

The Effectiveness of Grammarly Features in Building Arguments in Writing Essays

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ABSTRACT

Technology has already taken over to affect the way languages are learned. Tools such as Grammarly have become trendy among students to improve their writing. One of the helpful things for a student to write an effective essay is to have assistance like proper tools and support for better writing, and one of them is using Grammarly. This study aimed to measure how Grammarly affected the ESL students' writing provided in their essays, focusing on improvements in the build of the argument. This research also measured grammar, usage of tense, and overall structure. This research used mixed methods by collecting the data through essay assignment submission, taken both before and after using Grammarly. Each of the essays used as the assignment was a 5- paragraph essay consisting of an introductory paragraph, three body paragraphs, and a concluding paragraph. By comparing their essays from both stages, the results of this study show that Grammarly provided corrections not only for common mistakes such as grammar, misspellings, and inconsistent verb tense but also offered suggestions for improving sentence clarity. The analysis revealed an improvement of 60.24% in the clarity and structure of students' arguments as Grammarly helped rewrite the sentences into more concise and well-structured complex and compound forms.

Keywords: writing essays, writing assistant tool, Grammarly

ABSTRAK

Teknologi telah mengubah cara orang belajar bahasa. Alat seperti Grammarly menjadi populer di kalangan siswa untuk meningkatkan kemampuan menulis mereka. Salah satu hal yang berguna bagi siswa dalam menulis esai yang efektif adalah adanya bantuan dari alat yang tepat untuk mendukung penulisan yang lebih baik, dan salah satunya adalah Grammarly. Penelitian ini bertujuan untuk mengukur pengaruh Grammarly terhadap tulisan siswa ESL dalam esai mereka, dengan fokus pada perbaikan dalam pengembangan argumen. Penelitian ini juga mengukur tata bahasa, penggunaan tense, dan struktur keseluruhan. Metode yang digunakan adalah campuran, dengan mengumpulkan data melalui pengumpulan tugas esai yang diambil sebelum dan setelah menggunakan Grammarly. Setiap esai yang digunakan sebagai tugas terdiri dari lima paragraf, termasuk paragraf pengantar, tiga paragraf isi, dan satu paragraf kesimpulan. Dengan membandingkan esai dari kedua tahap tersebut, hasil penelitian ini menunjukkan bahwa Grammarly memberikan koreksi tidak hanya untuk kesalahan umum seperti tata bahasa, kesalahan pengetikan, dan penggunaan tense yang tidak konsisten, tetapi juga menawarkan saran untuk meningkatkan kejelasan kalimat. Analisis menunjukkan peningkatan sebesar 60,24% dalam kejelasan dan struktur argumen siswa, karena Grammarly membantu mereka menulis ulang kalimat menjadi bentuk yang lebih ringkas dan terstruktur dengan baik dalam bentuk kalimat kompleks dan majemuk.

Kata kunci: menulis esai, alat pembantu penulisan, Grammarly

I. BACKGROUND

Since 2003, the Indonesian Government has included English as Foreign Language (EFL) as an essential subject in higher education to equip the graduates of the universities with the capacity to communicate effectively in the international arena. The acquisition of EFL at university aims at equipping students with necessary language competencies such as knowledge, listening, speaking, reading, and writing among others [1][2]. These important skills

need to be gained by students in higher education that made them become critical writers, fluent speakers, and proficient writers [3]. By mastering these skills, students would be able to clearly explain their ideas both orally and in writing, and respond appropriately in natural conversation situations inside and outside the classroom [4][5].

Writing effective and communicative essays, especially in English, is one of the important skills in every academic or professional context, where clarity in communication, in this case, written context, is

needed. Essay writing gets more complicated and difficult for students especially those who learn English as a second language because it deals not only with knowing English but also with how to build ideas and present arguments clearly and effectively. The challenges that English as a Second Language (ESL) students face when writing academic essays and those were grammar issues, poor vocabulary, and a lack of coherence and cohesion [6].

