

THE EFFECT OF GRAMMARLY ON STUDENTS' WRITING ABILITY

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ABSTRAK

Grammarly adalah salah satu aplikasi online yang hadir karena kemajuan dari teknologi. Grammarly memiliki fitur pemeriksaan tata bahasa yang akurat. Grammarly dapat mengevaluasi dan meningkatkan tata bahasa dalam karya tulis, serta memperbaiki kesalahan yang mungkin terjadi dalam proses menulis. Penelitian ini dilakukan dengan pendekatan kuantitatif melalui eksperimen lapangan. Sampel dari penelitian ini terdiri dari siswa kelas sepuluh, dengan 24 siswa di setiap kelas, yang dibagi menjadi dua kelompok, yaitu kelompok eksperimen (menggunakan Grammarly) dan kelompok kontrol (tanpa Grammarly). Siswa akan diberikan tes menulis (pre-test dan post-test) di pertemuan awal dan akhir. data quantitative penelitian ini akan di analisis dengan menggunakan wilcoxon dan Mann-Whitney U test. Temuan dari penelitian ini menunjukkan bahwa penggunaan Grammarly secara signifikan meningkatkan kualitas tulisan yang dihasilkan oleh siswa dalam hal tata bahasa, kosakata, dan pemahaman konten. Analisis data juga mengungkapkan bahwa siswa yang menggunakan Grammarly cenderung lebih percaya diri dalam menulis mereka dibandingkan dengan siswa yang tidak menggunakan Grammarly. Temuan ini menunjukkan bahwa Grammarly dapat menjadi alat yang efektif dalam meningkatkan kemampuan menulis siswa, dengan potensi untuk digunakan dalam konteks pendidikan untuk mendukung pengembangan keterampilan menulis yang lebih baik.

Kata Kunci: Grammarly, Kemampuan Menulis, Tulisan Siswa.

ABSTRACT

The inclusion of 'Grammarly' among online grammar checkers reflects the influence of technological advancements. Grammarly is the application that has most accurate online grammar checker. Grammarly can evaluate and improve the grammar of written work, as well as correct any errors that may occur in the writing process. The investigation in question was carried out by employing a quantitative approach through the use of a longitudinal experiment. Sample is comprised of fourty eight of ten grade students. Each class consist of twenty four students. The students were tested with writing test at the beginning and the end of the research. The quantitative data were analyzed by using wilcoxon and mann-whitney u tests The findings of the study indicate that the utilisation of Grammarly significantly improves the quality of the writing produced by students in terms of grammar, vocabulary, and content comprehension. The data analysis also reveals that students who use Grammarly are more likely to be confident in their writing when compared to students who do not use Grammarly. This is the case when comparing the two groups.

Keywords: Grammarly, Writing Ability, Students' Writing.

INTRODUCTION

Writing is a communicative skill of English language learning that students and educators must master. In EFL learning, there are four abilities to learn English education,

including writing skills. Writing skills in English are quite difficult because many factors must be considered in writing skills. Hinkel (2004) mentions that one of the possible causes of students' poor writing skills may be their inaccurate grammar. The importance of grammar and mechanics features positively affects the ability of students' writing, such as language errors and punctuation usage.

Browns (2001) proposes six major aspect of writing that have to be required by a writer such as content, organization, discourse, syntax, vocabulary, and mechanics. To produce good writing, students and educators must fully understand grammar and vocabulary to get excellent and correct writing results. To produce good writing, students and educators must fully understand grammar and vocabulary to get excellent and correct writing results.

Most students sometimes need more understanding about the location of grammar errors that they have written, and even usually, they need to know whether their writing/sentences are correct or wrong. Hinkel (2004) mentions that one of the possible causes of students' poor writing skills may be their inaccurate grammar. The importance of grammar and mechanics features positively affects the ability of students' writing, such as language errors and punctuation usage.

