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Department of English Language

Enhancing EFL Students' Academic Writing Through AI-powered Language Tools (Grammarly and ChatGPT);
A Case Study of University EFL Learners and secondary school students of Ghardaïa

A Dissertation Submitted to the University of Ghardaïa in Partial Fulfillment of the Requirements for the Master's Degree in Didactics.

Submitted by:

✚ Adnane LAAZIZ.
✚ Toufik Slimane KHATTARA.

Supervised by:

- Dr. Youcef HADJ SAID

Board of Examiners:

Dr. Smail HADJ MAHAMMED	President	University of Ghardaïa
Dr. Mustapha DADDI OUAMEUR	Examiner	University of Ghardaïa
Dr. Youcef HADJ SAID	Supervisor	University of Ghardaïa

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Dedication

To my beloved parents, by whose grace I was brought into this world, and who raised me with piety, dedication to work, and service to God's creation, sparing no effort in this responsibility. I ask God Almighty to be pleased with them and grant them His favor, as He, the Exalted, said: {And lower to them the wing of humility out of mercy and say, "My Lord, have mercy upon them as they brought me up [when I was] small."} (Al-Isra: 24).

To my beloved wife and life partner, who has been patient and supportive with her humility, accompanying me on this journey with words of encouragement, hope, and determination to complete it. I ask God Almighty to grant her success.

To my beloved children, whom God has blessed me with, adding joy and hope to my life: Ayman, Aicha, Yousra, and Djouairia. I ask God Almighty to make them a source of happiness for me. To my friends, near and far, those who are loyal to me, I ask God Almighty to increase their knowledge and make them a treasure and a strong fortress for the Muslim nation. And to every Muslim who is zealous for his religion.

I dedicate this humble work to all of you.

Toufik

Dedication:

I dedicate this humble work to my beloved parents, who devoted their lives to me, and to their constant love and prayers.

To my dear brother, for his unwavering support and for being my pillar of strength and help throughout my studies.

To my beloved fiancée, for her constant encouragement.

To my esteemed professors at the university.

To whom I express my sincere gratitude for their invaluable guidance.

I dedicate this work to you all.

Adnane

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This Dissertation is the fruit of our humble efforts, and we ask God Almighty to bless and accept it.

Abstract

The increasing reliance on artificial intelligence (AI) and its applications among learners of English as a foreign language (EFL) raises many questions about its effectiveness in this field. Therefore, this study, which combines various ambiguity assessment methods used by English language professionals, aims to highlight the impact of two AI-powered language applications, and examine whether Chat GPT and Grammarly, contribute to improving student Academic Writing skills and to explore the benefits and challenges associated with their use. Furthermore, the study seeks to explore EFL learners' questions and opinions about using AI tools to support academic writing, identify the benefits and limitations they encounter when using them, and clarify the potential consequences of overuse. We aim to achieve scientifically significant results, suggesting that these intelligent applications promote self-directed learning and encourage independent practice, thus contributing to improved academic writing skills among EFL learners. This includes addressing potential challenges such as over-reliance on these applications, the need for their effective and efficient use, and the documentation of results—all of which require sound pedagogical guidance.

Keywords: Artificial Intelligence, Language Learning Applications, English as a Foreign Language, English Language Teaching, ChatGPT.

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List of abbreviations:

Abbreviation	Full Form
AI	Artificial Intelligence
EFL	English as a Foreign Language
ESP	English for Specific Purposes
NLP	Natural Language Processing
NLG	Natural Language Generation
LLM	Large Language Model
AWE	Automated Writing Evaluation
ACF	Automated Corrective Feedback
LMD	Licence-Master-Doctorate (system)
L1	First Year (License)
L2	Second Year (License)
L3	Third Year (License)
M1	First Year Master
M2	Second Year Master

General Introduction

General Introduction

- 1. Background of the Study**
- 2. Rationale**
- 3. Research Objectives**
- 4. Statement of the problem**
- 5. Research Questions**
- 6. Research hypotheses**
- 7. Research Methodology**
- 8. Limitations of the Study**

General Introduction

General Introduction:

The past few years have witnessed innovations in artificial intelligence, keeping pace with rapid technological advancements, particularly in academic education. Its use has become widespread among students, professors, and all those involved in teaching English, contributing to the improvement and correction of academic writing.

This is achieved through Smart Applications, which have their advantages and disadvantages, and by providing more personalized and adaptive methods to help students and teachers avoid errors.

This shift from traditional to modern education has gradually become possible thanks to the development of smart applications such as Grammarly and ChatGPT, which mimic interactive learning experiences and provide learners with immediate feedback and answers.