Writing essays is always found in academic life among scholars, lecturers, and also students especially when they need to finish their thesis, and it is taught to them. Hence, the ability and skills to write essays enables the students to show their understanding and reasoning ability. Writing exercises significantly enhance students' grammar and vocabulary, making them more confident essay writers [7]. It indicates that writing essays becomes an essential aspect that needs to be learned by the students, especially non-native English language students for their study and learning purposes.

When preparing a good essay, the students need to choose and ensure the things that matter in order to achieve the purposes of the essay, which deal with proper use of grammar, clarity in structure, good build of ideas, and most importantly, building effective arguments. This becomes difficult for the students who learn English as their second language. The other thing is that most students have certain difficulties in the proper way of self-expression in English, grammatical errors, or word choice, which influences the very essence of understanding the essay. In this case, the assistance and feedback when writing essays provided by the tutors, in this case, the lecturers, is needed. Feedback from teachers and peers impacts the development of essay writing skills in second language learners [8]. It also found that timely and constructive feedback can significantly improve students' academic writing abilities and confidence. From that, it shows that feedback and suggestions when students write essays are needed, and the assistance can be from any source provided. That's why, one of the helpful things for a student to write an effective essay is to have assistance like proper tools and support for better writing.

One of the popular tools that is mostly used is Grammarly. Grammarly is an application for desktops and smartphones that provides an online assistant that helps users perfect their writing by checking grammatical, punctuation, spelling, and other common mistakes. Grammarly analyses what is written in the files and provides suggestions on how to phrase it clearer and better and corrections if there is any grammatical mistakes found [9]. It is accessible through its website or browser extension for easier use on various devices like smartphones, tablets, laptops, etc. Grammarly has been a helpful tool in helping students and professionals who want to write better in English skills [10].

Not only error grammar correction, Grammarly also gives suggestions concerning style and tone to

make the text become clearer and more understandable for the readers in certain contexts provided. For example, Grammarly may give suggestions to use formal language in academic works or casual language in personal emails. Grammarly also makes sure the writing is original with the addition of a plagiarism checker. Grammarly has been helpful for those, especially students, who seriously want to improve their writing skills and quality written material. Grammarly has proven to be beneficial, especially for students who are eager to improve their writing skills and produce high-quality written material [11].

Until recently, in the present years, technology took over to affect the way languages are learned, and with the advancement in technology, tools such as Grammarly have become trendy among students to improve their writing. Indeed, Grammarly is helpful for EFL learners to improve grammatical errors, spelling errors, and inappropriate writing style. Grammarly helps in improving essay writing skills for non-native English speakers [12]. It shows that such tools, while not perfect, provide valuable grammar and style corrections that benefit students, particularly in the drafting and revising stages. Since essay writing skills have achieved a lot of importance in academics, especially in 2024, Grammarly is being vastly used among students to improve their work and achieve academic standards and it helps students by identifying and correcting various language issues, helping them create clearer, more cohesive, and grammatically accurate writing [10][11].

The second problem most students have with writing essays is timely feedback. This, Grammarly does in real time, helping the learner to realize their mistakes and fixing them then and there. It can also make them more independent in editing their writing and reduce anxiety about such errors. Feedback and direct suggestions impact the development of essay writing skills in second language learners [13]. It also found that timely and constructive feedback can significantly improve students' academic writing abilities and confidence. The Grammarly learning tool offers an easy, comfortable way for students to improve their writing even outside of school.

Grammarly complements traditional methods of improving writing skills by providing immediate feedback on grammar, punctuation, and writing style while applied in the devices. Traditional learning methods depend on teacher feedback and detailed grammar lessons while in Grammarly, students can see and correct their mistakes right as they write. This supports the foundational language knowledge taught in the classroom because students can apply grammar rules directly to their writing. Grammarly bridges technology with traditional learning that also offers a practical tool for practice outside of class without mentors or teachers.

Academic writing is a writing activity that is developed for academic purposes [14]. This requires writers to have sufficient appropriate knowledge and

writing expertise to demonstrate mastery in specific academic argumentation, integration, and presentation skills. The writer should also have appropriate competencies, like to research, read complex texts, understand key concepts of appropriate disciplines, using ways to evaluate and respond to new information. By the definitions provided for academic writing, it can be defined as one way of portraying one's views in a written form for educative purposes.

