

**THE CORRELATION BETWEEN THE USE OF QUILLBOT
AND STUDENTS' ACADEMIC WRITING PERFORMANCES
AT UNIVERSITAS LANCANG KUNING**

THESIS

**Submitted to Fulfill
One of Requirements
to Obtain a Degree of *Sarjana pendidikan (S.Pd)***



BY:

**HEMI TULO ZAMILI
NIM. 2288203037**

**ENGLISH LANGUAGE EDUCATION PROGRAM
FACULTY OF EDUCATION AND VOCATIONAL STUDIES
UNIVERSITAS LANCANG KUNING
PEKANBARU
APRIL 2026**

ABSTRACT

Hemi Tulo Zamili, 2026 : The Correlation Between the Use of Quillbot and Students' Academic Writing Performances at Universitas Lancang Kuning

This study aims to investigate the relationship between the use of QuillBot and the academic writing performance of students in the English Education Study Program at Lancang Kuning University. This study uses a correlational quantitative design involving 52 seventh-semester students selected through total sampling. Data were collected using a 34-item Likert scale questionnaire to measure the intensity of QuillBot use and students' academic writing performance scores. The reliability test results showed a Cronbach's Alpha value of 0.979, indicating a very high level of reliability. The normality test showed that the data were not normally distributed, so the analysis was continued using Spearman's correlation. The analysis results showed a correlation coefficient of -0.015 with a significance value of 0.914 ($p > 0.05$), indicating that there was no significant relationship between the use of QuillBot and students' academic writing performance. These findings suggest that the use of QuillBot does not directly affect students' ability to develop ideas, organize arguments, and produce academic writing independently. The implications of this study indicate that artificial intelligence-based tools should be used as a supporting resource in learning, not as a substitute for writing practice, cognitive engagement, and instructional guidance. Furthermore, this study contributes theoretically to enriching the literature on the integration of AI technology in English as a foreign language (EFL) learning, as well as practically to educators in designing effective, ethical, and evidence-based learning strategies to support the development of students' academic writing skills.

Keywords: QuillBot, artificial intelligence, academic writing, EFL learners, Writing performances

ABSTRAK

Hemi Tulo Zamili, 2026 : Korelasi Antara Penggunaan Quillbot dan Kinerja Penulisan Akademik Mahasiswa di Universitas Lancang Kuning

Penelitian ini bertujuan untuk menyelidiki hubungan antara penggunaan QuillBot dan kinerja penulisan akademik mahasiswa Program Studi Pendidikan Bahasa Inggris di Universitas Lancang Kuning. Penelitian ini menggunakan desain kuantitatif korelasional dengan melibatkan 52 mahasiswa semester tujuh yang dipilih melalui teknik total sampling. Data dikumpulkan menggunakan kuesioner skala Likert yang terdiri dari 34 item untuk mengukur intensitas penggunaan QuillBot, serta skor kinerja penulisan akademik mahasiswa. Hasil uji reliabilitas menunjukkan nilai Cronbach's Alpha sebesar 0,979 yang menunjukkan tingkat reliabilitas sangat tinggi. Uji normalitas menunjukkan data tidak berdistribusi normal, sehingga analisis dilanjutkan menggunakan korelasi Spearman. Hasil analisis menunjukkan koefisien korelasi sebesar $-0,015$ dengan nilai signifikansi $0,914$ ($p > 0,05$), yang menunjukkan bahwa tidak terdapat hubungan yang signifikan antara penggunaan QuillBot dan kinerja penulisan akademik mahasiswa. Temuan ini menunjukkan bahwa penggunaan QuillBot tidak secara langsung mempengaruhi kemampuan mahasiswa dalam mengembangkan ide, mengorganisasi argumen, dan menghasilkan tulisan akademik secara mandiri. Implikasi penelitian ini menunjukkan bahwa alat berbasis kecerdasan buatan sebaiknya digunakan sebagai sumber pendukung dalam pembelajaran, bukan sebagai pengganti latihan menulis, keterlibatan kognitif, dan bimbingan instruksional. Selain itu, penelitian ini memberikan kontribusi teoretis dalam memperkaya literatur mengenai integrasi teknologi AI dalam pembelajaran bahasa Inggris sebagai bahasa asing (EFL), serta kontribusi praktis bagi pendidik dalam merancang strategi pembelajaran yang efektif, etis, dan berbasis bukti untuk mendukung pengembangan keterampilan menulis akademik mahasiswa.

