THE EFFECTIVENESS OF PROWRITINGAID TOWARD STUDENTS WRITING SKILLS IN SENIOR HIGH SCHOOL

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ABSTRACT

Teaching activities are the core activities in the learning process, where there is a transfer of knowledge carried out by teachers to students. Various methods can be used in the learning process. The various methods are adapted to the needs and characteristics of students. Media and technology are also used to make the learning process more interesting. This study aims to find out about the effectiveness of using the ProWritingAid toward writing skills of XI senior high school students. The sample used in this study was 35 students of class XI. This research was conducted using a quantitative approach using a one shot case study as a research model. Data analysis in this study used paired t-test. The results of the paired t-test show a significance value of 0.000 where the value is smaller than 0.05 (0.00 < 0.05) so that H_0 is rejected and H_a is accepted, meaning that the ProWritingAid application is effective to be used toward students' writing skills of XI senior high school.

Keywords: Learning, Writing Skills, ProWritingAid Application

ABSTRAK

Kegiatan mengajar merupakan kegiatan inti dalam proses pembelajaran, dimana terjadi transfer pengetahuan yang dilakukan oleh guru kepada siswa. Berbagai metode dapat digunakan dalam proses pembelajaran. Berbagai metode tersebut disesuaikan dengan kebutuhan dan karakteristik siswa. Media dan teknologi juga digunakan untuk membuat proses pembelajaran menjadi lebih menarik. Penelitian ini bertujuan untuk mengetahui efektivitas penggunaan ProWritingAid terhadap keterampilan menulis siswa SMA XI. Sampel yang digunakan dalam penelitian ini adalah 35 siswa kelas XI. Penelitian ini dilakukan dengan menggunakan pendekatan kuantitatif dengan model penelitian one shot case study. Analisis data dalam penelitian ini menggunakan uji-t berpasangan. Hasil uji t berpasangan menunjukkan nilai signifikansi sebesar 0,000 dimana nilai tersebut lebih kecil dari 0,05 (0,00 < 0,05) sehingga H0 ditolak dan Ha diterima, artinya aplikasi ProWritingAid efektif digunakan untuk menulis siswa keterampilan SMA XI.

Kata kunci: Pembelajaran, Kemampuan menulis, Aplikasi ProWritingAid

INTRODUCTION

The teaching process is a core process in learning. There are various strategies, methods, and techniques in teaching. Of course, the various methods are adapted to the needs of students. Teachers as facilitators in learning activities must know well the needs of students so that teachers can determine methods that are suitable for students. The use of appropriate teaching methods can help in achieving learning objectives. Various methods are commonly used in teaching English, such as the direct method, grammar translation method, audio lingual method, suggestopedia, and others. In determining the appropriate teaching method, in addition to looking at the needs and characteristics of students, the teacher can also see from the material being taught. For example, TPR (Total Physical Response) is used to teach vocabulary, where students will learn about some command verbs more clearly because of learning followed by movements under orders given by the teacher. In addition to using appropriate teaching methods, teachers must also consider the use of exciting media in the learning process. Appropriate media can make students more interested in the learning process.

English is a compulsory subject for high school students in Indonesia, and in Indonesia English is considered as a second language. According to (Raimes, 1983) when someone learns a second language, then we also learn to communicate with them, then one of the things that must be learned is writing skills. Writing is an activity that involves both physically and mentally. In addition to focusing on the writing content, a writer must also arrange the writing properly, following the applicable writing rules (Nunan, 2003). Automated writing evaluation (AWE) are tools in the form of software or applications that are used to check writing. The task of AWE tools is to provide feedback to writers regarding errors contained in their writing. (Hockly, 2019) explains how this software works by comparing a written text to an extensive database of the writing of the same genre, written in answer to a specific prompt or rubric. Generally, feedback is given in terms of grammar mistakes, sentence structure, text complexity, and others. Some AWE tools also provide a feature to check the level of writing plagiarism. The use of the AWE tool is intended to be a partner in compiling writing. The use of the AWE tool is also expected to be able to overcome some of the problems that are often faced by teachers when teaching in class. (Linh & Thanh Ha, 2021) in their research revealed that the most common difficulty faced by students is word choice, so it is hoped that the AWE tool will be able to overcome this problem. With various feedbacks given, the author can improve his writing. AWE tools are more effective when correcting errors in language rules. According to research conducted by (Ghufron, 2019) on the Grammarly application, the study found that the use of Grammarly was more effectively used to correct errors in language rules.