Academic writing isn't just a simple task; it involves several steps to create a complete piece. The writing process can be broken down into four main stages: prewriting, organizing, writing, and polishing [15]. In the first stage, called prewriting, the writer picks a topic and gathers ideas to explore it further. This can involve brainstorming topics and writing down key words or phrases related to those ideas on paper or using a word processor. The next step is organizing, where the writer takes the ideas collected during prewriting and creates a basic outline. This outline should include relevant words and phrases from the initial brainstorming to help structure the writing effectively.

Writing is the third step in the process, where the writer begins creating drafts based on the outlines made earlier. In this stage, the writer should focus on getting the ideas down on paper and expanding on the previous steps using relevant words and phrases. The fourth step is polishing, which involves two parts: revising and editing. Revising means making significant changes to improve the content and organization of the writing. Editing, on the other hand, is about fixing minor errors related to grammar and mechanics.

This study's theoretical framework focuses on these polishing steps, particularly the revising and editing stages. In this part of the writing process, English as a Foreign Language (EFL) students can benefit from using automatic grammar checkers like Grammarly to improve their writing. The next section will discuss Grammarly, including its advantages and disadvantages, as well as previous research on its use in various educational contexts.

Grammarly could reduce foreign language anxiety (FLA) and then promote learner autonomy (LA) among EFL students [16]. They observed that, at a university level in Japan, participants who utilized Grammarly for 16 weeks demonstrated much lower anxiety and much higher autonomy when performing the writing task. Generally, the writers hold fairly positive attitudes toward the tool and consider it very helpful for improving their writing competence.

Several studies have examined Grammarly's role in assisting students with essay writing, and the findings highlight a similar trend. Grammarly is effective at detecting surface-level issues such as grammar, punctuation, and vocabulary errors. However, its ability to improve higher-level aspects like argument development, content quality, and overall structure is limited. While Grammarly helps

with grammatical corrections, it does not enhance the content or structure of an essay [17]. The results show the strengths of Grammarly in error detection on a surface level; on the other hand, its inability is highly poor in order to improve the content and structure. Thus, it is advisable for its usage in combination with traditional teaching. Similarly, while the tool is useful for fixing grammar and spelling, it is less effective in improving the coherence and organization of academic essays, suggesting that teacher feedback is still necessary for comprehensive improvement [18]. Grammarly is helpful in terms of grammar and spelling errors but is less successful in enhancing coherence and academic organization in essays written by L2 students. Because of that, they suggest adding the use of this tool to teacher feedback to accomplish better standards of performance in writing.

Students' views on Grammarly and discovered that although students appreciate its convenience for grammar and punctuation checks, the free version lacks important features like style and tone suggestions, which are essential for refining academic writing [19]. They found a fact that, indeed, students preferred the tool for convenience in carrying out grammar and punctuation checks. However, according to them, the free version of Grammarly lacks those important features that would make a difference in academic writing, such as style and tone suggestions. While Grammarly helps students achieve better grammatical accuracy, it does not support higher-order writing skills, such as developing arguments and maintaining a logical flow [20].

Existing previous studies highlight that Grammarly is helpful for correcting basic language issues, such as grammar and spelling mistakes, but it often lacks the capability to improve the structure or quality of content on a deeper level. To address this gap, this study focused on examining Grammarly's impact not just on surface-level errors but also on argument clarity and content structure in student essays. This approach showed if Grammarly can go beyond basic corrections to support higher-level writing skills that are essential in academic writing. By doing so, this study aims to provide new insights into the effectiveness of Grammarly as a broader learning tool for ESL writers, filling a gap left by previous research.

The aim of the study was to measure how Grammarly affected the students' writing provided in their essays, focusing on improvements in the build of the argument. This research also measured grammar, vocabulary, and overall structure. By comparing their essays from both stages, the researcher could see if Grammarly helped reduce errors and improve writing clarity.

