The Positive Impact of Internet-Based Resources to Encourage Students' Vocabulary

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Abstract

Internet-Based Resources is one of the solutions for increasing an aspect of English proficiency. This study aimed at knowing the Internet-Based Resources in their learning and to encourage English students' vocabulary. The method used in this research is experimental research. Sample of this study consisted of English students including 26 students as the experimental group and 26 students as the control group. Each class had five sessions that must be completed, those were treatments for three times, one post-test, and one pre-test. The result found that IBR is effective for students' vocabulary in writing an interesting, exciting to use and in combining their ideas with new words or vocabulary easier. The mean of the post-test in the control group was 73.53, on the other hand, in the experimental group was 83.12; the degrees of freedom totaled 25, the sig. (2-tailed) was 0.000, and the standard deviation was 8.500. The computation shows that the t-test has a higher score. Thus, it can be concluded that there is a positive impact of this method to encourage students' vocabulary in English Language Program. The vocabulary mostly achieved for pre-test and post- test in the control group was 412 to 370. However, in the experimental group, the pre-test and post-test ranged around 355 to 470. The increasing ratio of the experimental groups in acquiring vocabularies over Internet-Based Resources was 13.90%.

Keywords: Internet-Based Resource, English Vocabulary, English Language Learning

INTRODUCTION

English language is established by the government as the first foreign language for all level Education in Indonesia including English Student (Ahmad, 2014). Teaching English as Foreign Language (TEFL) is really challenging for the teachers because English is not used at home, market, and daily activity for the students. So, they need to create innovation and up-to-date teaching aids (Mubarak et al., 2016).

Although the advances of technology help the teachers in designing teaching materials instruction, some English teachers still used conventional teaching aids such as chalk, talk, board, textbook, teachers, individual work rather than group collaboration, and prefer memorization rather than understanding (Nerantzi, 2020).

Some rather circumstances make it difficult for individuals to explore their ideas. As a result, action must be taken to deal with this problem.

Recently, studying a foreign language has certainly benefited from the technology (Carraro, 2021). Studies show that using the Internet as a practical guide or practical technology has a positive impact on students (Kennedy,2010). Criollo (2021) already stated that there are a lot of other helpful studies that look into the way the internet impacts learning because it offers so many options to locate relevant information. Thus, Internet tools will be used as instructional tools in EFL classrooms to improve learning, and students have gained substantial advantages from Internet technology.

Based on the observation conducted on 10 September 2022 at English Language Education, Universitas Ahmad Dahlan (UAD) Yogyakarta, 42 participants out of 52 students feel that their writing skills are not sufficient yet, because they still have difficulties in building sentences and choosing appropriate vocabulary. Moreover, they lack paraphrasing exercises, so they frequently do paste from the resources as proven from the journal review feedback of the 52 only 48 were able to get into reputable journals submitted to the scopus or sinta index journal.

Klimoya (2014) stated that there are some criteria of vocabulary, including the capabilities to write and appropriate sentences (language use), the potential to use correct punctuation and spelling (mechanical skill), the abilities to have creative thinking and develop ideas. Hence, the potential to include all irrelevant information (treatment of content), the ability to manipulate ideas and paragraphs, the competence to write in a collaborative capacity, and the capacity to access language effectively (stylistic skills) (judgment skill) (Paul Deane, 2014). Perhaps, those English students of Universitas Ahmad Dahlan (UAD) who have bad writing skills may not master all the above criteria.

Nowadays, the internet plays a crucial role in people's daily lives, including classroom instruction and learning. Consequently, utilizing online resources for foreign language studying and training will improve students' writing abilities. The previous studies found that there is a significant improvement of students' writing skill by using Online Discussion Forums (ODF), (Akmal and Hariguna, 2019). Uzun (2012) states these online resources are being used to supplement or augment the teaching and learning process from classroom settings to modern learning in students' literary skills. It has similarity with Bahrani & Sim (2012), that the combination of authentic media in language teaching internet sources provides multisensory stimulation to start generating an idea which is effective and optimal for writing, (Erwin, 2017). A good source with rich knowledge will improve language input (Thi & Nguyen, 2021) and the students can enhance their motivation in writing topics (Li et al., 2021).