However, this study indicates that a lack of support in using these applications is a significant problem, and their overuse can lead to negative outcomes for students, especially those proficient in using them and understanding their features, particularly in improving writing, and who grasp their details and objectives.

1. Background of the Study:

This study is based on the positive and negative phenomena and outcomes that have followed the introduction of artificial intelligence (AI) applications in education in general, and in English language teaching in particular, including academic writing, which we consider a fundamental element of teaching English as a foreign language and which raises many questions in the field of linguistics.

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This includes the shift from the previous fixed teaching method the academic curriculum and its characteristics to the new, flexible approach based on AI and some of its applications that generate words and sentences in a deliberate manner.

From the students' perspective, the inclusion or absence of errors in the language has led to a reliance on answers and lesson planning that do not serve the educational curriculum.

Despite the richness of the English language, students often focus on superficial grammatical accuracy in their writing rather than deep critical thinking when relying on AI tools.

This may lead to a decline in students' English as a second language skills and their ability to write independently, bypassing some of the [characteristics, values, historical sources, and formal forms of the English language](#) in the name of civilization and technological progress.

This is what we observed in our initial study of these interpretations.

This study **aims to** improve the characteristics of artificial intelligence in the field of English language learning, to collaborate in identifying its consistent features and ensuring its error-free operation in practice, taking into account models of student writing and studies related to improving academic writing using artificial intelligence applications, revealing the current situation, and expanding horizons in the field of the impact of some artificial intelligence applications on English language teaching methodologies.

2. Rationale:

This research aims to reach practical conclusions for learners regarding the integration of Artificial Intelligence (AI) Applications to improve Academic Writing in English.

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The study also aims to identify the added value and educational benefits of integrating AI tools into academic writing.

Furthermore, the study offers insights into improving language learning with technology, advises students on adopting a balanced approach to using AI, and encourages its application in ways that serve and enhance their English language skills academically while maintaining established teaching methodologies.

3. Research Objectives:

- ✚ To investigate the importance of academic writing and some AI applications such as ChatGPT and Grammarly.
- ✚ To explore English language students' perceptions and attitudes toward integrating AI tools into academic writing and how to utilize them effectively.
- ✚ To analyze the impact of AI tools on academic writing, including its accuracy, coherence, vocabulary, and overall quality.

4. Statement of the Problem:

Students of English as a Foreign Language (EFL) frequently resort to using artificial intelligence tools in their learning and writing to achieve high scores in comprehension, achievement, and grammar correction.

However, they do not actively seek to learn the rules of academic writing, leading to laxity and a lack of concern for correction.

This can result in a haphazard approach to learning and writing, where students progress through levels without proper focus or discipline. This has become common among students, leading to an over-reliance on these tools.

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This Dissertation aims to highlight this issue by posing questions about the role of certain applications in improving academic writing within the framework of educational trends.

5. Research Questions:

- ✓ How does the integration of ChatGPT and Grammarly affect the quality of academic writing among English as a Foreign Language (EFL) students in Algeria?
- ✓ How do AI tools affect the characteristics of students' academic writing?
- ✓ What is the impact of AI tools on students and their interaction in developing ideas and organizing academic writing?

6. Research Hypotheses:

- ❖ AI-assisted language applications have a positive impact on students' academic writing.
- ❖ Students engage in developing their language skills and utilize AI applications to improve and master their writing within academic curricula.
- ❖ The added educational value of curricula contributes to improving and developing academic writing through the integration of AI tools with scientific guidance

7. Research Methodology:

This study employs both quantitative and qualitative methodologies to highlight the impact of AI-assisted language tools on improving the academic writing skills of a sample of university and high school students.

The study also examines their interaction with these tools and their impressions of them within an academic context.

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➤ **Qualitative Approach:** This qualitative data will be collected using open-ended questionnaire.

This approach will allow for an in-depth exploration of some student considerations such as goal setting, self-monitoring, and over-reliance on Grammarly and ChatGPT, two popular applications used to improve academic writing.

➤ **Quantitative Approach:** This involves selecting a focused sample of students from the final year of secondary school and University levels, then verifying the results obtained from comprehensive data and questionnaire responses.

This data can be collected through field-based surveys third year secondary school students (Baccalaureate students) or online surveys (for university students).

➤ **Data Analysis:** Students will be surveyed to explore their interaction with AI tools, including their self-learning behaviors and motivations.

We also aimed to engage learners with varying abilities, specifically high school students at the B1 level, through direct surveys, and compare their responses with those of university English language students (LMD), who were surveyed using Google Forms.