Keywords: *QuillBot, kecerdasan buatan, penulisan akademik, pelajar Pembelajaran EFL, kinerja penulisan.*

HALAMAN PENGESAHAN

Judul : The Correlation Between the Use of Quillbot and
Students' Academic Writing Performances at
Universitas Lancang Kuning

Nama : Hemi Tulo Zamili

Nim : 2288203037

Program Studi : Pendidikan Bahasa Inggris

Disetujui

Pembimbing,



Dr. M. Fadhly Farhy Abbas, S.Pd., M.Pd
NIDN. 1018088801

Diketahui



Dekan,

Dr. Herlinawati, S.S., M.Ed
NIDN. 1010037901

Ketua Program Studi,



Refika Andriani, S.Pd.I., M.Pd
NIDN. 1008088603

EXAMINERS' APPROVAL

A thesis entitled:

The Correlation Between the Use of Quillbot and Students' Academic Writing Performances at Universitas Lancang Kuning

Has been examined on February 12th, 2026

Approved by,

Advisor : Dr. M. Fadhly Farhy Abbas, S.Pd., M.Pd ()

Examiner I : Dr. Herlinawati, S.S., M.Ed 

Examiner II : Dr. Budianto Hamuddin, M.ESL 

PERNYATAAN KEASLIAN TULISAN

Dengan ini saya menyatakan bahwa:

- a. *Karya tulis ini, dengan judul: The Correlation Between the Use of Quillbot and Students' Academic Writing Performances at Universitas Lancang Kuning* adalah asli karya saya sendiri dan belum pernah diajukan untuk mendapatkan gelar Sarjana Pendidikan (S.Pd) di Program Studi Pendidikan Bahasa Inggris Fakultas Pendidikan dan Vokasi Universitas Lancang Kuning.
- b. Karya tulis ini tidak terdapat hasil karya atau pendapat yang telah ditulis atau dipublikasikan oleh orang lain kecuali dikutip secara tertulis dengan jelas sesuai dengan aturan pengutipan dan dicantumkan sebagai referensi pada halaman daftar pustaka.

Demikianlah pernyataan ini saya buat, apabila ditemukan penyimpangan dan ketidakbenaran dari pernyataan ini, saya bersedia menerima sanksi akademik berupa pencabutan gelar yang telah saya peroleh, serta sanksi lainnya sesuai dengan norma dan ketentuan hukum yang berlaku.

Pekanbaru, 12 Februari 2026

Saya yang menyatakan,



Heni Tulo Zamili
NIM.2288203037

ACKNOWLEDGEMENT

First of all, I would like to thank Jesus Christ, my Lord and Savior, for the health and opportunities given to me during my studies. This has enabled me to complete one of the final requirements for my Bachelor of Education (S.Pd) degree in the English Education Program at the Faculty of Education and Vocational Studies, Lancang Kuning University, Pekanbaru, Riau, and to complete this thesis. This thesis was written to provide information about a study entitled "The Correlation Between the Use of Quillbot and the Academic Writing Performance of Students at Lancang Kuning University."

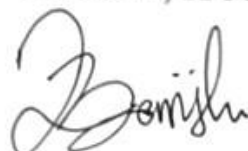
I realize that I could not have completed this thesis without the help of others; many individuals have helped and supported me from the beginning to the completion of this study. Therefore, as a researcher, I would like to express my sincere gratitude and appreciation to the following individuals:

1. My Advisor, Dr. M. Fadhly Farhy Abbas, S.Pd., M.Pd for the time, great ideas, guidance, advices, critics, encouragement, motivation and suggestion to complete this thesis. Thank you so much for your thoughtfulness. It is a privilege to have had such a giving, modest and sincere counsel as her. Thankyou for your time, constructive, thoughts, support ,inspiration and recommendations to help me complete this thesis.
2. The examiners who have given contributions and suggestions on this thesis, Dr. Marwa, S.Pd.I., M.A and Dr. Budianto Hamuddin, M.ESL
3. The Head of the Study Program of English Educationn has always given me occasions in running the examination process of this thesis, Refika Andriani, M.Pd
4. Dr. Herlinawati, S.S., M.Ed as a Dekan of Faculty of Education and Vocational Studies of Universitas Lancang Kuning.
5. Prof. Dr. Junaidi, S.S., M.Hum., Ph.D as the rector of Universitas Lancang Kuning and all of the staffs.
6. All the lecturers of English Education Department, Faculty of Education and Vocational of Universitas Lancang Kuning.

