

# **A QUASI-EXPERIMENTAL STUDY ON THE USE OF THE BERLITZ METHOD TOWARDS THE STUDENTS' PREPOSITION MASTERY KHOIRUL WARISI<sup>1</sup>, EUSABINUS BUNAU<sup>2</sup>, EKA FAJAR RAHMANI<sup>3</sup>**

<sup>1,2,3</sup>UNIVERSITAS TANJUNGPURA

## **Abstract**

This research was conducted to investigate the effect of applying the Berlitz Method on Students' Preposition Mastery to eleventh-grade students of MA Raudhatul Ulum Kubu Raya. The sample of this research was the students of grade eleventh of MA Raudhatul Ulum Kubu Raya in the academic year of 2022/2023, which consisted of two classes. The total number of students was 30, divided into 15 students for the experimental class and another 15 students for the control class. The researcher used a multiple-choice test to collect the data. The test consisted of two types, namely pre-test and post-test. The data were analyzed by using the t-test formula. To know the normality by utilizing the Chi-Square formula, homogeneity by measuring F-formula, validity and reliability by exerting Kuder Richardson Formula-20 or KR 20. The experimental class was taught by using Berlitz Method while the control class was taught using the method used by the English teacher at that school. The result of the research showed that the value of t-observed was higher than the value of t-table ( $293 > 2,16$ ) at the level significance of  $\alpha = 0,05$  and the degree of freedom (df)= 13. The calculation concluded that applying Berlitz Method has a significant effect on students' preposition mastery or in other words the alternative hypothesis (Ha) was accepted.

**Keywords:** *Berlitz, Method, Preposition*

## **INTRODUCTION**

English is a global language. It means that English is used by people in almost all parts of the world to communicate with each other. In Indonesia, English is taught as a foreign language. It must be studied to master and develop knowledge, technology, and arts and to create good relationships with other countries. The position of English in Indonesia is a compulsory subject of school from elementary school to university level. English is a foreign language, but it plays an important role in this country. It proves that English is one of the subjects required for passing the National Examination for junior to senior high school. This situation showed how important English is. Therefore, it is expected that everyone should be able to master English.

There are four main skills in English, those are listening, reading, speaking, and writing. To be able to communicate in English, people learn not only the four skills but also learn the aspects of it. One of the important aspects of English is vocabulary (Ghorbanpour, 2016). Someone can comprehend what others say by having a lot of vocabulary so they can communicate well. The vocabulary itself is made up of several parts of speech, including nouns, pronouns, verbs, adjectives, adverbs, determiners, predicates, interjections, articles, and prepositions (Linnegar, 2015).

A preposition is a component that must be studied in every English Foreign Language (Abdelghani, 2017). The researcher has observed that many of the eleventh-grade students of MA Raudhatul Ulum Kubu Raya have difficulty using English prepositions. This was because the teaching method used was mainly carried out with one-way communication so that the learning situation is centred on the teacher. The teacher also taught using only source books or textbooks so that during the teaching and learning process the students only interact with the sourcebook and the teacher. Therefore, many bored students did not pay attention to the subject. Meanwhile, the researcher needs to think about the method to use in teaching English prepositions so that the students did not feel bored and to improve students' preposition mastery.

In this case, the researcher tried to offer and investigate a kind of variation that the method was expected to enhance the student's mastery of prepositions. The researcher assumed that Berlitz Method was the effective way to teach prepositions at MA Raudhatul Ulum Kubu Raya in the academic year 2022/2023. The Berlitz Method used the direct method and focused on using language as a tool for communication (Ramadani, 2017). The Berlitz Method provided conversation-style education based on listening and speaking. Therefore, in an organized class from the beginning, students were educated in the target language through a series of instructional guidance. The use of specific vocabulary by objects, clear instruction, pantomime, images, and a careful grammatical approach were some of the principles of the Berlitz Method.