The use of online resources is a common educational method used during the lesson, (Selvaraj & Nithin, 2021). In the truest sense, technique is the clear definition of (1) methodical procedure by which a difficult or scientific activity is carried out, (2) the manner in which the fundamentals of a work of art are treated, and (3) skill or command in handling such fundamentals, (Gadamer, 2013).

Natalia (2010) argued that internet-based resources are educational materials gleaned from a variety of online sources and provided to students as a cutting-edge learning tool. In addition, Abdullah Sharadgah (2013) stated that the Internet is a powerful centralized repository for English teachers. Because of the expansion of the Internet, new digital tools for pedagogical applications had already surfaced, (Fakhruddin, 2017).

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The usefulness of the internet for writing skills is also the subject of numerous other related research, (Alshahrani, 2017). Cui & Hu (2018) argued that using the internet as a resource to enhance ability to work together is helpful for generating a relaxing writing environment and expanding their writing expertise. Students can actually understand meaningful learning experiences that are using internet media, (Thienthong & Lian, 2015).That is why current technology is started referring to as a technique, despite the reality that use of the internet in second and foreign language teaching has brought certain gains, (Sahin, 2010).

UAD undergraduate students are required to write an academic paper and publish a Scopus indexed journal. Unless they submit and publish the paper, they cannot register the names for graduation day. From 52 undergraduate students at Ahmad Dahlan University, researchers found that only fifteen students (28,8%) successfully submit and publish their paper in the indexed Sinta or Scopus journal. Existing research on the use of online learning resources implies that it improves student achievement as well as faculty performance, (Jones et al., 2011). For example, they can shift the lecturer's role from information provider to facilitator, allowing students to become more self-directed learners, (Deniz & Geyik, 2015). The majority of existing research on the impact of online learning resources in higher education settings is either too broad or multi-purpose, (Apuke & Iyendo, 2018). Then, examines the personal and emotional aspects of the student point of view, as well as the impact of online learning resources on students' perceptions, (Alshahrani et al., 2017). Some researchers have investigated the impact of online information on students' performance in their learning. However, no studies have been conducted to investigate its impact on the students' vocabulary to develop their ideas.

METHOD

The kind of this study is experimental research to obtain how online resources affect students' ability to write articles. This study explains the data, facts, and circumstances. The experimental research is covered by quantitative research. It may be said that experimental research is a type of study used to look at how treatments impact others, (Sugiyono, 2014). Experimental research has traditionally been defined by six characteristics: statistical equivalence of subjects in different factions, additional contributions through random assignment of subjects; comparison of two or more groups or sets of conditions; direct manipulation of at least one independent variable; measurement of each dependent variable; application of inferential statistics; and a design that allows for the highest amount of control over wholly irrelevant variables, (Paulsen, 2017).

This experiment utilized both primary and secondary data on the experimental and control groups. Experimental group is a group that received treatment, while the control group is a group that did not receive treatment by using Internet-based resources as media, but using the book as a media companion allowed to discuss with their friend. Instrument questions used to provide test students in this study include "Technology in Education" as pre-test question and "Digital Literacy for Children" as post-test question. The 52 students, from Classes B and C of the English Language Education program at Universitas Ahmad Dahlan Yogyakarta, are served as the study's sample groups.

RESULT AND DISCUSSION

The researcher used SPSS 23 to examine the experimental and control groups (pre-test and post-test responses) in order to verify the data and demonstrate consistency. The study was conducted to determine how well Internet-based resources encouraged students to write articles. The discussion is based on the results, which are compared to previous studies in the same field.

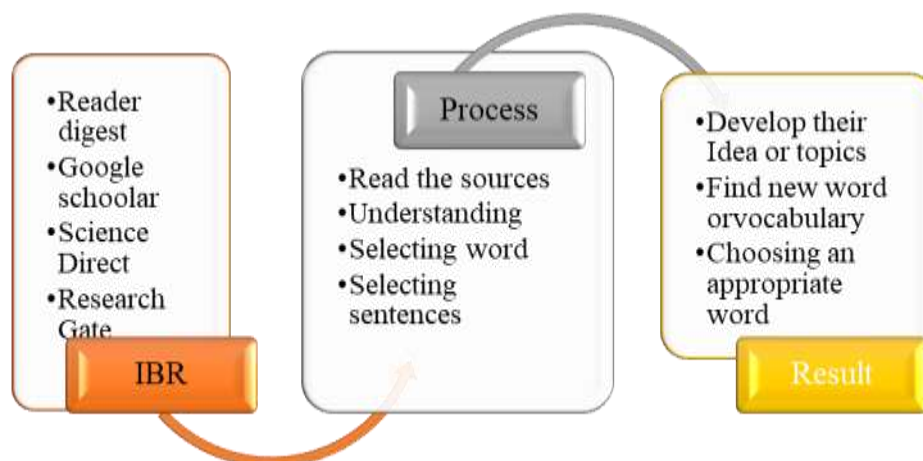**Process of Using Internet Based Resources to Explore the Students' Vocabulary**