II. METHODOLOGY

In this study, the design used was mixed methods, which combined quantitative and qualitative approaches. This method was appropriate because the

researcher collected quantitative data by evaluating students' essays before and after using Grammarly, and qualitative data by exploring the details of the content and arguments and the deeper effects of Grammarly on their writing.

In the quantitative part, the researcher gathered measurable information, like how many grammar, spelling, or vocabulary mistakes were made and the build of the arguments in the essays before using Grammarly. This fits within a pre-test/post-test design, where the researcher checked students' essays before and after the intervention (Grammarly) to see if there was an improvement [21]. Quantitative research typically deals with numbers and statistics, and in this case, you can analyze students' scores to assess the tool's effectiveness.

The qualitative part took part in looking at how well students improved their writing content, organization, and argument development after using Grammarly. The researcher checked the improvement of the grammar and the quality of arguments and coherence. The researcher also gathered students' reflections on how helpful Grammarly was to them beyond surface-level corrections.

A mixed methods approach is useful because it gives a more complete view of the results. Quantitative data showed how Grammarly helps with technical writing aspects, while qualitative data explained how the tool influences students' ability to write well-organized, convincing essays. By combining both quantitative and qualitative methods, this study gained a clearer view of Grammarly's overall impact on academic writing. For the quantitative data, a manual count was used to record occurrences of grammatical errors, tense inconsistencies, and misspellings in each essay before and after the use of Grammarly. This method gave a straightforward comparison of error frequency to measure the tool's impact on reducing specific types of writing mistakes. Manual analysis was beneficial for small-scale studies that provides a clear, hands-on approach to assess Grammarly's impact on specific writing weaknesses. For the qualitative analysis, a straightforward method was used to examine each essay's argument structure and clarity before and after using Grammarly. This process involved identifying and evaluating the primary arguments within each paragraph to identify changes in structure and clarity that occurred after applying Grammarly's suggestions. This analysis aimed to determine whether Grammarly contributed to more coherent and effective arguments, particularly by suggesting improvements in sentence complexity and argument flow. Together, these methods provided a comprehensive view, with quantitative analysis showing measurable improvements and qualitative insights revealing students' experiences and perceptions.

This study involved 45 fourth-semester students from two classes of English for specific purposes at the State Polytechnic of Malang, Central Java. The participants were selected using purposive random

sampling, a method chosen because the study had specific requirements for its participants [21]. The students that were selected had all completed a required course on academic essay writing and were familiar with using Grammarly in their writing process, making them suitable for this research. The details of the participants can be seen in Table 1.

Tabel 1. Participants details

Gender	Class A	Class B
Male	6	10
Female	15	14
Total	21	24

In this research, the researcher collected the data through student essay assignments, taken before using Grammarly. Each of the essays used as the assignment was a 5- paragraph essay consisting of an introductory paragraph, three body paragraphs, and a concluding paragraph. The goal was to measure how Grammarly affected their writing, focusing on improvements in grammar, vocabulary, and overall structure. By comparing their essays from both stages, the researcher could see if Grammarly helped reduce errors and improve writing clarity.

This approach follows a pre-test/post-test design, often used in education to see how an intervention changes performance [21]. This method helps show the impact of Grammarly on students' writing abilities.

III. FINDINGS AND DISCUSSIONS

In analyzing the results of the essays collected, it was found that all of the students still faced a number of writing issues which included frequent grammatical errors, misspellings, and inconsistent verb tense usage, for example, one of the students wrote, "He go to the store yesterday," where Grammarly identified the incorrect verb form and suggested changing it to "went" for proper tense usage. Another common issue was seen in sentences like, "The cat was sleeping on the mat, it was very comfortable." Grammarly marked this as a comma splice and recommended splitting it into two sentences. Additionally, one of the students wrote, "There is many problems with my essay," which Grammarly corrected to "There are many problems with my essay," which emphasized the importance of subject-verb agreement. The inconsistency in tenses disrupted the flow of their arguments that made the essays less cohesive. The number of mistakes made by the students can be seen in Table 2.

