### INVESTIGATING GRAMMARLY AS A TOOL FOR ACADEMIC WRITING

### **Audy Febrina Pulungan**

English Education Program
Faculty of Teacher Training and Education
Universitas Ibn Khaldun, Bogor
audyfebrina15@gmail.com

### **ABSTRACT**

Penelitian ini menyelidiki Grammarly sebagai alat bantu menulis dan bagaimana fitur-fiturnya mendukung proses penulisan akademik. Menggunakan pendekatan kualitatif, data dikumpulkan melalui studi dokumentasi, kuesioner, dan wawancara mahasiswa. Temuan penelitian mengungkapkan tiga fitur utama dalam Grammarly: (1) Saran Tinjauan (Ketepatan, Kejelasan, Keterlibatan, Penyampaian, Panduan Gaya); (2) Menulis dengan AI Generatif (Gagasan Akademik, Menulis Ulang, Evaluasi, Menciptakan Ide); dan (3) Pengecekan Plagiarisme dan Teks AI. Mahasiswa terutama menggunakan fitur-fitur ini untuk mendukung penulisan akademik mereka: Ketepatan untuk memperbaiki kesalahan tata bahasa, Kejelasan untuk memparafrase kalimat, Menulis Ulang untuk meningkatkan kualitas kalimat, dan Pengecekan Teks AI dan Plagiarisme untuk memastikan integritas akademik. Fitur-fitur ini dimanfaatkan selama tahap pra-penulisan, saat penulisan, dan pasca-penulisan, tergantung pada kebutuhan dan tugas spesifik. Penelitian ini menyimpulkan bahwa Grammarly adalah alat pendukung yang efektif untuk penulisan akademik, terutama dalam konteks bahasa kedua. Namun, mahasiswa menggunakan fitur-fitur ini secara kritis daripada pasif, menunjukkan perkembangan kesadaran metalinguistik dan pemikiran kritis. Studi ini berkontribusi pada pemahaman tentang bagaimana asisten penulisan berbasis AI dapat melengkapi, bukan menggantikan, pengembangan kemampuan menulis mandiri mahasiswa.

Kata kunci: Asisten penulisan, fitur, Grammarly, penulisan akademik, scaffolding.

### **ABSTRACT**

This research investigated Grammarly as a writing assistant tool and how its affordances scaffold the academic writing process. Using a qualitative approach, data were collected through documentation studies, questionnaires, and student interviews. The findings revealed three main affordances in Grammarly: (1) Review Suggestion (Correctness, Clarity, Engagement, Delivery, Style Guide); (2) Write with Generate AI (Ideas of School, Rewrite, Evaluate, Ideate); and (3) Plagiarism and AI Text Check. Students primarily use these affordances to scaffold their academic writing: Correctness to fix grammatical errors, Clarity to paraphrase sentences, Rewrite to improve sentences, and Check for AI Text and Plagiarism to ensure academic integrity. These affordances are utilized during pre-writing, while-writing, and post-writing stages, depending on specific needs and tasks. The research concludes that Grammarly is an effective scaffolding tool for academic writing, particularly in second language contexts. However, students approach these affordances critically rather than passively, indicating development of metalinguistic awareness and critical thinking. This study contributes to understanding how AI-based writing assistants can supplement, not replace, the development of students' independent writing abilities.

Keywords:, Academic writing, affordances, Grammarly, scaffolding, writing assistant.

### INTRODUCTION

The rapid advancement of artificial intelligence has significantly impacted education, particularly in English as a Foreign Language (EFL) instruction. Automated Writing Evaluation (AWE) systems have gained attention for their potential to enhance writing skills development through immediate, comprehensive feedback.

Writing remains one of the most challenging skills for EFL students, involving complex components like grammar, vocabulary, and discourse organization. Traditional writing instruction often struggles to provide the immediate, personalized feedback that contemporary learners need in today's digital educational environment. Scaffolding theory, originating from Vygotsky's Zone of Proximal Development, defines the distance between actual developmental level determined by independent problem-solving and potential developmental level achieved through guidance or collaboration with more capable peers.

According to Stuyf (2002), scaffolding serves as "the role of teachers and others in supporting the learner's development and providing support structures to get to that next stage or level." In English classrooms, scaffolding strategies include modeling, questioning and answering, providing feedback, breaking down tasks, direct assistance, and providing resources (Fajrin et al., 2024). For writing instruction specifically, scaffolding occurs across three stages: pre-writing (brainstorming and planning ideas), while-writing (drafting and modeling strategies), and post-writing (revision and editing processes) (Faraj, 2015; Laksmi, 2013; Serviti, 2012).