AWE tools are currently growing rapidly with various developments in terms of features. One application that is included as an AWE tool is ProWritingAid. The application built by Chris Banks is one of the AWE tool applications with abundant features. ProWritingAid is capable of enhancing the students' writing quality in terms of its accuracy on grammar, spelling, etc. with the indication of error that is underlined or highlighted (Ariyanto et al., 2019). In addition, the ProWritingAid application is not only an application for correcting grammatical mistakes in writing but also provides a feature to check plagiarism, and there is also a readability feature to measure the target readership of writing. The various features of ProWritingAid are expected to help students as partners in compiling an article.

LITERATURE REVIEW

Research conducted by Ariyanto, Mukminatien, & Tresnadewi (2019). The research aims to determine the perceptions of teachers and students as well as the advantages and disadvantages of implementing the ProWritingAid application and teacher feedback in the classroom. This study focuses on the combination of the ProWritingAid application and teacher feedback so that this study does not identify it separately. The research involved 33 students majoring in informatics engineering who were taking an English for specific purpose writing course. This study uses a survey research model, where questionnaires are given to students and interviews are conducted with teachers as a technique for collecting data. The results of the study revealed that teachers are interested in using these strategies for further learning; this is because teachers feel the benefits are suitable for both teachers and students. Teachers feel that these strategies are able to improve students' writing skills; these strategies help teachers save work time. As with other studies that have been described by the researchers above, the ProWritingAid application is also considered more effective for correcting writing in terms of grammar, while teacher feedback is considered more effective for correcting writing in terms of content.

METHOD

In this study, researchers used a quantitative approach. The quantitative approach was chosen to determine the differences between the two research variables. In this study, researchers used two variables: the writing skill as the dependent variable and the ProWritingAid application as the independent variable. Researchers used pre-experimental design as a research design in this study, with one shot case study as a model in the study. According to (Sugiyono, 2013), a one-shot case study is that a group is given treatment, and then the results are observed. The technique used to collect data is by giving a post-test to the experimental group. The post-test is given after the experimental group receives treatment from the researcher.

One shot case study requires an experimental group to be given treatment in the form of using the ProWritingAid application. Then after giving treatment, students will be given a post-test, where the post-test results will be analyzed to determine the effectiveness of using the ProWritingAid application in improving students' writing skills. Researchers chose purposive random sampling as a technique for selecting samples in this study. According to (Ary et al., 2010) sample elements judged to be typical, or representative, are chosen from the population. In this research, the researcher selected 35 students of class XI as the sample in this study.

The test instrument used in this research is a writing test. The tests given are in the form of instructions for writing text according to the explanation text material. Before the tests are given to students, the validity and reliability of the test instrument are first tested. The validity test was carried out using the Pearson product-moment formula, while the reliability test was carried out using Cronbach alpha formula.

Hypothesis testing in this study using paired t-test, with the following formula.

$$t = \frac{\sum d}{\sqrt{\frac{n(\sum d^2) - (\sum d)^2}{n-1}}}$$

Where:

d = difference per paired value

n   = number of sample

$\sum d$ = sum of the differences

With the following hypothesis:

H$_o$: "The use of the ProWritingAid application is not effective toward teaching writing skills of class XI senior high school students"

H$_a$: "The use of the ProWritingAid application is effective toward teaching writing skills of class XI senior high school students"

RESULT

This research was conducted on the explanation text learning material received by class XI students in the second semester. The value compared in this study is the value given by the class teacher on students' writing skills before giving treatment with the value obtained by students after being given treatment (post-test result). The following are the scores of 35 students of class XI before receiving treatment.