Tabel 2. The result of the mistakes found in the participants' essays

Number of mistakes	Grammar	Misspelling	Tenses
0	0	41	1
1-5	2	4	10
6-10	5	-	30
11-15	16	-	4
16-20	10	-	-
21-25	5	-	-
26-30	2	-	-
31-35	2	-	-

36-40	2	-	-
41-45	1	-	-
Total	45	45	45

As shown in Table 2, all of the students still had difficulties regarding grammar in their essays. There were only 2 students who had one to five grammatical mistakes in their essays and 5 students had six to ten grammatical mistakes. There were 16 students who had 11 to 15 grammatical mistakes and 10 students had 16 to 20 grammatical mistakes in their writing. Twelve students had more than 20 grammatical mistakes in their writing.

The grammar mistakes made were around the subject-verb agreement, auxiliaries, conditional if, the use of proper modal auxiliary, and also gerund. These grammar mistakes were mostly found in essays made by ESL students [22][23][24]. These studies show that grammar still becomes a significant challenge for ESL learners that affects the clarity and effectiveness of their writing.

In Table 2, it is shown that most of the students had shown no misspelling mistakes in their writing, yet four students had one to five misspellings mistakes in their essays. Inconsistent verb tense usage was found in their writings. Only one student successfully showed tense consistency in their writing, while other students still made inconsistent tense mistakes in writing their essays with one to fifteen mistakes. Grammatical errors are a major obstacle for second language users learning the language and when they write academic essays [25]. The researchers indicate that most of the ESL students make mistakes related to verb tense agreement, choice of article, and sentence structures.

The researcher then also checked and analyzed the kinds of sentences used in the essays submitted. The arguments of the essays were mostly in the body paragraphs. The sentences containing arguments were then analyzed and the result is shown in Table 2.

Tabel 3. Results of the form of sentences used to build the arguments in the essays

Body Paragraph	Simple Sentence	Complex Sentence	Compound Sentence	Compound-Complex Sentence	Total
1	25	11	9	0	45
2	27	13	5	0	45
3	31	11	2	1	45
Total	83	35	16	1	135

Table 3 shows that 25 students or more still wrote their arguments in simple sentence form, and the researcher also found that they mostly separated the evidence and the conclusion in the paragraph, making it not as effective as a paragraph containing an argument written in one sentence. Only 11 to 13 students wrote their arguments in complex sentence form, and not more than 10 students chose compound sentence form to display their arguments. Only one student wrote a compound-complex sentence for their sentence. This result indicates that the students were

still confused and unable to create such effective arguments written in complex, compound, and compound-complex sentence forms. Whereas, effective arguments benefit more from the use of complex, compound, or compound-complex sentences, compared to reliance on simple sentences, especially in essays [26] [27] [28]. More structured sentences, in this case, in the essays, are necessary for creating effective arguments instead of using overused simple sentences.

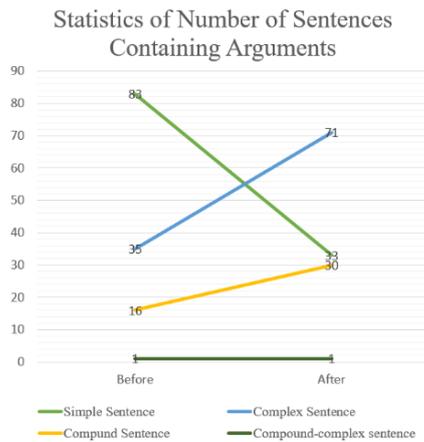
The study continued with the next step, which was using Grammarly to identify and check the writings in the essays. The researcher used Grammarly in each essay to check whether Grammarly could identify the grammatical mistakes found previously in the essays submitted. After applying Grammarly, the researcher found that Grammarly successfully identified the grammatical mistakes by giving red underlines under the words that contained grammatical mistakes as Grammarly can detect issues with misspellings, tense inconsistencies, and sentence structure by providing feedback for each error detected [29]. Grammarly also gave suggestions for the corrections of the wrong words used in the writings. Not only the grammatical errors identified by Grammarly, the misspelling and inconsistent tense usage mistakes were also identified, and Grammarly also gave correction suggestions for each word containing the mistakes [30].