Figure 1. Implementation of IBR

The researcher employs the method depicted in the prior image, which was being used by the previous researcher. It found that the researcher can efficiently manage the project and analyze the students' writing abilities. Furthermore, Internet-Based Resources made it simple for students to learn, as well as accessible and resilient, and most importantly, search their resources anywhere and at any time. It was in line with Kumar (2021) which stated that Internet-Based Resources are an effective learning tool that improves learner satisfaction in English language learning, notably in writing skill, students guarantee that these resources are updated, designed for educational purposes, and are free of bias. That statement supports Vlasenko (2020) that the method can access excellent resources, information, and primary source materials in this manner. It will aid them in establishing what makes an online resource valuable and legitimate sources for their ideas, (Purwanti, 2021).

Impacts of Internet-based Resources to encourage students' writing skill

Table 1. Pre-test and Post-test an Experimental and Control Group

Measurement		Experiment (26)	Control (26)
Pretest	M	72.62	72.12
	SD	6.450	4.493
Posttest	M	83.12	73.53
	SD	7.350	5.679

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It highlighted the descriptive statistics of the pre-test experimental group and the control group. As can be seen, the experimental group outperformed the control team in terms of pre-test mean (72.62 for the experimental group and 72.12 for the control group). While the students' writing abilities are on the paragraph level, the difference in scores between the two groups is still within the acceptable limits. The data show the post-test results for the experimental and control groups. The mean again for the experimental group was 83.12, while the mean for the control group was 73.53. Based on resources, it can be concluded that there is a significant impact on students' ability to write.

Hypothesis Test

The test calculations were analyzed using the t-test. The t-test is used to measure the effects of Internet-Based Resources on students' writing in terms of comprehension. The researchers used the t-test to compare the pre-test scores of the two groups to see how similar their writing abilities were. Researchers also used SPSS 23 to compute the T-test and T-table. The goal of this test was to see how effective Internet-based resources were for teaching writing skills focused on students' vocabulary at the UAD Yogyakarta English Department Program.

Table 2. Paired Sample Test of Pre-test and Post-test Experimental Group

Measurement		Experiment (N=26)	95% Confidence Interval of the Difference
Pretest	M	-10.500	
and	SD	6.094	
Posttest	Std.E	1.195	
	Lower		-12.962
	Upper		-8.038
t^1		-8.785	
Sig. (2-tailed)		.000	

Table 2 shows the experimental group's mean score for the pre and post-test was -10.500, the standard deviation was 6.094, the standard error of mean was 1.195, the degrees of freedom were 25, and the Sig. (2-tailed) was.000. Based on the calculations above, the p-value was 0.000, which is less than () 0.05. The results showed that H1 is accepted, and there is a significant effective score difference between the experimental class's pre-test and post-test.

The data show that the experimental group's mean score for the pre and post-test was -1.423, the standard deviation was 5.623, the standard error of mean was 1.103, the degrees of freedom were 25, and the Sig. (2-tailed) was 0.209. The P-value calculated above was 0.209, which is greater than (α) 0.05. The results showed that H0 is rejected, and there is no significant difference through effective scores between the control class's pre-test and post-test (see Table 3).