Grammarly, according to Javier (2022), is a digital writing tool with embedded artificial intelligence to check grammar, spelling, and detect plagiarism. The platform offers two versions: Free (providing correctness and clarity features) and Premium (adding engagement, delivery, style guide, and plagiarism detection features). Research demonstrates Grammarly's effectiveness in educational contexts. Sulistyowati (2021) found significant improvement in students' analytical exposition writing, with scores increasing from 66.43 (pre-test) to 80.74 (postimplementation). Similarly, Syapitri et al. (2023) reported that students using Grammarly achieved

higher scores (average 74.86) compared to those using traditional methods (average 68.61).

Grammarly provides advantages including useful feedback for grammar learning, easy accessibility across platforms, fast evaluation speed, and complete features in its premium version (O'Neill & Russell, 2019). However, limitations include potentially misleading feedback, overchecking reference lists, and noncontextual feedback that may alter intended meaning (Nova, 2018; Faisal & Carabella, 2023).

Academic writing, defined as writing done to meet university graduation requirements (Birhan, 2021), involves organized text supported by arguments. According to Lasi (2019), writing is the most difficult language skill as it requires mastery of grammar, word choice, punctuation, vocabulary, and paragraph unity. Students must develop original viewpoints using facts and objective information presentation. Research on Grammarly's use in academic writing shows mixed perceptions. While students appreciate relevant feedback, practicality, and grammatical accuracy (Hakiki, 2021), some find feedback not always relevant, useful, or contextual to their writing assignments (Miranty et al., 2021; Faisal & Carabella, 2023).

Previous research on Grammarly has primarily focused on user perceptions and general effectiveness, with limited investigation into specific affordances that contribute to its scaffolding potential in academic writing contexts. There remains a significant gap in understanding how Grammarly's specific affordances can be systematically leveraged to support academic writing instruction. Specifically, the study addresses: "What are the affordances of Grammarly and what affordances of Grammarly can be used to scaffold academic writing?"

### **METHOD**

This study employed a qualitative approach with a case study design to analyze the perceptions and challenges of English Department students in implementing the flipped learning model in writing classrooms. The research participants were fourth-semester students from English Education Study Program classes 4A and 4B at one of the universities in Bogor who were taking the Academic Writing course. Data collection was conducted through three methods: documentation

involving the collection of official documents and articles related to Grammarly, open-ended questionnaires consisting of 15 questions covering student demographics, opinions about Grammarly and its affordances, and academic writing experiences, and semi-structured interviews to obtain in-depth information about Grammarly usage, utilized affordances, and difficulties experienced by students in English writing. Data analysis employed the Miles and Huberman (1984) model comprising three stages: data reduction to summarize and focus on important information, data display to organize information in the form of tables and descriptions, and conclusion drawing and verification based on evidence obtained during the research to ensure the validity and reliability of research findings.

### RESULT AND DISCUSSION

The Affordances of Grammarly as a Writing Assistant in Academic Writing

### A. Review Suggestion

Grammarly provides five core affordances that support academic writing:

**Correctness Sub-affordance:** This helps identify and fix writing errors by showing a red underline for spelling, grammar, and punctuation mistakes. Students use this to check verb forms and ensure proper sentence construction.

**Clarity Sub-affordance:** This focuses on improving clarity by identifying convoluted sentences with a blue underline and suggesting more effective alternatives. It helps students with paraphrasing and removing unnecessary phrases.

**Engagement Sub-affordance:** This enhances word effectiveness and avoids repetition by suggesting appropriate synonyms, marked with a green underline. It helps improve readability and reader comprehension.

**Delivery Sub-affordance:** This assists writers in understanding writing from a pragmatic perspective and adjusting the tone of writing according to purpose and audience. It's shown with a dark blue underline.

**Style Guide Sub-affordance:** This supports the consistent implementation of citation rules, number and date formatting, word choice, and other style elements . It's displayed with a dark green underline.

### B. Write with Generative AI

This affordance acts as a comprehensive writing assistant that helps generate content efficiently and creatively:

### Ideas of School Sub-affordance

The ideas of school is a sub-affordance designed to help students overcome writing hurdles.. This sub has a function, for example: Suggest Cut to helps make writing more concise by identifying redundant elements.