7. My beloved parents, Grandpa Adriella Zamili and Grandma Adriella Gohae, who have always given me love, prayers, support, and advice. I would like to thank my brothers Erwin Zamili, Rinto Zamili, Wiskardo Zamili, and my sisters Aprillia Zamili and Miskelsey Zamili, who encouraged me to complete my education.
8. To all the students of the English Language Education Department A'22
9. My friends Anisa Bela and Doni, as well as Tomorrow Coffee Ciss, have provided continuous encouragement, motivation, and support throughout the process of completing this thesis. Your presence, understanding, and positive encouragement truly mean a lot to me.
10. Last but not least, I want to thank me for believing in me. I want to thank me for doing all this hard work I want to thank me for having no days off. I want to thank me for never quitting.

Lastly, I would like to say many thanks once again to my friends, classmates, and everyone who has directly or indirectly contributed to this thesis. Your support, motivation, and companionship have made this academic journey more meaningful. Therefore, constructive feedback and suggestions for improvement are warmly welcomed. It is my hope that this work will contribute beneficial insights to the field of English language education and serve as a useful reference for future studies

Pekanbaru, 12 February 2026



Hemi Tulo Zamili
NIM.2288203037

TABLE OF CONTENTS

ABSTRACT	Error! Bookmark not defined.
<i>ABSTRAK</i>.....	Error! Bookmark not defined.
HALAMAN PENGESAHAN.....	Error! Bookmark not defined.
EXAMINERS' APPROVAL.....	Error! Bookmark not defined.
PERNYATAAN KEASLIAN TULISAN	iii
ACKNOWLEDGEMENT.....	iv
TABLE OF CONTENTS.....	vii
LIST OF TABLES.....	x
LIST OF FIGURES	xi
 CHAPTER I INTRODUCTION.....	 1
A. Background of The Research.....	1
B. Identification of The Research.....	7
C. Limitation of The Research	7
D. Purpose of The Research	8
E. Formulation of The Research.....	8
F. Significances of The Research.....	8
G. Definition of Key Terms	9
 CHAPTER II REVIEW OF THE LITERATURES	 11
A. Review of Related Theoris	11
B. Review of Related Findings.....	17
C. Conceptual Framework.....	18
D. Research Hypothesis.....	20
 CHAPTER III RESEARCH METHOD.....	 21
A. Research Design	21
B. Time and Setting	21
C. Population and Sample	22
D. Research Instrument	22
E. Data Collecting Technique.....	28
F. Data Analysis.....	29

CHAPTER IV FINDINGS AND DISCUSSIONS	34
A. The Research Findings	34
B. Discussion.....	50
BAB V CONCLUSION AND SUGGESTION.....	54
A. Conclusion	54
B. Suggestion.....	54
REFERENCES.....	56
APPENDICES	58

LIST OF TABLES

Table 3.1 Scores of the Students' Questionnaire Answer Variable X	23
Table 3.2 Questionnaire of Using Quillbot	24
Table 3.3 The Range of Likert Scale.....	32
Table 3.4 Strength of Correlation.....	33
Table 4.1 Results of Validity Test of Using Quillbot Questionnaire	35
Table 4.2 Result of Validity Test of Using Quillbot Questionnaire.....	38
Table 4.3 Descriptive Statistic of Use Quillbot.....	39
Table 4.4 Use of Quillbot score of each participant.....	42
Table 4.5 Descriptive Statistics of Use Quillbot Dimensions	44
Table 4.6 Score of Students Writing Performances Score	46
Table 4.7 The Total Score For English Writing Performance	46
Table 4.8 One-Sample Kolmogorov-Smirnov Test Normality Test.....	47
Table 4.9 Result of Spearman's Rank Correlation	49

LIST OF FIGURES

Figure 2.1 Conceptual Framework.....	19
Figure 3.1 Descriptive Statistic	31
Figure 4. 1 Normal P-P Plot	48

CHAPTER I

INTRODUCTION

A. Background of The Research

Academic writing is a fundamental Performances in higher education because it is the primary means of conveying scientific arguments, reporting research results, and demonstrating students' critical thinking Performances. Various studies over the past decade have shown that students' academic writing skills remain weak in the areas of idea organization, cohesion, coherence, and grammar, often challenging the process of composing scientific papers. This situation has led to an increased reliance on digital writing tools that offer instant assistance in improving the structure and language of their writing. The emergence of artificial intelligence-based tools such as QuillBot has further expanded students' access to fast and efficient writing support. Latifah (2024) reported in *The Use of QuillBot in Academic Writing* shows that the use of paraphrasing and grammar-checking tools has increased sharply in the global education sector. These findings confirm that the use of AI writing tools is no longer a marginal phenomenon but has become part of modern academic writing practices. This development raises questions about the extent to which such tools contribute to the overall quality of students' writing (Amara & Rahmah, 2025; Raheem et al., 2023).