## METHODOLOGY

The type of design used is quasi-experiment (Gay, et al. 2012). Quasi-experiment is the experimental situation in which the researcher assigns, but not randomly, participants to groups because the experiment cannot artificially create groups for the experiment (Creswell, 2012). In addition, the researcher applied pre-test and post-test design. Creswell explained that pre-tests provide a measure of some attributes or characteristics that were evaluated for participants in the experiment before receiving treatment. In the meantime, the post-test was a measure of some attributes or traits that were evaluated against the participants in the post-treatment experiment. The research design of this research can be illustrated as follows (Creswell, 2012):

**Figure 1. Research Design**

Group	Pre-test	Treatment	Post-test	Class
Experimental	T1	X	T2	XI IPA
Control	T1	∅	T2	XI IPS B

Where:

XI IPA = Experimental Group

XI IPS B = Control Group

T1 = Pre-test for experimental and control group

X = Treatment by using Berlitz Method

T2 = Post-tes for experimental and Control Group

## Population

The population of the research was the eleventh-grade students of MA Raudhatul Ulum Kubu Raya. There were 3 classes and the total number of students or populations was 60 students.

## Sample

Based on the total population above, the researcher took some samples of the population of the research. In this research, the researcher used a cluster random sampling technique. According to Gay et al. (2012) cluster random sampling technique is sampling in which groups, not individuals, all the members of selected group had similar characteristics.

Therefore, the researcher used two groups of students as the sample in this research. In selecting the sample, the researcher made a roll of papers consisting of class IPS A until IPA A. Then, the researcher took two rolls of paper. The experimental class and control class have been

known by the result in the paper.

### **The Variable of the Research**

A variable is a trait or quality of an individual or an organization that may be measured or observed by a research study that differs between study participants or research organization. In this study, there were two variables: an independent variable and a dependent variable. The independent variable is one that the study has chosen to analyze its impact on the relationship with the dependent variable. In this study, two factors were involved:

1. Independent Variable

The use of the Berlitz Method in teaching preposition mastery

2. Dependent Variable

The student's achievement in preposition mastery

### **Data Collecting Technique**

For collecting data, this research used a test to collect the data. The test divided into two tests they were:

1. Pre-test

A pre-test was administrated to the sample before doing treatment. The pre-test was given to the experimental and control class.

2. Treatment

The experimental and control group have been taught the same material, which was prepositions. The experimental group was taught by applying Berlitz Method, while the control group by using the method used by the English Teacher.

3. Post Test

After the treatment was done and pre-test was given to the students. The post-test have been given after the treatment was completed which was done in two meetings.

### **Instrument of Collecting Data**

The instrument for collecting data was usually important in every scientific research. In this research, the researcher used the Preposition test as the instrument for collecting data and it was administered to both experimental and control classes. The Preposition test have been given to find out the score of experimental and control classes and to see whether the students' Preposition mastery after teaching by using Berlitz Method in the experimental class was significant or not.

The test was about multiple questions. 30 questions have been answered by the students. Every three questions have a score 'of 10'. So, 30 questions have a '100' score if the students can answer all the tests correctly.

## Data Analysis

This research used quantitative analysis techniques. As for technique data analysis used are:

### 1. Descriptive Statistics

Descriptive statistical methods are a set of methods that attempt to make a summary and description of the data that has been collected and allow the researcher to create a description of the value associated with a simple index number.

The descriptive analysis here was intended to answer the first and second research questions. In addition, descriptive statistical analysis was used to describe the learning outcomes obtained by students, both Experimental Class as well as the Control Class. As for the steps of compiling the results data observations were as follows:

#### 1) Define Ranges

$$R = X_t - X_r$$

Description:

R = Range

$X_t$  = Highest data

$X_r$  = Lowest data

#### 2) Specifies the number of interval classes

$$K = 1 + 3,3 \log n$$

Description:

K = interval class

n = the number of observation

#### 3) Calculates the length of the class intervals

$$p = \frac{R}{K}$$

Description:

p = interval class length

R = score range

K = interval class

#### 4) Percentage (%) average score with the formula:

$$P = \frac{f}{N} \times 100\%$$

Description:

P = Percentage

f = the frequency

N = total sample

5) Mean score

$$\bar{X} = \frac{\sum fiXi}{\sum fi}$$

Description:

$\bar{X}$  = Mean score

$fi$  = Frequency for variables

$Xi$  = Variable interval class sign

6) Calculating Standard Deviation

$$S_D = \sqrt{\frac{\sum fi (Xi - \bar{X})^2}{n - 1}}$$

Description:

