

# Effectiveness of Open Educational Resources in Increasing Japanese Writing Skills

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## Abstract.

*The purpose of this study was to obtain the effectiveness of the use of OER on Japanese writing skills. The research method uses a quantitative experimental approach with one pretest and posttest design. The design of this experimental method is quasi-experimental. The research was conducted in a writing class for the 2021-2022 academic year in the Japanese Language and Culture study program at a private university in Jakarta. The participants involved were students in a Japanese writing class of 50 students. So, the data is taken from observation and tests. The data analysis technique uses the t-test: Two-Pair Sample for the Mean. The results of the study concluded that  $t_{stat} < t_{table}$  ( $-27.1284 < 2.0009$ ). It can be said that  $H_0$  is rejected and  $H_1$  is accepted. It means that OER is effective for use in writing classes. It gave an impact on developing story ideas. The results of this study have implications for teachers that learning resources are varied and utilized through internet access.*

**Keywords:** OER, Japanese and Writing.

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## I. INTRODUCTION

The development of science and technology that has been widely used for the process of providing education provides convenience and improves the quality of the teaching and learning process. One of the most widely used access is open educational resources or what is known as open education resources (OER) using the internet network[1]. This means that OER is a source of authentic teaching materials which can take various forms, such as YouTube[2], [3]. Videos for speaking practice have an impact on oral fluency [4], [5]. YouTube is very effective in improving students' abilities[6]. So, OER can be in the form of audio and visual which can be accessed freely using the internet[7]. Thus, learning resources can be varied and students can collect various kinds of information during the learning process. As in the writing class for Japanese language class students. Students in a Japanese language class at a private university in Jakarta often lack information to develop their writing. From the results of interviews with the learning process in the 2020-2021 academic year, it was found that the problem that is most urgent to find solutions is the provision of learning resources because student learning resources are limited and they are less creative in using learning resources. This can also be seen in the results of developing student-written stories. Moreover, learning to write for students has a different orientation. Because writing skills can be used in their daily lives. Therefore, students who want to be successful in school, work and daily life must learn to write well and have good writing skills. So, they have to practice regularly because writing skills are acquired through practice. In fact, many graduates in educational institutions around the world have not achieved this goal in writing classes, so that students have not acquired writing skills that meet the needs of society [8].

From these problems, testing learning resources is a concern for improving students' abilities to develop their Japanese writing. Due to the limited ability to design learning resources independently, this research is therefore focused on using OER as a learning resource. OER has become a provider of learning resources in the administration of education[9]. Many studies have taken advantage of this and had an impact on student learning outcomes, apart from that students and lecturers can save costs in providing teaching materials[10]. Learning systems have also become student-centred [11], [12]. Even the University of Pennsylvania has used the OER program as a learning resource in class and provided various themes or topics in German class. This OER learning resource can also be used in online or asynchronous classes[13]. OER interventions are very helpful in the use of students' communicative strategies[14]. Moreover, learning

resources are often difficult to provide by lecturers according to learning needs. The technical ability to use tools and equipment to create digital learning resources is also one of the barriers teachers face [15]. Therefore, teachers can use OER as a learning resource. Thus, the purpose of this study was to obtain the effectiveness of the use of OER on Japanese writing skills. The results of the research are also expected to contribute to the teaching and learning of writing in Japanese classes, particularly to students' understanding of the diversity of OER as a learning resource that can be accessed free of charge.

## II. METHODS

The research method uses a quantitative experimental approach with one pretest and posttest design. The design of this experimental method is quasi-experimental because the dependent variable is measured in one group of participants before the pretest and after the posttest treatment. This type of research is used to minimize problems that arise during the research process and in this study, there is no control or comparison group [16][17]. So, this research was conducted to get the influence or impact of using OER on improving the quality of students' Japanese writing from the aspects of Japanese writing that were assessed. This research is not only oriented towards finding improvements in Japanese writing skills but also toward knowing the percentage of improvement for each writing component adjusted to Brown's reference theory[18].

The research was conducted in a writing class for the 2021-2022 academic year in the Japanese Language and Culture study program at a private university in Jakarta. The participants involved were students in a Japanese writing class of 50 students. So, the data is taken from observation and tests. Observations were made on the teaching and learning process to see the development of students' attitudes in using OER when writing activities were carried out. Essay tests are used to find out the development of Japanese writing skills and aspects of each piece of writing. The aspects of writing that are assessed are (1) organization (introduction, content and conclusion), (2) logical idea development, (3) grammar, (4) punctuation, spelling, and mechanics, and (5) style and quality of expression. The data analysis technique uses the t-test: Two-Pair Sample for the Mean.

