The Effectiveness of Using Grammarly in Teaching Writing Among Indonesian Undergraduate EFL Students

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ABSTRACT

In light of the current controversies and concerns surrounding Grammarly, this article discusses one specific way in which Grammarly can be used effectively in teaching L2 writing. This study used a switching replication design under the experimental design and involved eighty first-year students of English Education Department from a public university in Banten Province, Indonesia, taking a writing course. They were divided into two groups, experimental and control. Pre-tests and post-tests were administered to the students, followed by distributing open-ended online questionnaires to them at the end of the course. An interview was conducted with the writing teacher. Related to the interview, the experiences of the teacher were retrieved and discussed. The results showed that although the writing scores of the students from the experimental group improved significantly from the pre-tests to post-tests, there was no significant difference compared to the writing scores of the students from the control group. Further, the Gain Scores of both groups indicated that the use of Grammarly was not more effective enough than the teacher corrective feedback to teach writing in an EFL class. The students further perceived that Grammarly was a beneficial learning tool. The teacher admitted that using Grammarly could save the time spent evaluating the works of the students. A recommendation for future research is also mentioned.

Keywords: *Grammarly, Indonesian Undergraduate EFL Students, Teaching Writing*

1. INTRODUCTION

Nowadays, English as a Foreign Language (EFL) teachers integrate technology into their classrooms to improve the students' writing skills. Technology can provide a variety of supports for the teachers to create successful classroom environments. Automated Writing Evaluation (AWE), among other technology-enhanced language assessment methods, is deemed beneficial in L2 writing classrooms. Stevenson [1] has demonstrated how AWE can be an effective instructional tool in the writing classroom. O'Neil and Russell [2] discovered that AWE benefited low-performing writers by providing feedback on good writing. Then, the writers can better command the communicative and rhetorical aspects of the target language, which enables them to utilize AWE feedback more effectively [3]. Another merit of AWE lies in its potentials to assist the teachers in reducing their

workload [4]. Additionally, AWE has enabled the removal of time constraints and autonomous participation and interaction in the language classroom with accelerated feedback practice [5]. It is in line with previous research [6] that the writing skills of the EFL students are also developed through practice and reinforced by helpful feedback. They add that it takes considerable effort for the teachers to provide detailed feedback on rhetorical efficiency, proper language use, and content quality to many students in their classes.

Related to AWE, previous research has shown the benefit of applying Grammarly in EFL teaching and learning, in particular. O'Neil and Russell [2] stated that Grammarly is a teaching tool to provide grammatical feedback in writing and is a learning tool for EFL learners. Grammarly can reduce the time spent of the teachers on marking the writing texts. Such a tool is also

helpful to increase the writing scores of the students. Despite the benefits, there are currently some debates about the effectiveness of Grammarly for EFL students. O'Neil and Russell [2] stated that the weakness of Grammarly was discovered to be related to the inaccuracy of some feedback. Additionally, due to the limited capabilities of Grammarly, it cannot be relied upon to provide comprehensive feedback on student compositions [7]. In sum, there are some inconclusive findings related to the effectiveness of using Grammarly in writing class. Research focusing on the writing performance of the university students influenced by the use of Grammarly in the Indonesian context is still scarce as well.

Therefore, the present study offers essential issues of difference. First, Grammarly is used to assess the writing skills of the students both in the experimental and control classes in this study. Second, this study examined the perception of the students in using Grammarly to know whether the students take the benefits of using Grammarly in writing class or not. Third, this study aims to expand the research about the effectiveness of using Grammarly in teaching writing among Indonesian undergraduate EFL students. There are two research questions that are addressed in this study:

1. To what extent is the use of Grammarly effective to increase the writing scores among Indonesian undergraduate EFL students?

2. What are the perceptions of the teachers and students in using Grammarly in an EFL writing class?

2. METHOD

2.1. Settings and Participants

This study employed a Switching Replication Design under the framework of an experimental design. The study was conducted during an eight-week EFL academic writing course at an English Education Department in a public university in Indonesia in 2021. First-year students (n=80) along with the writing teacher agreed to participate in this research. The students were divided into two groups: experimental and control groups. The target students are the ones who must be currently enrolled in an EFL writing class. Meanwhile, the target teacher must be the one who is currently using Grammarly.

2.2. Data Collection Procedure

The students were given a pre-test of writing an argumentative text. Then, several weeks were spent by the instructor teaching the lessons about argumentative texts. At the end of the course, the students received a post-test, asking them to make an argumentative text individually, based on their themes. The writing of the students were scored using an analytic scoring rubric [8]. Then, the researchers distributed an online questionnaire through Google Form to the students to obtain their perceptions about using Grammarly. The questionnaire items were adapted from Lee [9] and Tang and Rich [10]. Afterwards, the writing teacher was interviewed to get more data to address the second research question. The online questionnaire consisted of 15 close-ended questions with a 5-Likert scale. The validity of the instrument was measured using the SPSS version 23 program. Meanwhile, Cronbach's Alpha coefficient was used to determine the realibility of the instrument.

2.3. Data Analysis Procedure

The test scores of the students before and after the treatments were analyzed and compared using paired-sample t-tests in the SPSS 23 program. The researchers determined the impact of using Grammarly on the writing performance of the students by calculating the Gain Score [11]. Afterwards, the SPSS software was also used to analyze the responses of the students to the questionnaire items. Descriptive statistics in the form of mean scores along with the minimum and maximum score as well as the standard deviation were employed. The validity and reliability level of the instrument were also measured. As for the interviews, a content analysis technique was used to examine the data. The statements of the teacher were extracted, discussed, and written to investigate the perceptions of using Grammarly in the academic writing course.