Nationally, a similar trend is also occurring in Indonesia, where students are utilizing AI writing tools as a quick solution to improve their academic writing Pratama (2025) found that students at various universities are increasingly using QuillBot to improve sentence structure, enhance clarity of meaning, and reduce grammatical errors. Furthermore, Herda (2025) noted that the integration of AI-based paraphrasing into writing classes is becoming more common, as it is perceived to help students develop their writing more effectively. However, these researchers also emphasized that using QuillBot without pedagogical controls can pose risks such as covert plagiarism and reduced independent writing Performances. This situation suggests that the increased use of AI writing tools needs to be balanced with a strong ethical and pedagogical understanding. Thus, the

use of QuillBot presents both benefits and challenges for higher education. This situation opens up space for research that empirically examines the relationship between QuillBot usage and student writing Performances.

Although QuillBot offers the convenience of correcting grammar, enriching vocabulary, and producing better sentence structures, several studies indicate that the underlying problems in academic writing have not been fully resolved. Rahmani (2023) emphasized that students continue to experience difficulties in developing original ideas and organizing arguments logically despite their regular use of AI-based tools. This finding indicates that improvements in the surface quality of writing do not necessarily reflect improvements in critical thinking skills or academic rhetoric. Furthermore, global studies such as those by Asmara (2024) highlight concerns that excessive use of QuillBot can create dependency that diminishes the writing learning process. This dependency can lead students to focus more on automatic correction than on developing analytical and linguistic skills independently. This impact has the potential to undermine the internalization of academic writing concepts, which should develop through continuous practice. Therefore, the effectiveness of QuillBot needs to be critically understood, especially in relation to the development of long-term writing competencies.

In the Indonesian context, various studies have found that the quality of student writing remains low to moderate despite the increasing use of digital aids. Laila (2024b) report that grammatical errors, lack of coherence between paragraphs, and poor idea development are the main problems frequently found in student writing. This fact suggests that digital aids have not fully addressed weaknesses in the cognitive and rhetorical aspects of writing. This situation also indicates a gap between actual writing ability and the ability to "produce good-looking writing" through technological aids like QuillBot. In other words, neat-looking writing does not always reflect mature academic ability. This imbalance raises concerns about the authenticity of the thought processes reflected in students' writing. This situation emphasizes the need for empirical research to determine the extent to which QuillBot use correlates with actual writing ability.

Several empirical studies have attempted to measure the impact of QuillBot on writing Performances through quantitative approaches in various learning contexts. Talapngoen & Thuratham (2025b) showed a significant improvement in post-test scores after students used QuillBot to revise their academic texts. The study confirmed that QuillBot not only corrected technical errors but also helped students improve their self-editing skills. Furthermore, the results of the study provide evidence that this tool can strengthen revision skills, which are often a major weakness in writing performances. Similar findings were reported by Amanda (2023), who found that the use of paraphrasing tools consistently improved the grammatical accuracy of students' writing. This study also confirmed that the presence of features such as a grammar checker and sentence rewriter contributed significantly to the improvement of sentence structure. Overall, these studies demonstrate the positive potential of QuillBot in improving the quality of academic writing Performances.

The most statistically robust results come from Rasidin (2025) study, which examined changes in writing Performances among 24 high school students in Makassar following the QuillBot Grammar Checker intervention. Students' pre-test writing scores were 76, then increased to 93.4 on the post-test following the intervention, representing a 22.89% improvement. These findings provide strong quantitative evidence that QuillBot significantly improves the quality of EFL students' writing. Furthermore, the study confirmed that QuillBot's grammar correction feature is effective in minimizing structural errors that frequently appear in language learners' writing.