### Rewrite Sub-affordance

Rewrite is a sub-affordance that instantly generates new versions of writing customized for tone, clarity, or length. This sub has a function, for example: Improve it to transforms informal text into a more formal version by removing informal expressions and simplifying complex sentence structures.

### Evaluate Sub-affordance

Evaluate is a sub-affordance designed to help students assess and refine the text the AI has generated. This sub has a function, for example: identify any gaps to helps evaluate text for missing information through questions based on the original content.

### **Ideate Sub-affordance**

Ideate is a sub-affordance designed to assist users in generating new ideas or further developing their writing. This sub has a function that can be used, for example: create ideas for a blog post to helps users overcome writer's block and accelerates the initial writing process by instantly producing relevant ideas based on the entered topic.

### C. The Plagiarism Detection and AI Text

It helps ensure the integrity and originality of writing. This affordance scans documents and highlights sections that match online content or existing academic sources.

## The Affordances of Grammarly can be used to scaffold Academic Writing

### A. Review Suggestion

### **Correctness Sub-affordance for Grammatical Error Identification**

Questionnaire responses indicate that students predominantly use the Correctness sub-affordance to enhance grammatical accuracy and sentence structure. Students primarily employ this feature to correct verb forms, verify proper tense usage, and ensure grammatical coherence. Interview data supports these findings:

Excerpt 1: "I use the free Grammarly affordance during both while-writing and post-writing activities, particularly during checking, correcting, and revising. During an Academic Writing course journal project, I used the Correctness affordance after receiving lecturer feedback about numerous grammar errors. I uploaded my document into Grammarly, which automatically identified and corrected the errors."

Excerpt 2: "I use the free Grammarly feature during while-writing activities. First, I create the draft, and when completely finished, I check it using Grammarly. The feature I commonly use is review suggestion, specifically Correctness, to check for errors in tenses and connecting sentences."

# **Clarity Sub-affordance for Sentence Paraphrasing**

Students predominantly utilize the Clarity subaffordance to enhance writing quality and conciseness. Findings reveal that students employ this tool for paraphrasing sentences, eliminating unnecessary phrases, condensing lengthy paragraphs, and improving overall clarity. Interview evidence includes:

Excerpt 3: "I use free Grammarly features during while-writing activity, specifically when forming sentences and paragraphs. During an Academic Writing course mini-research project, I was constructing and translating sentences into English. Some sentences were quite complex, so I used Grammarly's Clarity affordance to simplify complex language for better understanding."

*Excerpt 4:* "I use free Grammarly features during post-writing activities, specifically when paraphrasing sentences within paragraphs.

During my academic writing course, I received lecturer feedback about significant plagiarism. I used the Clarity feature to help paraphrase my written work to avoid plagiarism."

# B. Write with Generate AI Rewrite Sub-affordance for Sentence Improvement

Questionnaire responses concerning "Rewrite: Improve it" consistently identify its utility in enhancing overall writing quality. Students find it valuable for refining word choices and sentence construction, particularly when facing vocabulary limitations. The feature elevates formality and academic tone, especially in assignments like mini-research papers.

Excerpt 5: "I use free Grammarly affordances during post-writing activities. During a group assignment to write an English article, my evaluation showed the conclusion was too long and convoluted. I used the rewrite affordance to improve my paragraph; this feature checked and removed redundant sentences. The language was not formal enough, so the feature changed it to be more academic."

Excerpt 6: "I use free Grammarly affordances during post-writing activities. I employed the Rewrite affordance for a miniresearch paper in Academic Writing course. Upon completing paragraphs, minor revisions were needed for sentences lacking coherence and containing numerous abbreviations. I used the Rewrite affordance to enhance paragraph quality."

### C. Plagiarism and AI Text Check

Students utilize Grammarly's Check for AI Text and Plagiarism affordance for several key purposes: verifying whether written work might be detected as AI-generated content, examining AI-paraphrased texts for originality, and conducting routine quality control checks.

Excerpt 7: "I use the free Grammarly feature during my academic writing course. During a mini research task, I took several passages from journals and paraphrased them using AI. I used Grammarly's Check for AI and Plagiarism affordance during post-writing activities by uploading my document to check whether my writing was detected as AI-generated."