Table 1. Paired t-test Results (Pre-test and Post-Test from Experimental Class)

Group	Pre-test mean score	Post-test mean score	Paired-samples test (between pre- and post-test mean score)			
			Std. Deviation	Std. Error Mean	df	Sig. (2-tailed)
Experimental	70	85	3.16	.50	39	.000

Table 2. Paired t-test Results (Pre-test and Post-test from Control Class)

Group	Pre-test mean score	Post-test mean score	Paired-samples test (between pre- and post-test mean score)			
			Std. Deviation	Std. Error Mean	df	Sig. (2-tailed)
Control	67	81	5.07	.80	39	.000

3. FINDINGS AND DISCUSSION

3.1. The Effectiveness of Using Grammarly to Increase the Writing Scores of The Students

The researchers used the paired samples t-test to compare the mean scores on the pre-test and post-test writing essays. The paired samples t-test for the mean scores is shown in Table 1.

Table 1 shows that the writing performance of the experimental class enhanced from the pre-test mean score 70 to the post-test mean score 85. The results revealed a statistically significant difference between the pre-test and post-test mean scores (t = 30.110, $\alpha < 0.05$). The results indicate that using Grammarly can significantly improve the writing skills of the students in argumentative text. Then, the gain score result was 0.508; obtaining the moderate category. Hence, the use of Grammarly is moderately effective to increase the writing scores of the Indonesian undergraduate EFL students.

Table 2 shows that the writing performance of the students from the control class enhanced from pre-test mean score 67 to post-test mean score 81. The results revealed a statistically significant difference between pre-test and post-test mean scores (t = 16.715, $\alpha < 0.05$). Then, the gain score result was 0.415; obtaining the moderate category. Hence, the teaching method without using Grammarly is also moderately effective to increase the writing scores of the Indonesian undergraduate EFL students. In other words, the use of Grammarly does not make a significant difference as compared to the traditional teaching method in improving the writing

skills of the students in argumentative text. The results are partly in line with previous research [12] who found that the writing performance of the students improved significantly due to their use of Grammarly, which provided significant aspects of their writing skills.

Then, after conducting the pre-tests and post-tests, the researcher determined the effectiveness of the Grammarly on the students by using the Gain score to answer the first research question of this study. Table 3 depicts the descriptive statistics results.

Table 3. The Gain Scores of Both Groups

Group	Mean (in %)	Std. Error
Experimental	51.20	1.34
Control	46.54	2.21

The table above exhibited that the Gain Score of the experimental group was higher than that of the control group (51.20% and 46.54%, respectively). However, both scores were in the "moderate" category because they were in between 30%—70% [11]. It implies that the use of Grammarly in the experimental group is not more effective enough than the teacher corrective feedback in the control group to teach writing among the students because the Gain Score in the experimental group is in the same category as in the control group.

3.2. *The Perceptions of the Teachers and Students in Using Grammarly*

After establishing the normality distribution of the questionnaire about Grammarly, the authors conducted a descriptive analysis to determine the mean scores for each item. Table 4 depicts the descriptive statistics results.

Table 4. The Results of Descriptive Statistics

Min	Max	Mean	Std. Deviation
2.90	4.73	3.88	0.353

The table above demonstrated that the students were generally content with Grammarly in the writing class. They also perceived that using Grammarly was effective enough, as referred to the questionnaire item "Electronic feedback on my texts is very effective in the form of its fast response". The item received the highest mean score 4.51. They strongly agreed that the software was influential in the argumentative writing class. This research also confirms O'Neil and Russell's [2] study that they are generally very optimistic about their assignments and grades by using Grammarly. However, the questionnaire item "Grammarly never gives misleading feedback in this system" obtained the lowest mean score 3.04. This indicates that several students might perceive the feedback given by Grammarly as misleading.

From the interview results, the teacher argued that Grammarly saved the time for marking the works of the students. At the same time, the teacher could learn and effectively make the students learn from the feedback provided by Grammarly. For instance, the instructor mentioned that, "When it comes to assessing or assigning a score to works of the students, it was effective." Furthermore, Ghufron and Rosyida [13] found that Grammarly software is an excellent tool for assisting teachers in correcting EFL writing. In other words, the use of Grammarly made it easier for writing teachers to evaluate the students whose works were filed through the Grammarly software, and it also improved the results of the assignments of the students significantly, despite the fact that the traditional teaching method without the use of Grammarly can increase the writing scores as well. However, the teacher stated that the aspect that needs improvement from Grammarly is its ability to make quality feedback for a text, particularly the aspects of cohesion and coherence from a text.

4. CONCLUSION

The present study has investigated the effectiveness of using Grammarly to enhance the argumentative writing skills of the Indonesian undergraduate EFL students and the perceptions of the students and the writing teacher. The results show that although the writing scores of the students from the experimental group improved significantly from the pre-test to post-test, there is no significant difference compared to the writing scores of the students from the control group. The students further perceive that Grammarly is a beneficial learning tool. The perception of the students is in line with the teacher that using Grammarly can save the time spent for evaluating the works of the students. Hence, the present study calls for further investigations with a larger sample size to better inform the use of Grammarly in L2 academic writing classrooms.

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