In addition to quantitative research, perceptual research also provides important insights into how students interpret the use of QuillBot in their writing process. Wahyuningsih (2025), using the UTAUT model, found that students perceived QuillBot as very easy to use and useful in constructing more coherent paragraphs. These findings indicate that ease and usability are key drivers of technology adoption in academic writing contexts. Laila (2024a) shows that international studies also report similarly positive perceptions, indicating that QuillBot is perceived as a tool that helps produce more structured text. However,

these studies generally only describe perceptions and do not examine the empirical relationship between intensity of use and writing quality. This indicates that there is still a research gap that needs to be bridged through correlational or experimental studies. Therefore, perceptual analysis needs to be complemented with empirical evidence to fully understand the impact of QuillBot use.

Despite making important contributions, previous research has several methodological limitations that require critical consideration. Most studies used pre-experimental designs without a control group, thus limiting the internal validity of the research and making it difficult to determine whether the improvement in writing skills was truly due to the use of QuillBot. Furthermore, many studies involved only small samples confined to a single class, making the generalizability of the findings less robust. Some studies did not even consider moderating variables such as learning independence, intensity of writing practice, or students' academic experience. Latifah (2024) noted that the majority of studies focused solely on technical aspects of writing such as grammar or sentence structure. These studies failed to explore how QuillBot impacts critical thinking skills, original idea development, and higher-order thinking processes in writing. These shortcomings highlight the need for new, more comprehensive and systematic research.

An additional significant limitation is the lack of research systematically examining the originality and potential for post-paraphrasing plagiarism produced by QuillBot. Several studies, such as those discussed by Foltýnek & Zimba (2019) have shown that automated paraphrasing can produce text that technically passes plagiarism detection but still raises questions about academic integrity. This situation indicates that evaluating writing quality should not focus solely on linguistic aspects but should also consider the originality of students' ideas. This is important because over-reliance on paraphrasing tools can cause students to lose the ability to formulate and develop ideas independently. Previous research generally has not included aspects of academic ethics in analyzing the relationship between QuillBot use and writing outcomes. Therefore, research on the relationship between QuillBot use and writing quality needs to consider aspects of academic integrity to produce a more comprehensive understanding. This situation opens up

space for contemporary research that examines QuillBot from the perspective of both writing ability and academic writing ethics.

From these findings, it is clear that there is still a significant gap in the literature regarding the relationship between QuillBot use and student writing Performances at Lancang Kuning University. To date, no quantitative research has specifically measured the correlation between the intensity of QuillBot use and students' academic writing performance at the institution. Studies by Rasidin (2025) do provide valuable insights, but they were all conducted in different educational contexts. Differences in academic environments, curricula, digital literacy levels, and student characteristics make these research findings infeasible for direct generalization to Lancang Kuning University. Furthermore, each institution has its own unique technology usage dynamics and level of digital readiness, which can significantly vary QuillBot usage patterns. This situation emphasizes the need for new, locally-based research to achieve more relevant and accurate results. Without such research, understanding the impact of QuillBot on Lancang Kuning University students remains presumptive.

Furthermore, existing studies have not simultaneously examined multiple dimensions of writing ability such as idea organization, grammatical accuracy, coherence, and originality in relation to the intensity of QuillBot use. Most prior research has focused on isolated aspects of writing, resulting in a fragmented understanding of the tool's overall impact. For example, Rasidin (2025) concentrated on grammatical accuracy, Wahyuningsih (2025) analyzed the paraphrasing function, and Laila (2024) explored students' perceptions. Although these studies provide valuable contributions, their single-focus orientation limits a comprehensive evaluation of how AI-assisted tools influence students' academic writing performance.

It is challenging for instructors to thoroughly assess QuillBot's influence on pupils' writing ability due to a narrow analytical methodology. It is commonly acknowledged that academic writing proficiency is a multifaceted concept that includes grammatical precision, rhetorical structure, and conceptual originality. Swales (1990) asserts that rhetorical frameworks and genre standards influence

academic writing by directing the organization and communication of ideas within discourse communities. Additionally, Hyland (2003) highlights that audience awareness, coherence, and disciplinary conventions are all necessary for excellent academic writing in addition to grammatical proficiency. Furthermore, according to Bachman (1990) language proficiency is made up of a variety of elements, such as pragmatic and organizational competence, which work together to affect the overall caliber of written materials. These viewpoints show that rhetorical efficacy and intellectual contribution must be taken into account when assessing writing quality, rather than relying only on superficial linguistic elements like grammar or vocabulary. Thus, to get a more thorough and accurate knowledge of how AI-assisted tools like QuillBot affect students' academic writing performances, research that concurrently looks at several aspects of writing is crucial. This study provides a more comprehensive assessment of writing quality by combining several writing components into a single analytical framework.