The researcher then identified the suggestion made by Grammarly in the case of argument clarity, especially arguments that were made in only simple sentence form. Regularly, Grammarly gives yellow underlines whenever it finds suggestions for the clarity of the writing. When Grammarly was applied and the researcher checked the arguments, Grammarly successfully found suggestions for better clarity. The researcher then applied and used the suggestions and there were a large number of simple sentences containing arguments in the essays were changed into complex and compound sentences as shown in Table 4.

Tabel 4. Results of sentences that were changed into different forms

Body Paragraph	Simple Sentence	Complex Sentence	Compound Sentence	Compound-Complex Sentence	Total
1	9	22	14	0	45
2	13	26	6	0	45
3	11	23	10	1	45
Total	33	71	30	1	135

The statistic of sentence number change can be seen in Figure 1.



Gambar 1. Statistic of Number of Sentences Containing Arguments

As shown in Table 4, the total number of simple sentences containing arguments was greatly reduced from 83 to 33 which represents a decrease of 60,34% after the researcher used the suggestions given by Grammarly. Even Grammarly did not give all of the suggestions for simple sentences, the number was changed a lot. The researcher then checked why Grammarly did not give the simple sentence corrections and the researcher found that the structure and words made by the students were unable to be changed because the sentences were too complicated.

Figure 1 also shows that the simple sentences containing arguments were changed mostly into complex sentences from 35 to 71 sentences which represent an increase twice and more of the previous number. There were also some compound sentences made after the corrections were made from 16 to 30 sentences. There was no suggestion given by Grammarly for the compound-complex suggestions. The researcher also found that there was a reduction of the number of words because of the change made as the simple sentences were changed into complex or compound sentences, which made the sentences more likely to be effective as arguments.

As shown from the findings and discussion above, Grammarly can be a practical digital solution compared to traditional methods for checking grammar. This app can provide instant feedback on errors like grammar, spelling, and style. Unlike traditional methods that often take more time to review and check, Grammarly can help students improve their sentences independently, which makes their writing clearer and more structured in order to make clear arguments written in more complex or compound sentences.

IV. CONCLUSIONS

Since essay writing requires students to be correct but also to think logically, most educators would recommend that students use Grammarly in tandem with teacher feedback or even peer review. In this

way, students will improve not only in grammar but also in critical thinking and structuring essays.

The results above show that Grammarly has provided corrections not only for common mistakes such as grammar, misspellings, and inconsistent verb tense, but also gives corrections for sentence clarity. In this study, Grammarly suggested how to rewrite sentences containing arguments to make them more concise and structured by changing them into complex and compound sentences, which is essential for strong essay writing. From this, Grammarly can be useful for EFL students who struggle with sentence-level errors and may not have the time to revise their work extensively.

This study found that Grammarly significantly helped students improve their essay writing by identifying and fixing various writing issues such as grammar errors, tense inconsistencies, and misspellings. Moreover, Grammarly also successfully provided valuable suggestions that enhanced the effectiveness of students' arguments. The analysis revealed an improvement of 60.24% in the clarity and structure of their arguments which shows that Grammarly's role not only as a tool for correcting basic mistakes but also as a support system for developing stronger, more coherent essays.

Additionally, Grammarly also highlights areas where students can improve sentence flow and organization, which can help them build stronger arguments in their essays. Effective writing is not just about using the correct grammar, but it is also about structuring ideas to achieve understanding. In particular, Grammarly can help in developing more effective sentences by providing recommendations depending on the context. These recommendations are useful for students to strengthen their arguments and present their ideas clearly.

Using tools like Grammarly can improve the quality of language used, especially when writing essays in English. Grammarly helps the users, in this case, ESL students, by identifying grammar mistakes, spelling errors, and sentence structure issues, which are common challenges faced by English learners. By providing suggestions for corrections, Grammarly helps students in writing more effective and coherent sentences, and develop their writing skills. Additionally, with continuous use, students can learn from their mistakes which lead them to continuous improvement in their overall experience and writing ability.

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