It was one of the grammar checker tools, specifically Grammarly, that the researcher utilised for this particular study. These technologies are able to highlight faults in grammar, punctuation, and spelling, and they can also provide ideas for how to remedy those errors. Students have the option of utilising Grammarly on the website, which is free of charge, or downloading the application from the app store or Windows.

Grammarly applications have been the subject of numerous research papers in the past, which have examined their impact on learning. There has been previous research conducted on the utilisation of grammar checker software for educational learning activities. McCarthy (2019) provided an explanation of how influential grammar checkers can boost the writers' capacity to compose essays for pupils. The conclusion that can be drawn from this is that the availability of tools that check spelling and grammar may have contributed more to overall gains.

Johnson (2019) claims that using Grammarly significantly improves the ability of students' writing. This application helps students avoid grammatical errors, improve spelling accuracy and improve unclear writing style. Grammarly also help students expand their vocabulary and maintain a consistent writing style. According to Smith (2018), Grammarly is an application that utilizes artificial intelligence to assist students in improving their writing ability. The application can detect and correct grammar, spelling, and writing style errors.

Grammarly is a software that is super helpful for teachers and learners when correcting English as a foreign language (EFL) writing. It is so effective because Grammarly can do more than spot punctuation mistakes like missing spaces after periods and spelling errors, including proper nouns. It even offers substitute terms for mistake words. Grammarly can also identify sentence fragments and advise on verb forms, although sometimes it does not provide specific corrections, and the explanations can be complex (Daniels & Leslie, 2013).

This research aims to know whether there is a significant effect of using Grammarly on students' writing ability. The hypothesis alternative can be formulated as follow "There is significant effect of using Grammarly on students' writing ability at islamic state in bondowoso.

RESEARCH METHOD

The researcher chooses a type of quantitative research method. This study uses experimental research design. According to Kirk (2009) an experimental design aims to establish a causal connection between independent and dependent variables and to extract the maximum amount of information with the minimum expenditure of resources.

Research Design

The researcher used an experimental research design to see the impact of one variable on another. This type of research was quasi-experimental research. A quasi-experimental design is a research design used to test the causal relationship between two variables. The quasi-experimental design differs from the randomized experimental design, in which participants are not randomly assigned to treatment groups.

In this study, there were two groups; the first is the experiment group, and in this experiment, the group was given treatment using Grammarly. The second group is the control group. For both groups, researchers gave pre-test and post-test questions. The experimental group received the treatment before the post-test, which was the sole distinction between them.

The Illustration of Quasi Experimental Research Design

Group	Pre-test	Treatment	Post-test
A	Y1	X	Y2
B	Y2	-	Y2

(Ary et al,2010)

Notes :

A : Experimental group

B : Control group

Y1 : Pre-test for experimental and control group

X : Treatment using Grammarly

Y2 : Post-test

Participants

In this study, there are two groups; the first is the experiment group, and in this experiment, the group will be given treatment using Grammarly. The second group is the control group; in this group, the students need to be taught using Grammarly. The subjects of this study are ten grade students at a state Islamic school in Bondowoso, each class consisted of twenty-four students.

Instruments

According to Gulo (2002), research instruments are written directions for interviews, observations, or lists of questions that are prepared to collect data from respondents." The instrument is referred to as the Guidelines of Engagement, Interview Guidelines, Questionnaires, or Documentary Guidelines, depending on the approach utilized.

In this research, the researcher used writing tests (pre-test and post-test) with different treatment between control group and experiment group. The researcher chose the writing tests as the instrument because the test could measure the student's level of understanding of the learning materials given to each group. The experimental group used Grammarly, and the control group did not use Grammarly.

The assessment of the test has four aspects, they are grammar, vocabulary, mechanic

and organization. The pre-test and post-test is consisting by two topics. They are about person and place. In conducting the writing test (pre-test and post test), the researcher asked the students to write a descriptive text about the topic given based on the syllabus which was about animal and persons. In the test the students should write at least 15 – 20 sentence.

