class. The number of students in each class was 25 people. In this study, the instruments used were three types, namely:

(1) About

The questions used in this study amounted to 30 questions in the form of fill-in questions divided into 3 parts. Before the questions were given to the sample as a research instrument, the questions were tested for validity and reliability. The test was given using the help of Google Form. The scale used in the assessment of questions is a scale of 1-100. The results of the calculation of this question can be categorized as follows.

Table 2. Assessment Criteria Table

Value	Description
80-100	Excellent
66-79	Good
56-65	Simply
40-55	Less
30-39	Failed

Source: Arikunto (2018, p.281)

(2) Questionnaire

The questionnaire used in this study is a questionnaire with closed questions that provide alternative answers to each question given. This helps respondents to answer more quickly and makes it easier for researchers to process and analyze the data that has been collected and the questionnaire used uses a Likert scale which is useful for measuring the attitudes, opinions, and perceptions of a person or group of people towards research variables. The questionnaire in this study consisted of 15 statements. The questionnaire was administered online using Google Form. In this questionnaire, four alternative answers have been provided for each statement. The four alternative answers can be described in the table below:

Table 3. Likert Scale Questionnaire Scores

Description	Score

Strongly Agree	4
Agree	3
Disagree	2
Disagree	1

Source: Riduwan and Sunarto (2017, p. 22)

(3) Learning Implementation Plan (RPP)

The lesson plan was used as an instrument in this study as a reference for the implementation of the learning process. The theme of the lesson plan is adjusted to the syllabus, namely *der Urlaub*. There are 3 lesson plans used in this study, namely RPP for treatment 1, RPP for treatment 2, and RPP for treatment 3. Teaching was conducted online using Google Meet.

4. RESULTS AND DISCUSSION

The following is the data of the research results in the form of pretest (X) and posttest (Y) about students' abilities in learning *Wechselpräposition*.

4.1 Students' Ability in Learning *Wechselpräposition* Before Treatment

The pretest results obtained by the experimental class showed the highest score of 55.5 and the lowest score of 28.5 from a maximum total score of 100 with an average score of 37.50. The pretest results in the control class showed the same results as the experimental class, namely the highest score of 55.5 and the lowest score of 28.5 with an average score of 39.42. Based on the table of assessment criteria according to Arikunto (2018, p. 281), the initial ability of students in both classes to master the *Wechselpräposition* is included in the failed category.

4.2 Students' Ability in Learning *Wechselpräposition* After Treatment

The posttest results in the experimental class showed the highest score of 82.5 and the lowest score of 49.5 with an average score of 68.34. This average value is included in the good category (Arikunto, 2018, p. 281), The posttest results in the control class showed the highest score of 73.5 and the lowest score of 40.5 with an overall average value of 60.18. Based on the assessment criteria according to Arikunto (2018, p. 281), the average value of the control class is included in the sufficient category.

4.3 Comparison of Student Learning Outcomes before and after Treatment

To determine the difference in student learning outcomes before and after treatment, first test the significance of the data using the t-Test. Before the test is carried out, the data obtained has been confirmed to be normally distributed and homogeneous.

a. Paired Sample t-Test

The basis for making decisions from this Paired Sample t-Test test, namely if the significance value (2-tailed) <0.05, then H_0 is rejected and H_a is accepted and if the significance

value (2-tailed) >0.05, then H_0 is accepted and H_a is rejected. The hypothesis that can be formulated in the Paired Sample t-Test test is as follows:

H_0 = there is no difference in the average learning outcomes of pretest and posttest

H_a = there is an average difference between pretest and posttest learning outcomes.

(1) Paired Sample t-Test of Pretest and Posttest Data of Experimental Class

The average value of the experimental class pretest results was 37.50 and the posttest was 68.34. The output of the Paired Sample t-Test calculation results with a success rate of 95% shows the results of the Sig value. = 0.000, which means the value of Sig. = $0.000 < \alpha = 0.05$ so that the null hypothesis is rejected and the alternative hypothesis is accepted. Thus, it can be concluded that there is a significant difference between the pretest and posttest scores of the experimental class, which means that there is an effect of using Wordwall application in learning *Wechselpräposition*.