Excerpt 8: "I use the free Grammarly feature during my Prose: Creative Writing course. My lecturer instructed that using AI and plagiarism would be detected. For a story assignment with film references, I used Grammarly's Check for AI and Plagiarism affordance during post-writing evaluation to avoid potential issues."

### **Discussion**

# The Affordances of Grammarly as a Writing Assistant in Academic Writing

### A. Review Suggestion

The research findings indicate that Grammarly's Review Suggestion affordances offer significant support for academic writing, aligning with O'Neill & Russell's (2019) identification of key sub-affordances.

### **Correctness Sub-affordance**

The Correctness sub-affordance assists students in identifying grammar, spelling, and punctuation errors, consistent with Octaberlina's (2023) findings demonstrating error identification and correction facilitation. In second language learning contexts, this affordance provides crucial scaffolding for students developing grammatical understanding. Notably, students do not passively accept correction suggestions but critically evaluate them, indicating metalinguistic ability development. These findings align with Rahma Hakiki (2021) and Armanda et al. (2022), who found students perceive Grammarly positively for relevant feedback and grammatical accuracy.

### **Clarity Sub-affordance**

The Clarity sub-affordance enhances writing clarity by detecting convoluted or ineffective sentences, reinforcing Octaberlina's (2023) argument that paraphrasing and language simplification help writers convey ideas more clearly. Academic writing processes demanding precision and clarity are significantly aided by this affordance, especially for students developing scientific writing skills in academic contexts.

### **Engagement Sub-affordance**

The Engagement sub-affordance helps students avoid word repetition and use appropriate lexical variations, supporting Octaberlina's (2023) argument about reducing unnecessary repetition

and suggesting stronger word alternatives. In academic writing, lexical variation is crucial for maintaining reader interest and demonstrating comprehensive language proficiency.

### **Delivery Sub-affordance**

The Delivery sub-affordance assists students in adjusting writing tone for effectiveness with intended purposes and audiences, aligning with Fitriana & Nurazni's (2022) view of enhancing writers' abilities from pragmatic standpoints. In academic contexts, tone adjustment ability is essential for meeting various academic community expectations with differing communication conventions.

### **Style Guide Sub-affordance**

The Style Guide sub-affordance supports consistent implementation of specific rules regarding citations, formats, word choice, and stylistic elements, consistent with Octaberlina's (2023) research emphasizing adherence to specific writing styles within academic communities. For students learning academic writing conventions (APA, MLA, Chicago), this affordance provides practical assistance accelerating convention learning processes.

### **B.** Write with Generate AI Analysis

The "Write with Generate AI" feature provides significant academic writing process support, functioning as a writing assistant helping users generate content efficiently and creatively while maintaining academic standards (Wang & Ren, 2023).

### **Ideas of School Sub-affordance**

This sub-affordance helps students overcome academic writing hurdles (Faller, 2018). The "Suggest Cut" feature enables concise, effective writing by identifying and suggesting removal of redundant elements. In academic writing prioritizing clarity and precision, the ability to identify and eliminate unnecessary parts is crucial skill development through this affordance usage.

### Rewrite Sub-affordance

The Rewrite sub-affordance generates new writing versions tailored to desired tone, clarity, or length (Fitria, 2021). The "Improve it" affordance helps students transform informal

writing to formal styles in accordance with academic writing conventions. While beneficial, students need critical evaluation of suggestions to ensure personal voice and style preservation during revision processes.

### **Evaluate Sub-affordance**

The Evaluate sub-affordance helps students assess and refine generated text (Karyuatry, 2018). The "Identify any gaps" affordance facilitates text evaluation for missing information through content-based questioning. This reflective process supports critical thinking skill development essential in academic writing, where argumentation completeness and depth are highly valued in scientific communities.

### **Ideate Sub-affordance**

The Ideate sub-affordance helps students generate new ideas or further develop writing (Khoshnevisan, 2019). The "Generate ideas for a blog post" affordance helps overcome writer's block and accelerates initial writing processes through relevant idea generation based on entered topics. Although initially designed for blog content, the same principle applies to academic writing for exploring new perspectives or research topic approaches.

### C. Plagiarism and AI Text Check

The Plagiarism and AI Text Check affordance helps students ensure writing integrity and originality. As Phuangsuwan et al. (2024) explain, this affordance authenticates writing and provides solid author identity. In higher education contexts highly emphasizing academic integrity, this affordance is crucial for detecting unintentional plagiarism and ensuring proper source citation. With increasing AI usage in writing, AI-generated text identification ability becomes increasingly critical for maintaining originality and academic integrity, as highlighted by Ummah & Bisriyah (2022) regarding this affordance as a main feature in Grammarly's premium version.