Data Analysis

After collecting the pre-test and post-test data from the students, the researcher analyzed the data obtained from both experimental and control groups. The researcher analyzed the score based on the writing rubric used consisted of grammar, vocabulary, mechanics, and organization elements. This design compares the results between the experimental group and the control group. Since the research data is not normally distributed, the researcher uses non-parametric statistics (Wilcoxon and Mann – Whitney U tests) to analyze the research data. The Wilcoxon test, also known as the Wilcoxon Signed Rank Test, is used to test the difference between two paired groups of data that are ordinal or interval in size but not normally distributed. This test is an alternative to the paired sample t-test when data does not meet the normality assumption.. This analysis's test criterion for the significance level (Sig) is 0.05.

FINDINGS AND DISCUSSION

Findings

This study began on April 22, 2024, and ended on May 20, 2024, spanning more than a month fifth times meeting. the writing test consists of a descriptive place prompt for the pre-test and a descriptive person prompt for the post-test.

In the first meeting, the researcher explained to the students about the research that was going to be conducted, which was to measure the effect of using Grammarly on students' writing ability. Students were given an example of descriptive text that was available and displayed on the whiteboard and projector. Then, the researcher gave a pre-test prompt to the students, where they were asked to write a descriptive texts about the place shown on the projector in 2 paragraphs.

Then, in the second meeting, the researcher demonstrated the steps of using Grammarly to the students with clear and practical examples. These steps could include uploading text to the Grammarly platform, running checks, and implementing suggested improvements. After that, the researcher instructed the students to check using yesterday's pre-test texts to see which parts were wrong, and instructed the students to note the incorrect parts and replaced them with the correct ones.

After the demonstration, in the third meeting, students were given the opportunity to try using Grammarly independently. Students were given the task of writing another descriptive texts about their classmate in 2 paragraphs. After the writing stage was complete, they were asked to upload their own texts to Grammarly and check for errors that appeared and implement the recommended improvements.

In the fourth meeting, the researcher and students evaluated results with Grammarly. After students finished editing their text with Grammarly, the results were re-evaluated using the tool. They were asked to observe the changes that occurred in their text after using Grammarly, both in terms of grammar, sentence structure, or vocabulary.

Lastly, in the fifth meeting, students conducted a post-test session. In the post-test session, students were not allowed to use the Grammarly application to measure changes that occurred.

In the control class, the material taught was the same as in the experimental class, but the method of delivered the material is different. In the control class, Grammarly application was not used. The reasercher delivers the material through lectures and discussions for four meetings. Students were asked to stay calm and listen to the researcher explain the material. Then, the researcher asked the students to write a descriptive text about a place based on what has been displayed on the screen for the pre-test.

In the second meeting, the researcher and students corrected and evaluated together the writing errors made by the students. During the evaluation session, the researcher asked the students to inquire about any difficulties they encountered when writing and also instruct them to note down any grammar or verb errors along with their corrections so that the students were able to study them at home.

In the third meeting, students were asked to write a descriptive text about their classmates and then correct and evaluate it together. In the fourth meeting, the teacher conducted a post-test where students were shown a photo of the teacher on the screen and asked to write a descriptive text based on what they saw in the photo.

After undergoing the learning program, the students were retested to evaluate changes in their writing ability. The highest pre-test score for the control group was 75, and the lowest was 50, while for the experimental group, the highest was 80 and the lowest was 60. For the post-test scores, the highest in the control group was 85, and the lowest was 65, while for the experimental group, the highest was 90 and the lowest was 70.

The initial analysis results indicated an improvement, as evidenced by higher post-test scores compared to pre-test scores. Further, through a more in-depth statistical analysis, such as descriptive statistic, normality, homogeneity, and hypothesis testing which will be elaborated on in the next subsection.