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Table 3. Paired Sample Test of Pre-test and Post-test Control Group

Measurement		Control (N=26)	95% Confidence Interval of the Difference
Pretest	M	-1.423	
and	SD	5.6231	
Postest	Std.E	1.103	
	Lower		-3.694
	Upper		.848
t[1]		-1.291	
Sig. (2-tailed)		0.209	

Table 4. Paired Sample Test of Post-test Experimental and Control Group

Measurement		Experiment and Control (N=26)	95% Confidence Interval of the Difference
	M	9.577	
	SD	8.500	
Postest	Std.E	1.667	
	Lower		6.144
	Upper		13.010
t[1]		5.745	
Sig. (2-tailed)		.000	

Table 4 shows that the mean post-test score for the control and experimental groups was 9.577, the standard deviation was 8.500, the standard error mean was 1.667, the degrees of freedom were 25, and the Sig. (2-tailed) was 0.000. In the statistic table df=n-1 or 26-1=25, you can see the T-table. The researcher looked up the score in the T-table. The significance level was 0.000, and the T-table score was 2.060. In accordance with the calculation, the Account is greater than T-table (5.745>2.060). It means that H0 is rejected and H1 is accepted because "there is significant effectiveness of Internet-Based Resources to encourage students' vocabulary in English Language Education at Universitas Ahmad Dahlan Yogyakarta.

The Most Improvement of Students' Vocabulary in Writing

Figure 2 shows the score of students' vocabulary in each group, based on each classified writing score, consisting of ; Very good to excellent (18 – 20 poin) , average to good (14– 17 poin), Poor of fair (10-13 poin) ,Very poor (7 – 9 poin).

While, the percentage ratio achieved by students without Internet-Based Resources implementation decreased down to 5.38 %. So, it can be concluded that, most of the students feel it is easy to choose an appropriate word or vocabulary and develop their idea in writing by using internet-based resources, (Alshahrani, 2017). It also gives contribution to the student's integration of authentic media, particularly internet sources, for language teaching by providing multisensory stimulation to develop an idea that is effective and optimal for writing, (Sharma & Pooja, 2016).
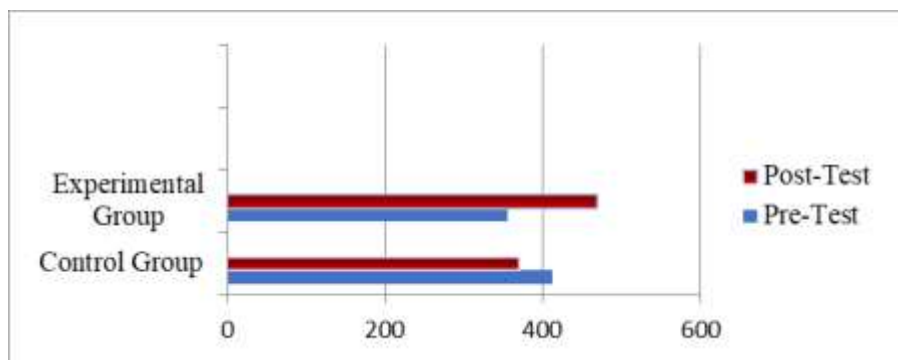
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Figure 2. Students' Vocabulary Achievements

The use of current technology blended with the internet has increased student scores, and able to scan vocabulary faster than using a printed dictionary or traditional method, (Govindasamy et al., 2019) . Cetinkaya & Sütçü (2018) added a discussion that the application of modern technology also made a positive difference that various internet sources heavily influence the creation of new vocabulary. Whereas they felt confused to choose an appropriate vocabulary and did not have much of an idea to develop the topic in writing without using internet-based resources.

CONCLUSION

As a result of discussion, internet-based resources have a positive impact for English students, especially to enrich new vocabulary. The role of IBR in learning is very important, because in addition to providing information from various sources, it will also enrich the vocabulary directly. Then, students will more easily develop their ideas and new vocabulary in written form. Furthermore, the pre-test score in both the experimental and control groups revealed the same issues with systematic review for English proficiency. Then, the result is calculated using t-test obtained ($t_{account}$=5.745) > (t_{table}=2.06). It means that there was a significant difference between participants who were instructed using internet-based resources and those who used the media of books as well as group discussions in writing in English education. Ha is accepted when $t_{account}$ is higher than t_{table}. Then H0 is accepted when $t_{account}$ is lower than t_{table}. It can be seen from the explanation above that is t_{accoun} higher than t_{table}. So, there is any positive impact of students' vocabulary aspect at Universitas Ahmad Dahlan Yogyakarta.

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This article has been finished by two authors. EP has performed this experimental research, and TW has helped in editing this article to be published.

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