$S_D$  = Standard Deviation

$fi$  = Frequency of variables

$Xi$  = Variable interval class sign

$\bar{X}$  = Mean Score

$n$  = the number of population

7) Creating a score category table

The guidelines used for categorizing data on the results of participation in preposition learning material obtained by students are as follows:

**Figure 2. Learning outcomes categorization formula**

$X < (\mu - 1,0 \sigma)$	Low
$(\mu - 1,0 \sigma) \leq X < (\mu + 1,0 \sigma)$	Medium
$(\mu + 1,0 \sigma) \leq X$	High

Description:

$X$  = Students' score

$\mu$  = Mean Score

$\sigma$  = Standard Deviation

2. Inferential Statistics

Inferential statistical analysis was used to test the proposed research hypothesis. Inferential statistics or probability is a statistical technique used to analyze sample data and the results applied to the population. Inferential statistical analysis was used to test the proposed research hypothesis. The steps taken were as follows:

1) Normality Testing

$$\chi^2_{observe} = \sum_{i=1}^k \frac{(O_i - E_i)^2}{E_i}$$

Description:

$x^2$  = Calculated Chi-square value

$O_i$  = Frequency of observations

$E_i$  = Expected Frequency

$K$  = the number of classes

Normal test criteria if  $x_{observe}^2$  is smaller than  $x_{table}^2$  where  $x_{table}^2$  is obtained from list  $x^2$  with  $dk = (k-3)$  at the significance level  $\alpha = 0,05$ .

#### 2) Homogeneity testing

To test the homogeneity of the conceptual understanding test data, the F test used the following formula:

$$F = \frac{\text{Biggest Variant}}{\text{Smallest Variant}}$$

The test criteria are if  $F_{observe} < F_{table}$  at the real level with  $F_{table}$  is obtained from the F distribution with the respective degrees of freedom corresponding to the  $dk$  in the denominator at the level of  $\alpha = 0,05$ .

#### 3) Validity

To find out the validity of the test, the writer used correlation product moment following the formula (Suharsimi, 2006):

$$r_{xy} = \frac{\sum xy}{\sqrt{\sum x^2 \sum y^2}}$$

Where:

$r_{xy}$  = correlation product moment  $x$  and  $y$

$\sum xy$  = total  $x$  and  $y$

$x^2$  =  $X$  quadrant

$y^2$  =  $Y$  quadrant

#### 4) Reliability

The reliability of the test can be found using various formulas, one of which is the Kuder Richardson formula-20 or KR 20. The KR 20 formula is as follows:

$$r_{11} = \left( \frac{n}{n-1} \right) \left( \frac{s^2 - \sum pq}{s^2} \right)$$

Description:

$r_{11}$  = overall test reliability

$p$  = the proportion of students who answered the items correctly

$q$  = the proportion of students who answered the items incorrectly

$\sum pq$  = the number of products multiplied between  $p$  and  $q$

$N$  = total items

$S^2$  = Standard Deviation

The variance formula used to calculate reliability is as follows:

$$S^2 = \frac{\sum x^2 - \frac{(\sum x)^2}{N}}{N}$$

Description:

$s^2$  = the variance is always written as a square because the standard deviation is squared

$(\sum x)^2$  = the square of the total score obtained by students

$\sum x^2$  = the sum of the squared scores obtained by students

$N$  = the total of students

### 3. Hypothesis Testing

- 1) Determine the formulation of the hypothesis:

$$H_0: \beta = \beta_0$$

$$H_a: \beta \neq \beta_0$$

- 2) Significant level ( $\alpha$ ) and t table values

$$\alpha = 5\%$$

$$= 0,05 \rightarrow \alpha/2$$

$$= 0,05/2$$

$$= 0,025$$

- 3) Testing criteria

$$H_0 \text{ accepted if } -t_{\alpha/2} \leq t_0 \leq t_{\alpha/2}$$

$$H_0 \text{ rejected if } t_0 < -t_{\alpha/2} \text{ or } t_0 > t_{\alpha/2}$$

- 4) Statistical testing

$$t_0 = \frac{b - \beta_0}{S_b}$$

- 5) Conclusion

Conclude whether  $H_0$  was accepted or rejected.