Table 1 Descriptive Statistics of Both Class

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Pre-Test experiment	24	60	80	68.54	6.338
Post-Test experiment	24	70	90	79.17	4.815
Pre-Test Control	24	50	75	64.38	6.965
Post-Test Control	24	65	85	73.96	5.894
Valid N (listwise)	24				

Based on the table, it can be seen that the highest score for the pre-test of the experimental group is 80 and the lowest is 60. For the post-test of the experimental group, the highest score is 90 and the lowest is 70. Additionally, the table includes the results of the mean score, where the mean score for the pre-test of the experimental group is 68.54 and for the post-test is 79.17, indicating that the pre-test mean score is lower than the post-test score, which is $68.54 < 79.17$.

For the control class, the highest score for the pre-test is 75 and the lowest is 50. For the post-test, the highest score is 85 and the lowest is 65. Furthermore, the table also includes the results of the mean score for the control class. The mean score for the pre-test of the control class is 64.38 and for the post-test is 73.96, indicating that the pre-test mean score is lower than the post-test.

Table 2 Normality Test**Table 2 Test of Normality**

Tests of Normality							
	Class	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Result students study	Pre-Test Experiment (Grammarly)	.216	24	.005	.893	24	.016
	Post-Test Experiment (Grammarly)	.223	24	.003	.896	24	.018
	Pre-Test Control	.165	24	.089	.938	24	.150
	Post-Test Control	.207	24	.009	.916	24	.048
a. Lilliefors Significance Correction							

Based on the output above, it is known that the significance value (Sig.) for all data, both for the Kolmogorov-Smirnov test and the Shapiro-Wilk test, is less than 0.05. Therefore, it can be concluded that the research data is not normally distributed due to a sample size of less than 30.

Since the research data is not normally distributed, the researcher uses non-parametric statistics (Wilcoxon and Mann – Whitney U tests) to analyze the research data.

Statistic Test Wilcoxon

Test Statistics ^a		
	Post-Test Experiment - Pre-Test Experiment	Post-Test Control - Pre-Test Control
Z	-4.360 ^b	-4.343 ^b
Asymp. Sig. (2-tailed)	.000	.000
a. Wilcoxon Signed Ranks Test		
b. Based on negative ranks.		

Based on the "Test Statistics" output, it is known that the Asymp Sig (2-tailed) value is 0.000. Since the value 0.000 is less than 0.05 ($0.000 < 0.05$), it can be concluded that "the alternative hypothesis is accepted" and the null hypothesis is rejected. This means that there is a difference between the learning outcomes for writing Skill for the control and experiment classes.

Homogeneity of Variance

Test of Homogeneity of Variance					
		Levene Statistic	df1	df2	Sig.
Results student study	Based on Mean	1.358	1	46	.250
	Based on Median	1.231	1	46	.273

	Based on Median and with adjusted df	1.231	1	45.277	.273
	Based on trimmed mean	1.358	1	46	.250

Based on table the significance of the data is 0.250 which mean higher than 0.05, it can be concluded that the data is homogeneous.

table 2 Mann- Whitney U Results

Ranks				
	Class	N	Mean Rank	Sum of Ranks
Results Student study	Experiment class (Grammarly)	24	30.33	728.00
	Control Class (Dictionary)	24	18.67	448.00
	Total	48		

table 3 Statitics of Mann- Whitney U.

Test Statistics ^a	
	Results Student study
Mann-Whitney U	148.000
Wilcoxon W	448.000
Z	-2.977
Asymp. Sig. (2-tailed)	.003
a. Grouping Variable: Class	

Based on the "Test Statistics" output, it is known that the value of Asymp.Sig. (2-tailed) of $0.003 < 0.05$. So it can be concluded that "The Hypothesis Alternative (Ha) is accepted" and the null hyphothesis (H0) is rejected. Thus, it can be said that there is slightly significant effect in students' writing ability for those using Grammarly.

Discussion

The researcher conducted an analysis of the data and determined that the utilization of Grammarly has a significant effect on the writing ability of students in descriptive text. This is seen in the calculation of the hypothesis using the U test performed by Mann Whitney, where the two-tailed significance value is 0.003, which is less than 0.05. It can be concluded that the class utilizing Grammarly achieved a higher mean score compared to the class utilizing a dictionary purely.