The results will then be evaluated to determine the impact of these tools on improving the quality and accuracy of students' academic writing.

This involves analyzing the collected and evaluated data, noting the feedback, and formulating recommendations.

General Introduction

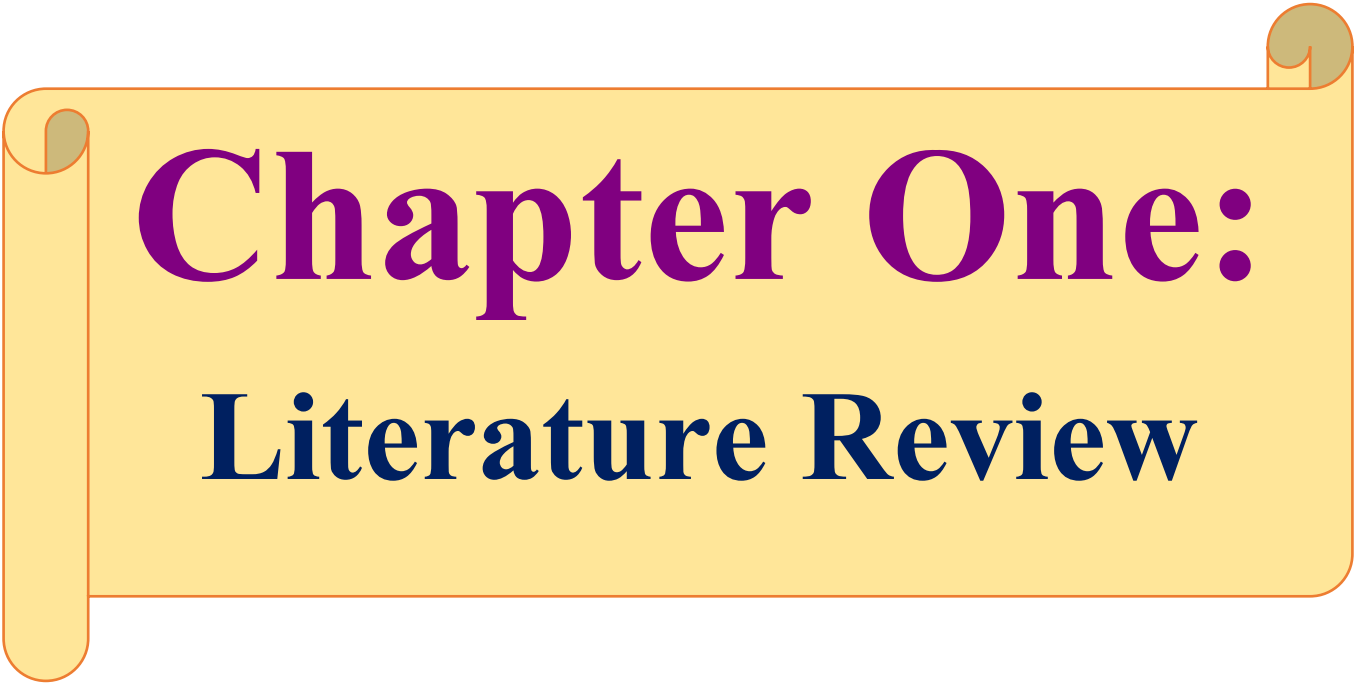
8. Study Limitations:

This study focuses on students' perceptions of using AI applications to improve their academic English language skills, specifically targeting undergraduate English language students during the 2025/2026 Academic Year.

Concerns are raised regarding data privacy, as the use of AI tools often involves collecting and analyzing user data, particularly in relation to English language tools.

Not all learners have equal opportunities to improve their language skills due to socioeconomic, technological, and geographical disparities. The study also addresses the issue of unequal access to AI.

However, our conclusions are based on a questionnaire to ensure the methodology of the study.

A yellow scroll graphic with a brown border and a brown shadow. The scroll is unrolled, showing the text. The text is in a serif font, with 'Chapter One:' in purple and 'Literature Review' in dark blue.

Chapter One:

Literature Review

Table of contents (Chapter one)

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1.9 Examples of studies on the impact of AI tools like Grammarly and ChatGPT on Academic Writing

Introduction:

With technological advancements and the dominance of digital information in educational programs, the integration of Artificial Intelligence (AI) into English as a Foreign Language (EFL) Teaching has revolutionized English language learning Methods, particularly in writing and summarization skills. Writing is a fundamental and pivotal element in language acquisition and mastery.