### The Affordances of Grammarly can be used to scaffold Academic Writing

A. Review Suggestion Correctness Sub-affordance for Grammatical Error Identification

The research findings indicate that "Review Suggestion" affordances, consisting "Correctness" and "Clarity," play significant roles in students' academic writing processes, aligning with Octaberlina's (2023) theory that Grammarly provides comprehensive review and suggestion affordances for writing quality improvement. Octaberlina (2023). According to "Correctness" sub-affordance focuses on ensuring writing accuracy through spelling, grammar, and punctuation checking with red underlines. Findings show students use this affordance to identify and correct grammatical errors, verify proper verb forms and tenses, and ensure grammatical coherence, reaffirming Hakiki (2021) and Armanda et al. (2022) findings highlighting Grammarly's positive contribution to grammatical accuracy and improved writing competence.

# Clarity Sub-affordance for Sentence Paraphrasing

For the "Clarity" sub-affordance, Octaberlina (2023) states this affordance focuses on improving writing clarity and efficiency by detecting wordy sentences, simplifying sentences, and eliminating writing ambiguity. This is reflected in research findings where students utilize "Clarity" for paraphrasing, eliminating redundant phrases, and condensing lengthy paragraphs into more concise versions.

# B. Write with Generate AI Rewrite Sub-affordance for Sentence Paraphrasing

The "Rewrite: Improve it" affordance within Write with Generate AI plays crucial roles in enhancing students' writing quality. According to Wang & Ren (2023), the "Write with Generate AI" affordance functions as a writing assistant helping users generate content efficiently and creatively using artificial intelligence. The "Rewrite" sub-affordance offers comprehensive writing improvement approaches, focusing on various important aspects from sentence structure improvement to vocabulary enrichment for more interesting and professional writing. Research findings show students utilize this affordance to improve word choice and sentence construction, especially when facing vocabulary limitations. However, it's important to recall Faisal & Carabella's (2023) findings indicating that AI

feedback relevance and context may not always align with student expectations.

### C. Plagiarism and AI Text Check

Research findings related to "Check for AI Text and Plagiarism" affordance indicate students use this affordance as quality control mechanisms ensuring academic integrity in their work. According to Ummah & Bisriyah (2022), plagiarism detection is one of the main affordances available in Grammarly's premium version. This affordance is particularly vital in the current era with increasing AI usage in writing.

### **CONCLUSION**

This research examined how students use Grammarly as a writing assistant in academic contexts, identifying three primary affordance categories: Review Suggestion, Write with Generate AI, and Plagiarism and AI Text Check. Review Suggestion includes five sub-affordances: Correctness, Clarity, Engagement, Delivery, and Style Guide. Correctness helps students identify grammatical errors and improve sentence construction, while Clarity facilitates paraphrasing and conciseness. These features serve as fundamental scaffolding tools for developing academic writing competencies. Write with Generate AI provides comprehensive writing support through Ideas of School, Rewrite, Evaluate, and Ideate sub-affordances. Students use these features to overcome writing challenges, transform informal text into academic discourse, and generate relevant ideas. The Rewrite function particularly helps refine word choices and enhance academic tone. Plagiarism and AI Text Check addresses academic integrity concerns in the digital age, providing verification mechanisms that help students maintain originality while appropriately leveraging AI assistance.

The research reveals that students critically evaluate Grammarly's suggestions rather than passively accepting them, indicating development of metalinguistic awareness and autonomous learning capabilities. This suggests Grammarly functions as a pedagogical instrument promoting critical thinking about language use. In conclusion, this study provides empirical evidence that when used strategically and critically, Grammarly can effectively support both writing

quality improvement and metalinguistic development in academic writing contexts.