Table 1. Students' scores of pre-test

No.	Name	Score
1	A	77
2	AYF	75
3	AIQA	85
4	ADS	80
5	ANM	85
6	AHU	55
7	ANS	85
8	ADWP	85
9	AKM	88
10	AAS	65
11	CBS	65
12	DA	75
13	EBH	65
14	ESA	50
15	FNA	60
16	FRPA	70
17	GRS	85
18	HMA	88
19	ITWH	60
20	KRH	70
21	MPC	65
22	MAF	90
23	MHPA	55
24	MRR	65
25	NA	85
26	NAA	60
27	NM	75
28	NANO	80
29	NARS	65

30	NW	80
31	NM	75
32	RAM	70
33	RAR	55
34	SBK	65
35	SMY	70

Table 2. Descriptive analysis of students' scores pre-test

Column1	
Mean	72,08571429
Standard Error	1,888653172
Median	70
Mode	65
Standard Deviation	11,17342285
Sample Variance	124,8453782
Kurtosis	-1,063792058
Skewness	-0,114506772
Range	40
Minimum	50
Maximum	90
Sum	2523
Count	35

Table 1 shows the scores of 35 students in the pre-test, while table 2 contains a descriptive analysis of the students' scores in table 1. The table above shows that the average score of students in the pre-test is 72.08, with a median of 70 and mode of 65. The highest score obtained by the students was 90, and the lowest score was 50. After conducting the pre-test, the researcher began to give treatment in the form of using the ProWritingAid application, which was used as a student partner in doing the writing assignments given by the teacher. The step of giving treatment carried out by the researcher was that students did the writing assignments given. After the students finished working on the writing, they had to check their writing on the ProWritingAid application. After they check their writing, the application will provide feedback in the form of errors in their writing, and then students will correct these errors according to the suggestions given by the application.

After students receive treatment in the form of using an application, the score of the writing assignment at the next meeting will be used by the researcher as a post-test score. In that assignment, students are no longer using the ProWritingAid application. The scores obtained by students in the post-test are as follows.

Table 3. Students' scores of post-test

No.	Name	Score
1	A	80

2	AYF	80
3	AIQA	85
4	ADS	90
5	ANM	87
6	AHU	70
7	ANS	80
8	ADWP	90
9	AKM	88
10	AAS	70
11	CBS	75
12	DA	75
13	EBH	80
14	ESA	65
15	FNA	50
16	FRPA	65
17	GRS	90
18	HMA	85
19	ITWH	75
20	KRH	80
21	MPC	85
22	MAF	90
23	MHPA	60
24	MRR	70
25	NA	80
26	NAA	75
27	NM	75
28	NANO	75
29	NARS	70
30	NW	90
31	NM	80
32	RAM	70
33	RAR	60
34	SBK	70
35	SMY	75

Table 4. Descriptive analysis of students' scores post-test

Column1	
Mean	76,71428571
Standard Error	1,648820015
Median	75
Mode	80
Standard Deviation	9,754550759
Sample Variance	95,1512605
Kurtosis	0,256596029

Skewness	-0,580229666
Range	40
Minimum	50
Maximum	90
Sum	2685
Count	35

Table 3 contains students' scores in the post-test, and table 4 contains a descriptive analysis of table 3. Based on the table above, it can be seen that the average score of students in the post-test is 76.71, with a median of 75 and mode of 80. the average score of students in the post-test showed an increase of 4.63 compared to the average score of students in the pre-test. This increase in value means that there is an increase in students' writing skills after using the ProWritingAid application.

Next, the researcher conducted a t-test to prove the research hypothesis. Before conducting an analysis using t-test, a normality test must be performed to determine whether the distribution of the data is normal or not. In this study, researchers used the Kolmogorov Smirnov formula as a tool to test normality. Researchers used the SPSS 25 application as a tool for testing. The results obtained from normality testing are as follows.