These factors make this study crucial in light of the growing use of AI-assisted writing tools in higher education. Mishra & Koehler (2006) Technological Pedagogical Content Knowledge (TPACK) framework, which emphasizes that effective technology use must be consistently matched with pedagogical and content objectives, is in line with the broad acceptance of educational technology. There is, however, a dearth of local empirical data investigating the relationship between academic writing performance and the intensity of AI tool usage. From the standpoint of language evaluation, Bachman (1990) emphasizes that various aspects of communicative competence influence writing performance, suggesting that a thorough quantitative analysis of the connection between technology use and writing results is necessary. Concerns about ethical use and policy regulation are also raised by the increasing use of AI in academic settings. Eaton (2021) contends that the development of AI in education calls for a reexamination of academic integrity frameworks in order to encourage responsible use of digital tools, a point that the International Center for Academic Integrity also highlights in its guidelines on ethical academic practice. Therefore, analyzing the statistical relationship between QuillBot usage intensity and academic writing performance fills a

scholarly gap and meets practical needs in modern higher education. It also informs institutional policies on AI-assisted writing, supports lecturers in creating adaptive pedagogical approaches, and helps students gain a better understanding of the ethical and productive use of AI tools. All of these factors contribute to the development of evidence-based curricula and technology-informed instructional strategies.

B. Identification of The Research

Based on the background of the problem described above, This study identifies a critical gap in the literature concerning the increasing use of AI-based writing tools, particularly QuillBot, in higher education. Although academic writing is a core competency for articulating scientific arguments and demonstrating critical thinking, students continue to experience difficulties in organization, coherence, grammar, and originality despite widespread reliance on digital writing aids. Existing studies largely report improvements in surface-level features and are methodologically limited, often employing small samples, pre-experimental designs, or focusing on single dimensions of writing without examining the comprehensive relationship between usage intensity and multidimensional writing performance. Moreover, issues of academic integrity, dependency, and the potential discrepancy between polished output and genuine competence remain underexplored. In the context of Lancang Kuning University, no empirical quantitative research has specifically investigated the correlation between QuillBot usage intensity and students' academic writing performance. Therefore, the purpose of this study is to determine whether and to what extent the use of QuillBot significantly impairs students' multidimensional writing performances and its implicit implications for academic integrity and continued development.

C. Limitation of The Research

In order to maintain focus and clarity, this study is limited to examining the correlation between the intensity of QuillBot use and students' academic writing performance among students of the English Education Study Program at Universitas Lancang Kuning. The investigation specifically involves students who

are enrolled in academic writing related courses during the 2025 academic year. This study focuses on key dimensions of writing performance, including organization, coherence, grammar, and originality, as measured through quantitative instruments. It does not examine other variables such as students' motivation, digital literacy levels, or instructional strategies, nor does it employ qualitative analysis of the writing process. Therefore, the findings are confined to the specified population and context of Universitas Lancang Kuning.

D. Purpose of The Research

Related to formulation raised in the background, purpose of the research To determine whether there is a significant relationship between the use of QuillBot and students' academic writing performances.

E. Formulation of The Research

Related to the identification proposed in the background, this researcher will answer the question "Is there a significant correlation between the use of QuillBot and the academic writing performances of Lancang Kuning University students?"

F. Significances of The Research

Researcher hopes that this research can provide benefits to following parties:

a. Theoretical

Contributes to enriching the literature on the use of artificial intelligence-based technology in academic writing learning. The results of this study can strengthen or correct previous research findings regarding the effectiveness of QuillBot in improving students' writing performances. Furthermore, this study provides new insights into the quantitative relationship between the intensity of QuillBot use and the quality of academic writing, which has not been widely studied, especially in the context of Indonesian higher education.

b. Practical

The results of this study are expected to provide several significant benefits for various stakeholders within the academic environment of Universitas Lancang Kuning. For lecturers, the findings can serve as a foundation for designing more effective academic writing instruction strategies, particularly in integrating technological tools such as QuillBot without hindering the development of students' independent writing abilities. For students, this study offers insights into how QuillBot can be used appropriately, effectively, and ethically, ensuring that the tool functions as a support in the learning process rather than replacing essential writing performances. For the institution, especially Universitas Lancang Kuning, the results may contribute to policy formulation regarding the use of AI-based writing tools and the development of academic digital literacy programs. Finally, for future researchers, this study provides valuable local empirical data that can be further utilized to develop subsequent research, such as pedagogical interventions, plagiarism detection development, or AI-based instructional models.