### **REFERENCES**

- Armanda, A., Pratiwi, N. I., & Puspita, R. C. (2022). Students' perception on the use of Grammarly as a grammar checker in academic writing. Journal of English Language Teaching and Learning, 3(1), 1-10.
- Birhan, A. (2021). The challenges of academic writing for EFL undergraduate students: A case study. *Journal of Humanities and Social Sciences*, 12(3), 1-10.
- Fajrin, N. H., Indramawan, A., & Sumarsono, D. B. (2024). Teacher's strategies in scaffolding students' speaking skill in English language learning. *Journal of English Teaching, Learning, and Literature*, *I*(1), 1-10.
- Faisal, R., & Carabella, S. (2023). Perceptions of using Grammarly in academic writing: A study at English Department, Faculty of Languages and Arts, Universitas Negeri Padang. *Journal of English Language Teaching*, 12(1), 105–118.
- Faller, P. (2018). *Academic writing: A guide for students*. Cambridge University Press.
- Faraj, A. K. (2015). The effectiveness of scaffolding writing instruction on EFL learners' writing performance. *Journal of Language and Linguistic Studies*, 11(1), 227-240.
- Fitria, T. N. (2021). Artificial Intelligence (AI) in education using AI tools for teaching and learning process. *Prosiding Seminar Nasional & Call for Paper STIE AAS, Surakarta*, 134-147.
- Fitriana, K., & Nurazni, L. (2021). Exploring English department students' perceptions on using Grammarly to check the grammar in their writing. *Journal of English Teaching*, 8(1), 15-25. https://doi.org/10.33541/jet.v8i1.3044
- Javier, J. (2022). Grammarly as a tool for improving writing skills: A review of research. *Journal of Education and Learning*, 16(2), 1-10.
- Karyuatry, V. P. (2018). The use of Grammarly in improving students' writing accuracy at eleventh grade of SMA Negeri 1

- *Majalengka* (Unpublished undergraduate thesis). Universitas Siliwangi.
- Khoshnevisan, S. (2019). The effect of explicit instruction of ideation strategies on Iranian EFL learners' writing fluency. *Journal of Language Teaching and Research*, 10(5), 1083-1090.
- Laksmi, Y. (2013). The implementation of scaffolding technique in teaching writing at SMA N 1 Wuryantoro (Unpublished undergraduate thesis). Universitas Muhammadiyah Surakarta.
- Lasi, J. (2019). The difficulties of academic writing for EFL students: A case study. Journal of Research in English Language Teaching, 7(1), 1-10.
- Miles, M. B., & Huberman, A. M. (1984). Qualitative data analysis: A sourcebook of new methods. Sage Publications.
- Miranty, D., & Widiati, U. (2021). An automated writing evaluation (AWE) in higher education: Indonesian EFL students' perceptions about Grammarly use across student cohorts. *Pegem Journal of Education and Instruction*, 11(4), 126–137.
  - https://doi.org/10.47750/pegegog.11.04.1 2
- Nova, R. (2018). The effectiveness of using Grammarly in improving students' writing accuracy. *Journal of English Language Teaching*, 7(2), 1-10.
- Octaberlina, L. R. (2023). Integrating Grammarly tools to enhance writing efficiency in senior high school. *Jadila: Journal of Development and Innovation in Language and Literature Education*, 3(1), 92-106. http://repository.uinmalang.ac.id/14990/
- O'Neill, S. M., & Russell, A. J. (2019). The application of Grammarly as a proofreading tool for Australian university students. *Journal of Academic Language and Learning*, 13(1), A1-A12.
- Phuangsuwan, J., Suphawat, P., & Promsaard, T. (2024). Plagiarism detection and AI-generated text: A comparative study of available tools. *Journal of Applied Linguistics and Language Research*, 11(1), 1-15.

- Servati, S. (2012). The effect of self-editing and peer-editing strategies on Iranian EFL learners' writing performance. *Theory and Practice in Language Studies*, 2(10), 2097-2104.
- Stuyf, R. (2002). Scaffolding as a teaching strategy. ERIC Digest.
- Sulistyowati, E. (2021). The use of Grammarly to improve students' writing skills in analytical exposition text at SMA Negeri 1 Jalaksana. *Jurnal Ilmiah Pendidikan Bahasa Inggris*, 7(2), 1-10.
- Syapitri, V., Khairunnisah, K., & Astuti, R. (2023). The effectiveness of using Grammarly to improve descriptive writing skills at MTs Fajar Siddiq Palembang. *Jurnal Ilmu Pendidikan*, 4(2), 1-10.
- Ummah, H., & Bisriyah, Z. (2022). The perception of university students on using Grammarly application in writing. *Journal of English Language Teaching, Literature and Linguistics*, *1*(2), 70–78.
- Wang, J., & Ren, X. (2024). AI-powered writing assistants: Affordances and challenges for academic writing. *Journal of Applied Linguistics*, 15(3), 1-15.
- Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. Harvard University Press.