(2) Paired Sample t-Test of Pretest and Posttest data of Control Class

The average value of the control class pretest results was 39.42 and the posttest was 60.18. The output of the Paired Sample t-Test calculation results with a success rate of 95% shows the result of the Sig value. = 0.000, which means the value of Sig. = $0.000 < \alpha = 0.05$ so that the null hypothesis is rejected and the alternative hypothesis is accepted. Thus, it can be concluded that there is a significant difference between the pretest and posttest scores of the control class.

b. Independent t-Test

The basis for decision making from the Independent Sample t-Test test, namely if the significance value (2-tailed) <0.05, then H_0 is rejected and H_a is accepted and if the significance value (2-tailed) >0.05, then H_0 is accepted and H_a is rejected. The hypothesis that can be formulated in the Paired Sample t-Test test is as follows:

H_0= there is no significant difference between the *Wechselpräposition* mastery ability of the experimental class and the control class.

H_i= there is a significant difference between the *Wechselpräposition* mastery ability of the experimental class and the control class.

$$H_0: \mu 1 = \mu 2$$
$$H_i: \mu 1 \neq \mu 2$$

The following are the results of the Independent Sample t-Test calculation using SPSS.

(1) Independent Sample t-Test Test of Pretest Data of Experimental and Control Classes

The calculation results show a significance value of 0.339 which means greater than 0.05. Thus, it can be concluded that there is no significant difference between the mastery ability of *Wechselpräposition* of the experimental class and the control class.

(2) Independent Sample t-Test Test of Posttest Data of Experimental and Control Classes

The calculation results show a significance value of 0.002, which is smaller than 0.05. Thus, it can be concluded that there is a significant difference between the ability to master the *Wechselpräposition* of the experimental class and the control class.

Based on the data processing carried out, it can be seen that the results of the Pretest data calculation of the experimental class and the control class have the same results. The Pretest results of both classes belong to the failed category and based on the Independent Sample t-Test test table, with a level of 95%, resulting in a Sig value. = 0.002 <0.05, which means there is a significant difference between the experimental class and the control class in mastering *Wechselpräposition*.

The results of this data processing show that the use of Wordwall application is effective in learning *Wechselpräposition*. The use of Wordwall application also received a positive response from students. This can be seen from the results of questionnaire processing which shows that the majority of students answered agree to the 15 positive statements given and these results are classified in the strong category according to Riduwan and Sunarto (2017, p. 23).

5. CONCLUSION

Based on the results of research data processing regarding the use of Wordwall application in learning *Wechselpräposition*, the following conclusions can be drawn: First, the initial ability of experimental and control class students in mastering *Wechselpräposition* is classified in the failed category. It can be seen from the average pretest result of the experimental class, amounting to 37.50 with the highest score of 55.5 and the lowest score of 28.5 from a total maximum score of 100. Likewise with the control class, the average pretest result was 39.42 with the highest score of 55.5 and the lowest score of 28.5. Second, the mastery of *Wechselpräposition* material of experimental class students after the use of Wordwall application increased from the category of not good to good. Based on the students' posttest results, the highest score was 82.5 and the lowest score was 49.5 with an average of 68.34. Meanwhile, the control class also experienced an increase from the category of not good to sufficient. The average value of the posttest results of the control class students was 60.18 with the highest score of 73.5 and the lowest score of 40.5. Third, there is a significant difference in the average posttest scores of the experimental and control classes. Based on the independent t-Test, the calculation results show that the significance value is 0.002, the amount of significance value is smaller than 0.05, which means that the average value of the experimental class is higher than the control class and there is a difference in mastery of *Wechselpräposition* material between experimental class students and control class students. Fourth, the results of data processing show that Wordwall application is effective in learning *Wechselpräposition*. In addition to improving student learning outcomes, the use of this application received a positive response from students. This statement is supported by the results of the student questionnaire whose response is classified into the strong category.

Based on the research results that have been presented previously, there are several suggestions that can be proposed that the results of calculations and data processing prove that the Wordwall application is effective in improving student mastery of *Wechselpräposition* learning. Therefore, this application can be used as a learning media in learning German, especially materials related to *Grammatik*. When you want to create a game in the form of a quiz in the Wordwall application, pay attention to the duration of the work time. Games with a short duration of working time make students become unfocused. Then for further research, researchers can use Wordwall application in overcoming other *Grammatical* learning problems such as *Konjungation*. In addition, this application can also be used in improving German language skills, such as *Schreiben*.

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