Table 5. The result of normality test

One-Sample Kolmogorov-Smirnov Test		pre	post
N		35	35
Normal Parameters[a,b]	Mean	72.09	76.71
	Std. Deviation	11.173	9.755
Most Extreme Differences	Absolute	.137	.118
	Positive	.137	.087
	Negative	-.133	-.118
Test Statistic		.137	.118
Asymp. Sig. (2-tailed)		.094[c]	.200[c,d]
a. Test distribution is Normal.			
b. Calculated from data.			
c. Lilliefors Significance Correction.			
d. This is a lower bound of the true significance.			

The data is said to be normal if the significance value is > 0.05. On the other hand, if the significance value is < 0.05, the data is not normally distributed. Based on the tests that researchers have carried out, the results are shown in the table above. The result is 0.094 in the value before giving treatment, and the value is 0.200 in the post-test value. These two values indicate that the data is normally distributed because > 0.05. With the normally distributed data, the hypothesis testing with a t-test can be continued.

Hypothesis testing carried out with paired t-test will determine whether Ho is rejected or not. If the significance value shows a value less than 0.05 (p < 0.05), then Ho is rejected and

Ha accepted. However, if the significance value is more than 0.05 (p > 0.05), Ho is accepted and H0 rejected. The following are the results of the t test using the SPSS 25 application.

Table 5. The result of paired t-test

Paired Samples Test										
		Paired Differences								
					95% Confidence Interval of the Difference					
			Std. Devi ation	Std. Error Mean	Lowe r	Upper	t	df	Sig. (2-tailed)	
		Mean								
Pair 1	pre - post	- 4.629	7.013	1.185	- 7.038	-2.220	- 3.905	34	.000	

Based on the table above, it is known that the significance value is 0.000, where the value is smaller than 0.05 (0.000 < 0.05), resulting in the decision Ho is rejected and Ha is accepted, meaning the use of the ProWritingAid application is effective toward teaching writing skills of class XI seniors High school students.

DISCCUSSION

In this study, it was found that the ProWritingAid application was effectively used in teaching writing for Senior High School students. The results of this study strengthen the results of research that have been carried out by (Ariyanto et al., 2019). In his research, 100% of respondents agreed that they needed the ProWritingAid application to improve their writing skills. It means that the use of the ProWritingAid application has a positive effect on students. Students have digital partners to assist in the learning process, and the finding reinforces this statement that 100% of respondents want to continue using the ProWritingAid application.

The use of the ProWritingAid application can be collaborated with conventional feedback by the teacher. Although the ProWritingAid application has been proven to be effective in helping students learn to write English, there are still some shortcomings of the application. Research conducted by (Ariyanto et al., 2019) also reveals that the ProWritingAid application is more effectively used to correct writing in the linguistic aspect, while feedback from the teacher is still needed for students to correct writing in aspects of writing organization and also writing content.

CONCLUSSION

Various kinds of methods, learning media, and technology in learning are used by teachers to create an exciting and effective learning process. The use of these methods, media, and technology cannot be separated from the consideration of student needs that are adapted to the learning material being taught.

The results of research conducted on class XI senior high school students to determine the effectiveness of using the ProWritingAid application in improving writing skills showed a significance value of 0.000 (p < 0.05). The result shows that the ProWritingAid application

effectively improves the writing skills of class XI students. With the results of this study, it is hoped that teachers can maximize the use of media and technology in learning activities.

Suggestions from researchers that can be applied to further research are to compare two or more automated writing evaluation (AWE) tools so that they can be seen as the most effective application to be used to correct writing, along with an analysis of why an application is more effective than other applications. Another suggestion that can be used is that research is carried out at the level of education below senior high school. It can be done to see the effectiveness of using AWE tools at lower school levels. It should be noted that the use of AWE tools provides opportunities for students to do self-learning so that the final result can produce an assumption about whether the effectiveness of using AWE tools is related to the ability to do self-learning or not.

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