## RESEARCH FINDINGS

1. The differences in students' preposition mastery between the students who were taught using the Berlitz method and those who were not

- a) Description of Experimental Class pre-test data

**Figure 3. Presentation of pretest results of Experimental Class Students**

Score	Completeness	Frequency	Presents
-------	--------------	-----------	----------



≥ 60	Completed	2	13%
≤ 60	Not Completed	13	87%
<b>Total</b>		<b>15</b>	<b>100%</b>

Based on the table above, it was known that most of the Experimental Class students were declared incomplete in the pre-test. From the results, it could be concluded that overall students had not been able to understand the material about the Preposition of Place and Time (at, in, on).

b) Description of Experimental Class post-test data

**Figure 4. Presentation of post-test results of Experimental Class Students**

Score	Completeness	Frequency	Percentage
≥ 60	Tuntas	15	100%
≤ 60	Tidak Tuntas	0	0%
<b>Total</b>		<b>15</b>	<b>100%</b>

Based on the table above, it was known that most of the Experimental Class students were declared complete in the post-test. From the results, it could be concluded that overall students had been able to understand the material about the Preposition of Place and Time (at, in, on).

c) Description of Control Class Pre-test data

**Figure 5. Presentation of pretest results of Control Class Students**

Score	Completeness	Frequency	Percentage
≥ 60	Completed	0	0%
≤ 60	Not completed	15	100%
<b>Total</b>		<b>15</b>	<b>100%</b>

Based on the table above, it was known that all of the Control Class students were declared incomplete in the pre-test. From the results, it could be concluded that overall students had not been able to understand the material about the Preposition of Place and Time (at, in, on).

d) Description of Control Class post-test data

**Figure 6. Presentation of posttest results of Control Class Students**

Score	Completeness	Frequency	Percentage
≥ 60	Completed	13	86,7%
≤ 60	Not completed	2	13,3%
<b>Jumlah</b>		<b>15</b>	<b>100%</b>

Based on the table above, it was known that most of the Control Class students were declared as completed in the post-test. From the results, it can be concluded that overall students have been able to understand the material about the Preposition of Place and Time (at, in, on).

## 2. Normality of the Test

### a) Normality testing of Pre-test in Experimental Class (XI IPA A)

Based on the normality test distribution table in Experimental Class (XI IPA A) above by using the chi-square test, the score was obtained that  $X^2_{hitung} = -156,38$  and  $X^2_{table}$  on significance 0,05 is 7,87. So, it could be concluded that the pre-test data in Experimental Class (XI IPA A) was normally distributed because  $X^2_{hitung} < X^2_{table}$ .

### b) Normality testing of Post-test in Experimental Class (XI IPA A)

Based on the normality test distribution table in Experimental Class (XI IPA A) above by using the chi-square test, the score was obtained that  $X^2_{hitung} = -32,904$  and  $X^2_{table}$  on significance 0,05 is 7,87. So, it could be concluded that the post-test data in Experimental Class (XI IPA A) was normally distributed because  $X^2_{hitung} < X^2_{table}$ .

### c) Normality testing of Pre-test in Control Class (XI IPS B)

Based on the normality test distribution table in Control Class (XI IPS B) above by using the chi-square test, the score was obtained that  $X^2_{hitung} = -27,52$  and  $X^2_{table}$  on significance 0,05 is 7,87. So, it could be concluded that the pre-test data in Experimental Class (XI IPS B) was normally distributed because  $X^2_{hitung} < X^2_{table}$ .

### d) Normality testing of Post-test in Control Class (XI IPS B)

Based on the normality test distribution table in Control Class (XI IPS B) above by using the chi-square test, the score was obtained that  $X^2_{hitung} = -61,76$  and  $X^2_{table}$  on significance 0,05 is 7,87. So, it could be concluded that the post-test data in Control Class (XI IPS B) was normally distributed because  $X^2_{hitung} < X^2_{table}$ .