Based on Hinkel (2004) there is a significant number of students struggle with writing English texts. Regarding proper verb usage and grammar structure, they are confused. The majority of students lack the motivation to look up a dictionary in order to identify challenging words or correct formulas. When it comes to writing English terms, the majority of students are ignored and unconcerned with their work. This research therefore proves to be highly helpful for solving the issues that have been identified thus far.

According to the findings of a research study conducted by Tucker (2015), Grammarly was an online writing tool that offered a wide range of resources to aid users with correct grammar and spelling checks, punctuation checks, vocabulary improvement, suitable language, and plagiarism checks. Grammarly drew attention to the problem with the error.

Not only did it make it simpler for students to properly edit their own writing, but it also made it simpler to recognize errors made by other students. The pupils had a greater chance of recognizing the errors that they made in their writing in the future if they were made aware of the usual mistakes that they made in their writing.

Hyejin's (2018) findings show that fourteen students expressed positive response to the helpfulness of the grammar checker in the post-treatment questionnaire, this is because grammar checker denotes this kind of mistakes that students usually made. In this findings students also stated that the grammar checker helped them find their weaknesses in English grammar use.

According to research conducted by Smith (2020) in the article "The Importance of Grammarly in Enhancing Writing Ability," the use of Grammarly significantly influences writing ability. In his research, Smith found that Grammarly users tend to produce writing that is clearer, structured, and free of grammatical errors compared to those who do not use Grammarly.

From the results of previous studies that have been listed above, it is stated that Grammarly has a significant influence on students' writing skills. Therefore based on the result of the study, the researcher found that Grammarly can be effective and make students improve in the quality of students writing.

CONCLUSION

The results of the study indicate that there is a significant effect in the level of writing ability between students who use Grammarly and students who do not use Grammarly.

According to the findings of the study, the utilisation of Grammarly had a considerable and favourable impact on the writing abilities of students who were enrolled in schools of secondary education. The fact that students who used Grammarly had a tendency to lower the number of grammatical errors, spelling mistakes, and sentence structure issues that they had in their work was one of the most important discoveries. When they used the programme, they were able to preserve consistency in the right usage of grammar and reduce the number of common writing errors.

Students who used Grammarly had psychological effects in their writing endeavours, in addition to the technical gains that resulted from using the software. Grammarly helped students feel more confident in their writing talents by providing them with immediate feedback that was both constructive and constructive. This was due to the fact that they were able to observe immediate changes in their writing without having to wait for constructive criticism from their instructors or classmates.

On the other hand, despite the fact that Grammarly offers a number of significant advantages, it is essential to emphasise that it should be utilised as a supplementary tool in the process of learning how to write. One of the most important skills that one must possess is the capacity to comprehend and implement key concepts of grammar and sentence construction. Consequently, the incorporation of Grammarly ought to take place within a learning environment that places an emphasis on the development of comprehensive writing abilities, which encompasses a profound comprehension of language as well as the ability to communicate effectively.

Therefore, despite the fact that Grammarly unquestionably makes a beneficial contribution to the writing abilities of students, it is still vital to use a holistic and integrated approach in order to obtain the best possible learning outcomes in an educational setting.

The weaknesses of this research include the small sample size, which means that the

findings cannot be widely applied and do not represent the entire population. Additionally, this study is constrained by a very limited timeframe due to the time constraints imposed by the school, resulting in less comprehensive and thorough research outcomes.

SUGGESTION

Based on the explanation above, it is suggested that both teachers and students implement this type of dictionary in the teaching and learning process since it is suitable with 21st century skills in assessing students' writing ability. This product will support students in the teaching and learning process, especially in writing. Students will enjoy implementing this application because simple to operate the application. Besides, this application will develop students' writing ability.

The researcher hopes that this study on Grammarly can be further developed by other researchers using a larger sample size and sufficient time, thereby achieving more comprehensive and accurate research outcomes.