Therefore, technological developments offer innovative approaches despite traditional teaching methods; persistent challenges in grammatical accuracy, limited vocabulary, and poor organization continue to hinder effective expression among ELF learners, necessitating the exploration of effective support technologies.

The increasing reliance on AI in educational support, especially among language learners, underscores the need to examine how these tools are applied and the extent of their effectiveness.

Among the most prominent tools we studied were ChatGPT and Grammarly.

These tools demonstrated a positive impact on writing skills, such as grammatical accuracy and style, vocabulary and style development, feedback and revision processes, and narrative writing abilities (Lun.o, 2026).

1. Academic Writing

1.1 Definition:

The definition of academic writing varies depending on the specific research and the online source.

Perhaps the most important definition is: Academic writing is a formal, objective, and precise writing style used in university research, studies, and scientific publications to define the scientific boundaries of disciplines and areas of expertise.

This style involves carefully selecting words according to their position in the sentence, adhering to grammatical rules, and focusing on the topic or problem at hand, as is the case in major disciplines such as law and medicine. (Akhtar,2021).

Academic writing is also defined as a linguistic style and system with its own tools, vocabulary, structure, connotations, meanings, formulation, and distinctive characteristics.

This style is used in writing research papers, studies, theses, dissertations, reports, scientific abstracts, academic articles submitted for publication, and similar documents.

One of the main features of academic writing is the use of terminology with specific meanings within each field.

Another aspect of "style" is that writing styles in English tend to differ from spoken styles:

- ✚ Writing styles are characterized by formality, while spoken styles are characterized by spontaneity.
- ✚ Written texts used in most academic contexts should be formal and technical to maintain formality, and informal to maintain objectivity.

A publication from the University of Sydney, (Style, 2012) defines academic writing style as the style used by students and professionals in academic fields such as engineering, science, architecture, philosophy, fine arts, and law.

Each of these fields has its own distinct style.

For example, the writing style in engineering or philosophy differs significantly from the writing style in fine arts or law.

1.2 Types of Academic Writing:

Based on a review of numerous books and research papers specializing in Academic Writing, its definitions, specializations, and types, we find that it comprises four main types: Descriptive, Analytical, Persuasive, and Critical.(Learning, 2026)

These types are often integrated within larger projects, such as dissertations or scholarly articles. Each type has its own linguistic characteristics and specific objectives.

They are also characterized by a formal style, evidence-based arguments, and precise language. They can be briefly explained as follows

1.2.1 Descriptive Writing:

Descriptive writing is the simplest type of Academic Writing; its purpose is to present facts or information.

Examples include summarizing an article or writing a report on the results of an experiment. Types of instructions for descriptive writing include: (Identify, Report, Record, Summarize, and Describe).

1.2.2 Analytical Writing:

Analytical writing largely incorporates descriptive writing, but it also requires reorganizing the facts and information you describe into categories, groups, parts, types, or relationships.

This is preceded by prior organization and planning, and the gathering of facts and ideas (such as comparing or contrasting theories).

Types of instructions for Analytical Writing Include: (Analyze, Compare, Contrast, Connect, and Examine).

1.2.3 Persuasive Writing:

Persuasive writing includes all the features of analytical writing (information and its reorganization), in addition to your personal viewpoint, most essays are persuasive, and there is at least one persuasive element in the discussion and conclusion of a research paper.

Viewpoints in academic writing include: argumentation, recommendation, interpretation of results, or evaluation of others' work.

Types of instructions for a persuasive task include: (Argument, Evaluation, Discussion, Taking a position).

1.2.4 Critical Writing:

Critical Writing is common in research papers and graduate studies. This is writing for advanced undergraduate students. It includes all the features of persuasive writing, with the added benefit of presenting at least one other viewpoint.

While persuasive writing requires you to have your own perspective on an issue or topic, critical writing requires you to consider at least two viewpoints, including your own.

For example, you might explain a researcher's interpretation or argument, then evaluate the merits of that argument, or offer your own alternative interpretation.

Examples of critical writing tasks include analyzing a research article or conducting a literature review to identify the strengths and weaknesses of existing research.

Types of instructions for critical writing include: critique, discussion, objection, and evaluation.

1.3 Essential Steps in Academic Writing:

1.3.1 Understanding the Assignment: Analyze the essay question, research keywords, and define the topic and scope of the research.

1.3.2 Brainstorming and Research: Generate initial ideas and gather relevant materials, ensuring that evidence is obtained from reliable sources.

1.3.3 Planning and Structuring: Organize your ideas into a logical structure (Introduction, Body, and Conclusion) before beginning to write the draft.