## 3. Homogeneity Test

The testing criteria are if  $F_{hitung} \leq F_{tabel}$  then the data is categorized as homogeneous and if  $F_{hitung} \geq F_{tabel}$  then the data is categorized as not homogeneous. Based on the results of the analysis performed then the variance of the Experimental Class XI IPA A ( $S_1^2$ ) = 685,734 was obtained while for ( $S_1$ )=10,25524 and for the value of the variance of the Control Class XI IPS B ( $S_2^2$ ) = 617,734 while ( $S_2$ )=10,0499. So, it could be obtained that the value of the test value ( $F$ ) = 1,11008 at a significance level of 0,05. Because  $F_{hitung}$  (1,11008)  $\leq F_{tabel}$  (2,48) then  $H_0$  was accepted which means the data was homogeneously distributed.

## 4. Validity of the Test

According to Suharsimi (2006), the ranges of validity are:

Classification	Score
Excellent	0,800 – 1,00
Good	0,600 – 0,800
Fair	0,400 – 0,600
Poor	0,200 – 0,400
Very Poor	0,00 – 0,200

$$r_{xy} = \frac{\sum xy}{\sum x^2 \sum y^2}$$

$$r_{xy} = \frac{45278}{672010}$$

$$r_{xy} = 0,067$$

Based on the validity test distribution table in Experimental-Control Class above, the score was obtained = 0,067. So, it could be concluded that it was categorized as "Good".

## 5. Reliability of the Test

The KR 20 formula is as follows:

$$r_{11} = \left( \frac{n}{n-1} \right) \left( \frac{S^2 - \sum pq}{S^2} \right)$$

$$n = 30 \text{ items}$$

$$N = 30 \text{ students}$$

$$\sum x^2 = 6062$$

$$\sum x = 300$$

To find KR 20 is to find the variance value (S<sup>2</sup>) first, and after that, then the KR-20 formula could be used. Manual calculation of variance and KR-20 or r<sub>11</sub> can be seen below:

$$S^2 = \frac{\sum u^2 - \frac{(\sum u)^2}{N}}{N}$$

$$S^2 = \frac{6062 - \frac{(300)^2}{15}}{15}$$

$$S^2 = \frac{6062 - \frac{90000}{15}}{15}$$

$$S^2 = \frac{6000}{15}$$

$$S^2 = 400$$

So, after getting the variance value ( $S^2$ ) then look for the KR-20 value or its reliability:

$$\begin{aligned}r_{11} &= \left(\frac{n}{n-1}\right) \left(\frac{S^2 - \sum pq}{S^2}\right) \\&= \left(\frac{30}{30-1}\right) \left(\frac{400 - 5,62}{400}\right) \\&= (1,03) \left(\frac{394,38}{400}\right) \\&= 1,03 \times 0,98 \\&= 1,01\end{aligned}$$

From these calculations, the reliability result was obtained = 1,01, if measured from the reliability interval, it was included in the "Very high" category. So, the conclusion of the overall test reliability above was "Very High".

## 6. Hypothesis testing

Looking for a t-table using the t distribution table with a significant level  $\alpha = 0,05$  and db = N-2:

$$\alpha = 5\% = 0,05 \text{ or } \frac{0,05}{2} = 0,025$$

$$db = N - 2$$

$$= 15 - 2$$

$$= 13$$

$$T_{\text{-table (13)}} = 2,16$$

Determine the statistical test:

$$T_0 = \frac{b - \beta_0}{Sb}$$

$$T_0 = \frac{5,86}{0,02}$$

$$T_0 = 293$$

Define conclusions:

Based on the results of the hypothesis above,  $t_{\text{count}} = 293$ , so  $t_{\text{count}} > t_{\text{table}}$  ( $293 > 2,16$ ), then  $H_0$  is rejected. Thus this test decided to reject  $H_0$  and accept  $H_a$ , which means that there was a significant effect on Students' Preposition Mastery Eleventh Grade Students of MA Raudhatul Ulum Kubu Raya.

## DISCUSSION

Based on the research that has been done, the researcher succeeded in finding research

results which showed that there were significant differences between students who were given treatment using the Berlitz method and students who were given treatment using the method used by the English teacher. This is evidenced by the results of the average score of students in the experimental class on the pre-test that has been given, namely 44,66 and the average score on the post-test that has been given namely 66,86. While the results of the average score of students in the control class in the pre-test that has been given is 39,53 and the average score in the post-test that has been given is 61,46.