REFERENCES

- Ary, D. . (2006). introduction to Research in Education. Wadsworth Cengage Learning. USA.
- Ary, D. J. (2010). Introduction to research in education. 8th edition. Wadsworth: Cengage Learning.
- Browns, & Douglas , B. H. (2001). Teaching by Principles . An interactive Approach to Language Pedagogy.
- Daniels, P., & Leslie, D. (2013). Grammar software ready for EFL writers. *OnCue Journal*, 391 - 401.
- Graham, S., & Perin, D. . (2007). What we know, what we still need to know. *Teaching adolescents to write. Scientific studies of reading*, 11(4), , 313-335.
- H. E. (2004). Practical techniques in vocabulary and grammar. *Teaching academic ESL writing*.
- Harmer, J. &. (2004). How to Teach Writing. *The English Writing System V*. Cook Arnold 2004, 229 pp.,£ 16.99 isbn 0340808640 , *ELT Journal*, 229.
- Huddleston, R., & Pullum, G. . (2005). Introduction to English grammar. *Zeitschrift für Anglistik und Amerikanistik*. 195 - 197.
- Husna, L., Zainil, & Rozimela, Y. . (2013). An Analysis of Students' Writing Skill in Descriptive Text at Grade X1 Ipa 1 of MAN 2 Padang. . *Journal English Language Teaching (ELT)*, 1 (2):, 1-16.
- Hyejin, & Yang, H. (2018). Efficiency of online grammar checker in English writing performance and students' perceptions. 328 - 348.
- Jacobson, P. (2002). The (dis) organization of the grammar: 25 years. . *Linguistics and Philosophy*,, 601 - 626.
- Juriati, D. E., Ariyanti, A., & Fitriana, R. (2018). The correlation between reading comprehension and writing ability in descriptive text. . *Southeast Asian Journal of Islamic Education*, 1 - 14.
- Karadeniz, A. . (2017). Cohesion and Coherence in Written Texts of Students of Faculty of Education. . *Journal of Education and Training Studies*, 5(2), 93 - 99.
- Karyuatry, L. (2018). Grammarly as a tool to improve students' writing quality: Free online-proofreader across the boundaries. *JSSH (Jurnal Sains Sosial dan Humaniora)*, 83 -

- Kirk, R. E. (2009). Experimental design. . In R. Millsap & A. Maydeu-Olivares (Eds.), Sage handbook of quantitative methods in psychology , 23–45.
- Laufer, B. &. (2013). Vocabulary. The Routledge handbook of second language acquisition , 163 - 176.
- McCarthy, K. S., Roscoe, R. D., Allen, L. K., Likens, A. D., & McNamara, D. S. (2019). Automated writing evaluation. Does spelling and grammar feedback support high-quality writing and revision?. *Assessing Writing*, 52.
- McCarthy, K. S., Roscoe, R. D., Likens, A. D., & McNamara, D. S. (2019). Does adding spelling and grammar checkers improve essay quality in an automated writing tutor. *Checking it twice*, 270-282.
- Nunan, D. (2015). The teacher as researcher. *Research in the language classroom*. 16 - 32.
- Purwaningsih, E. H. (2022). AN ANALYSIS OF STUDENTS'ABILITY IN WRITING DESCRIPTIVE TEXT DURING ONLINE LEARNING. *The Journal Of English Teaching For Young And Adult Learners*, 1(1), 1-10.
- Refrence coming from book :
- Refrence coming from Graduate Thesis:
- Tarsan, V., Kandang, A., & Helmon, A. (2021). The Automatic Grammar Checker In Writing Narrative Text in the Third Semester At Stkip Ypup Makassar. *Students Perception towards the Application of Grammarly*, 123 - 133.
- Wu, Z., Johnson, E., Yang, W., Bastani, O., Song, D., Peng, J., & Xie, T. . (2019). reinforcement learning for input-grammar inference. 448 - 498.