G. Definition of Key Terms

There are some key terms have to be clarified to steer of misinterpretation briefly, those are counted below:

a. QuillBot

QuillBot is an artificial intelligence (AI)-based digital platform that provides various features to support academic writing, including paraphrasing, grammar checking, and rewriting tools. QuillBot helps users improve sentence structure, expand vocabulary, and structure more coherent text, thus supporting a more effective and efficient writing process. In this study, QuillBot was measured based on the intensity of use, the types of features used, and the purposes for which students used it in completing academic assignments.

b. Academic Writing Performances

Academic writing performances refers to a student's ability to produce academic writing that meets certain quality standards. This quality encompasses several key aspects content development, organization and coherence, academic vocabulary use, grammar and language accuracy, mechanics and writing conventions.

BAB V

CONCLUSION AND SUGGESTION

A. Conclusion

Based on the findings of this study, students demonstrate generally positive perceptions and a moderate level of engagement in using QuillBot as an AI-assisted writing tool, particularly in terms of its usefulness, ease of use, and functional support for writing activities. However, the correlational analysis indicates an extremely weak and statistically insignificant relationship between QuillBot usage and students' academic writing performance, suggesting that while QuillBot facilitates writing processes, it does not directly lead to substantial improvements in writing outcomes. This implies that students' writing performance is more strongly influenced by factors such as language proficiency, learning strategies, instructional quality, and individual motivation. Therefore, AI-based writing tools should be integrated as supplementary resources within a pedagogical framework that emphasizes critical thinking, autonomous writing development, and originality. In this context, lecturers are encouraged to provide structured guidance on the ethical and effective use of AI tools to prevent overreliance and promote responsible academic practices. Additionally, future research is recommended to explore the long-term effects of AI-assisted writing tools on students' writing development using mixed-method or experimental designs.

B. Suggestion

Based on the findings of this study, several important recommendations are proposed to improve the effective integration of QuillBot as an artificial intelligence (AI)-based writing tool in an academic context. English instructors are advised to strategically integrate QuillBot as a supplementary learning resource rather than as a primary writing solution, guiding students to use it critically for purposes such as paraphrasing, grammar checking, and idea refinement, while continuing to emphasize the development of independent writing, critical thinking, and originality. Furthermore, future research is encouraged to adopt experimental or

mixed-method approaches with larger and more diverse samples to explore the causal impact of AI tools on writing performance, as well as to analyze students' cognitive, motivational, and affective responses to AI integration. These efforts are expected to provide deeper pedagogical insights and contribute to the development of effective, ethical, and evidence-based AI applications in teaching academic writing in English as a foreign language (EFL).