Based on the research method in Chapter III of this research, the writer conducted a quasi-experimental research design. In this research, the first step was administering of pre-test by giving multiple choices of the prepositional test. A pre-test was given to the 30 students of the experimental and control group to measure their ability before being given treatment. The pre-test was given to know the basic competence and to know their earlier knowledge before they got treatment. After getting the result of the pre-test the two groups are given a different treatment. The experimental class got a treatment by using the Berlitz method and the control class by using the method used by the English teacher. In the last step, the writers were administering a post-test. The post-test was used to measure the student's ability after they were given treatment. The post-test was conducted in the last meeting and only one meeting.

From the explanation above, it is very appropriate with the result that in the teaching and learning process using the Berlitz method is effective, especially in teaching prepositions. Based on research finding in this research that there are any significant differences in students' preposition mastery before and after being taught using the Berlitz Method. Thus, it can be concluded that the effectiveness of using the Berlitz as a method for the students' preposition mastery is effective in teaching the learning process on the eleventh grade MA Raudhatul Ulum Kubu Raya in the Academic Year 2022/2023.

## **CONCLUSION AND FURTHER RESEARCH**

This research used a quantitative research method, including the total sample approach for sampling and pre-test and post-test data collecting, in which students were given the multiple choices test. The Berlitz Method encourage the teaching and learning process. Based on the result of the previous chapter's data analysis, it was that  $H_a$  is accepted and  $H_0$  is rejected, which suggests that the Berlitz Method significantly affect students' preposition mastery of the eleventh-grade students of MA Raudhatul Ulum Kubu Raya. The research concludes that the Berlitz Method can make the learning process more exciting based on data analysis.

## **REFERENCES**

Abdelghani, A. (2017). The difficulties encounter (ESP) students in using English prepositions

- of time. *International Journal of Humanities Social Sciences and Education (IJHSSE)*, 11(2), 214 – 222.
- Arikunto, Suharsimi. (2007). *Prosedur penelitian suatu pendekatan praktik*. Cet. XIII; Jakarta. Rineka Cipta.
- Astri. (2018). *Teaching prepositions by using pictures at the eighth grade of MTs DDI Masamba*. IAIN Palopo.
- Creswell, J. W. (2012). *Educational research: planning, conducting and evaluating quantitative and qualitative research*.
- Darmadi, Hamid. (2008). *Medode penelitian pendidikan*. Jakarta. Erlangga.
- Gay, L.R., Mills, G.E. and Airasian, P. W. (2012). *Educational research: competencies for analysis and application*. Upper Saddle River.
- Ghorbanpour, E & Abbasian R. G. (2016). The Effect of Flash Card-Based Instruction on Vocabulary Learning by EFL Learners. *International Journal of Humanities and Cultural Studies*.
- Kurniawan, Singgi S. (2022). The effectiveness of using the Berlitz Method in teaching vocabulary in the tenth grade of SMA PGRI Sungguminasa. *BEE Journal*.
- Larsen, Diane & Freeman. (2000). *Techniques and principles in language teaching: 3rd edition*. U.K. Oxford University Press.
- Linnegar, J., Steynberg, M., Jeffery, B., Hoepner, L., & Hathorn, B. (2015). *English grammar*. South Africa: Oxford University Press.
- Maha, F.H. (2017). *The effect of applying the Berlitz method on students' conjunction mastery at Islamic boarding school Darul Hikmah TPI Medan*. UIN Medan. North Sumatera.
- Octavia, Sonia. (2019). *Grammatical errors in using prepositions of time and place in narrative text writing at the first-grade students' of MAN 1 Bandar Lampung in the academic year of 2018/2019*. Universitas Raden Intan. Lampung.
- Ramadani, Suci. (2017). *The effect of applying the Berlitz method on the student's achievement in narrative text*. Universitas Muhammadiyah Sumatera Utara. Medan.
- Sugiyono, (2013). *Metode penelitian kuantitatif-kualitatif dan R&D*. Alfabeta. Bandung.
- Suprpto, J. (2008). *Statistik teori dan aplikasi*. Cet. VII. Jakarta Erlangga.
- Taufiq, Wahyu & Santoso, Dian R. 2020. *Learning advanced English grammar*. Umsida Press. Sidoarjo.
- Zaini, Hisyam. (2008). *Strategi pembelajaran aktif*. Yogyakarta. Insan Madani.