## III. RESULT AND DISCUSSION

The results of the Japanese writing tests that have been analyzed are presented in two forms, namely the results of the t-test and the percentage of achievement in each aspect of writing so that the data presents the development of students' writing progress seen from aspects of writing assessment. The following table shows the percentage of each aspect of writing that has been analyzed.

**Table 1.** Percentage of Students' Japanese Writing Aspect

Aspects		Indicator		%
1	Organization	1.	Introduction	27%
		2.	Body	
		3.	Conclusion	
2	Logical development of ideas	1.	Content	20%
3	Grammar	1.	Construction is simple and complex but effective	20%
		2.	Syntax rules	
4	Punctuation, spelling, and mechanics	1.	Punctuation and spelling	13%
		2.	Writing rules	
5	Styles and quality of expression	1.	Diction (word choosing)	20%
		2.	Useful word, and	
		3.	Choosing and expression, and vocabulary construction.	

Table 1 shows that the ability to organize writing from the initial paragraph to the conclusion is very good and has a well-developed storyline. The aspects of developing ideas, grammar, and construction of diction are also good with a percentage of 20%. While the aspects that are still low are the use of punctuation, spelling, and mechanics. Students often use punctuation marks incorrectly, spelling is lacking letters so that the words used have different meanings. From these aspects of writing it can be concluded that students have

used OER as a source of reference or reference for developing writing. Lecturers provide various OER website links that can be accessed free of charge. The results of the t-test also show an increase in the value of learning to write Japanese from and before using OER.

**Table 2.** The result of the T-Test

	<i>Pre-test</i>	<i>Post-test</i>
Mean	56.4	84.86
Variance	46.85714	15.2249
Observations	50	50
Pearson Correlation	0.132033	
Hypothesized Mean Difference	0	
df	49	
t Stat	-27.1284	
P(T<=t) one-tail	1.79E-31	
t Critical one-tail	1.676551	
P(T<=t) two-tail	3.58E-31	
t Critical two-tail	2.009575	

The results of the t-test data analysis show the score of t Stat < t-table ( $-27.1284 < 2.0009$ ), this score provides information that  $H_0$  is rejected and  $H_1$  is accepted. So, OER is effective to use in writing class. It gave an impact on the development of story ideas. The average value also increased from 56.4 to 84.86. This means that the results of the student's writing test are quite good and show a significant increase compared to before using OER. This can provide an understanding that OER is quite effective for Japanese writing classes. OER is of equal or higher quality than textbooks[19]. So, OER can be adopted as a learning resource that is easily accessible and costs nothing so that students do not need to buy textbooks to get information. Educational institutions can develop OER into an open source of learning for students[20]. In addition, OER benefits learning by providing access to course materials[21]. The results of other studies show that the use of OER leads to increased student performance, the time needed to search can be done at any time, and selecting, editing, and applying OER are found to be the biggest challenges in using OER[22].

There are many advantages to using OER, besides saving on the cost of providing books, students can also access materials at OER anywhere and anytime, moreover the teaching materials needed at OER are abundant according to current needs. Students can take advantage of mobile access to access open resources and become independent learners[23]. It can be used in professional writing classes[24]. The results of this study illustrate that the use of appropriate and varied learning resources can make it easy for students to increase knowledge and information that is very useful in their learning experience. Moreover, writing activities require the knowledge of writers to develop their writing. In learning to write, students must have a sense of optimism as an idea about writing culture in the classroom[25]. This finding is also in line with other studies which show that most students have a positive perception of using OER to improve their writing skills. It is very important to maximize the use of OER from various aspects, including quality, value, cognitive, affective, and course quality, especially to increase their perception of the use of OER in improving writing skills[26]. Moreover, writing activities are a very useful provision for graduates when they are in their social life. Because from the data findings, it can be seen that students have a thought process for an idea to be developed into a story and put the right words to support the story. When students often read using OER it makes it easier for them to develop their writing.

#### IV. CONCLUSION

The results of the data analysis concluded that OER had a fairly good impact on students' Japanese writing skills. From every aspect of writing that has been studied, it can be seen that the development of student writing is getting better before directing students to use OER. The t-test data, also shows that there are differences in student writing results before and after using OER as a reference source in writing classes. The average value has also increased quite well. The results of this study have implications for teachers that

learning resources are varied and utilized through internet access. Moreover, many learning resources can be accessed free of charge so as not to burden students. In addition, the results of this study also recommend tertiary institutions facilitate lecturers in developing online learning resources such as websites specifically for writing materials. Lecturers can also conduct research related to certain OER learning resources that can be used for learning other Japanese language skills. As future researchers, they can develop this research to create interactive multimedia for learning to write Japanese.

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