REFERENCES

- Amanda, A., Elsa, M. S., Nursyahrina, L., & Utami, D. (2023). *QuillBot as an AI-powered English writing assistant: Students' alternative for writing academic essays*. *Jurnal Pendidikan dan Sastra Inggris (JUPENSI)*, 3(2), 48–56. <https://doi.org/10.55606/jupensi.v3i2.2026>
- Asmara, A. Y. V., & Kastuhandani, F. C. (2024). Students' lived experience in utilizing Quillbot as an online paraphrasing tool in academic writing. *Globish: An English-Indonesian Journal for English, Education, and Culture*, 13(1), 56–65. <http://dx.doi.org/10.31000/globish.v13i1>
- Bachman, B. L. F. (1990). *Fundamental Considerations in Language Testing*. Oxford University Press.
- Cohen, C. L., Manion, L., & Morrison, K. (2007). *Research Methods in Education*. London: Routledge. ISBN: 978-0-415-36878-0.
- Cotton, D., Cotton, P., & Shipway, J. R. (2023). ChatGPT: Friend or foe? Students' perceptions of AI tools in higher education. *Innovations in Education and Teaching International*.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE Publications.
- Cronbach, L. J. (1951). Coefficient Alpha and the Internal Structure of Tests. *Psychometrika*, 16(3), 297–334. <https://doi.org/10.1007/BF02310555>
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340. <https://dl.acm.org/doi/10.2307/249577>
- Eaton, S. E. (2021). Artificial Intelligence and Academic Integrity: An Exploratory Review of the Emerging Literature. *International Journal for Educational Integrity*, 17(1), 1–15. <https://doi.org/10.1007/s40979-021-00071-6>
- Flower, L., & Hayes, J. R. (1981). A cognitive process theory of writing. *College Composition and Communication*, 32(4), 365–387. <https://doi.org/10.2307/356600>
- Foltýnek, T., & Zimba, O. (2022). Academic integrity and artificial intelligence: Implications of automated paraphrasing tools. *International Journal for Educational Integrity*, 18(1), 1–15. <https://doi.org>
- Herda. (2025). [Integration of AI-based Paraphrasing in Writing Classrooms].
- Hyland, K. (2003). *Second Language Writing*. Cambridge: Cambridge University Press..
- Laila, L. (2024a). Errors on Efl Students' Paragraph Writings. *International Journal of English and Applied Linguistics (IJEAL)*, 2(3), 379–386.
- Laila, L. (2024b). Academic Writing Challenges of Indonesian University Students.
- Latifah, L. (2024). The Use of QuillBot in Academic Writing: A Systematic Literature Review, Vol.7 No 1 (2024) <https://doi.org/10.33503/journey.v7i1.872>
- Mishra, M. P., & Koehler, M. J. (2006). *Technological Pedagogical Content Knowledge: A Framework for Teacher Knowledge*. Teachers College Press. <https://doi.org/10.1111/j.1467-9620.2006.00684.x>

- Mundir, (2012). ISBN 978-623-423-185-4, *Statistik Pendidikan: Analisis Korelasi dan Regresi*.
- Murni M. C. K. (2023). *The Impact of TikTok Technology Transformation in the Digitalization Era Using SmartPLS*. 2(October), 30–39. <https://doi.org/10.30741/jid.v2i1.1191>
- Pratama, P (2025). Students' Use of QuillBot in Indonesian Higher Education. 13(1), 215-222.
- Rahmani, R. (2023). Undergraduate students 'perceptions on Quillbot paraphrasing tool. Scripta: English Department Journal, 10(2), 182-190. <https://doi.org/10.37729/scripta.v10i2.3674>
- Ranalli, R. J. (2018). Automated written corrective feedback: How well can students make use of it? *Computer Assisted Language Learning*, 31(7), 653–674. <https://doi.org/10.1080/09588221.2018.1428994>
- Rasidin, R (2025). Intervention Using QuillBot Grammar Checker: Pre-test and Post-test Results in Makassar. Vol. 5 No. 1, <https://doi.org/10.56983/jlta.v5i1.929>
- Richards, J. C., & Schmidt, R. (2010). *Longman dictionary of language teaching and applied linguistics* (4th ed.). London: Routledge.
- Sugiyono. (2019). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Alfabeta.
- Swales, S. J. (1990). *Genre Analysis: English in Academic and Research Settings*. John M. Swales. 125–126. doi:10.1017/S0272263100011773
- Syarani. S (2025a). An Analysis of Indonesian Students' Academic Writing Quality. Vol. 9 No.5 (2025) <https://doi.org/10.31258/jes.9.5.p.4298-4307>
- Syarani, S. A. (2025b). Narrative Writing Skills of Eleventh Grade Students Using QuillBot. *Esteem*, 8(2), 18733. <https://doi.org/10.31851/esteem.v8i2.18733>
- Talapngoen, T. P., & Thuratham, R. (2025a). *Effects of QuillBot-Assisted Revision on Students' Writing: A Quantitative Study*.
- Talapngoen, & Thuratham. (2025b). Effects of Using QuillBot for Revision: A Study of 54 Thai University Students.
- Wahyuningsih, W (2025). *Students' perceptions of QuillBot use in academic writing: A UTAUT perspective*. Journal of English Language Teaching and Research, 10(1), 45–58. <https://doi.org>
- Zhang, Z. L. (2022). Artificial intelligence in second language writing: Effects on writing quality and learner autonomy. *Language Learning & Technology*, 26(2), 45–65. <https://doi.org/10.3390/bs15040523>
- Zhang, Z. R., & Zou, D. (2022). Automated writing evaluation and EFL learners' writing development. *ReCALL*, 34(2), 167–185. <https://doi.org/10.1016/j.jeap.2025.101505>.