1.3.4 Writing the Draft: Write the first draft, focusing on crafting a clear thesis statement.

1.3.5 Revising: Review the draft to improve its structure, clarity, and the strength of its arguments.

1.3.6 Proofreading and Editing: Finalize the text by correcting grammatical, spelling, punctuation, and formatting errors. (Learning, 2026)

1.4 Characteristics of Academic Writing:

In Academic Writing, a good question must be posed and then answers sought the language of Academic texts tends to be "Precise, Objective, and Impersonal."

Explaining and justifying answers with logic and arguments demonstrates your understanding and appreciation of the subject, which is essential for achieving a good grade" (Hartley, 2008).

This means that the writer avoids value judgments and biases, uses formal vocabulary, and cites references.

Words with judgmental connotations, such as "Horrible," "Terrifying," "Fantastic," and "Unbelievable," Should be avoided. (Headey, 2007).

This text identifies the following characteristics of good academic writing: precise, clear, and based on facts, not assumptions. Consider these two statements:

- Academic Writing is precise.
- Clear.
- and based on facts not assumptions.

Consider these two statements:

✚ **University students are expected to write in an academic style.**

✚ **At James Cook University, students are expected to write in an academic style, using formal language, clear structure, and accurate citation.**

Academic Writing relies on the critical evaluation of ideas rather than appealing to emotions.

However, some research fields welcome personal comments and opinions; clarity is essential for conveying the intended meaning directly; complex and convoluted language does not necessarily convey a clear meaning. (Hartley, 2008).

1.5 The Purpose of Academic Writing:

Also known as an academic writing assignment, this is an opportunity to explore an interesting topic within your coursework in the form of an academic research paper.

In an Academic Writing assignment, you will begin by formulating a good question, then research and analyze the answers, and choose the best answer(s) to discuss in your research paper.

Your research will include your ideas and findings, and you will support your answers with logic and evidence.

Therefore, the goal of academic writing is not to showcase everything you know about your topic, but rather to demonstrate your understanding of it and your ability to think critically about it (which will help you get a good grade).

In addition, you will develop skills in research, information evaluation, organization, argumentation, responding to others' arguments, analysis, and expressing yourself clearly in writing (also in English). (Whitaker, 2009)

1.6 Main Features of Academic Writing:

Academic Writing is typically characterized by a prose style that demonstrates the Writer's (or writers') perseverance, Openness, and Systematic Approach to study.

It prioritizes reason over emotion or sensory perception, envisioning a calm and rational reader seeking information and aiming to formulate a logical response. (Thaiss & Zawacki, 2017).

These styles are characterized by (Aull, 2020)

1.6.1 Balance between caution and certainty, or between reservation and assertion:

Presenting a fair and objective viewpoint.

1.6.2 Coherence:

This is demonstrated through a coherent set of links and techniques, and through a well-organized structure that includes a clear introduction, body, and conclusion.

1.6.3 Reliance on evidence:

Claims are supported by research and citations.

1.6.4 Formality is maintained:

precise and objective language is used, avoiding colloquialisms or emotionalism.

1.7 Research in Academic Writing:

According to Tikhonova (Research in academic writing has long enjoyed widespread attention, but recently it has undergone a transformation to include new linguistic and pedagogical aspects). (Tikhonova, 2022).

The phrase "publishing or disseminating" is often used to describe the art of scientific writing, and its impact on scientific writing can be seen in the fact that publishing manuscripts is the only means by which scientists communicate with one another.

Recently, the desire to publish manuscripts from the developing world has increased for many reasons.

While conducting research is challenging in itself, writing it for publication is the final stage, which can be particularly daunting, especially for beginners.

Work that remains unpublished in any form is essentially incomplete. Therefore, it is crucial to publish research findings in a reputable scientific journal.

Adopting this approach contributes to developing the skills and competence of potential researchers and practicing physicians in medical writing, and enables the developing world to

achieve the desired value from its enormous intellectual capital by making valuable contributions to global science. (Sabyasachi, 2014).

1.8 Improving academic writing through smart applications:

The integration of digital tools into academic writing has significantly improved student writing proficiency across all educational levels.

Tools such as grammar checkers, reference management software, and **collaborative platforms** help students produce more structured and academically compliant writing.

These tools support the development of technical skills while simultaneously increasing access to education, providing students from diverse backgrounds with greater opportunities to enhance their writing abilities.

AI-based writing aids, in particular, help reduce grammatical errors and expand vocabulary, while multimedia technologies encourage creativity by enabling students to incorporate visual and audio elements into their work.

For example, this literature review using the PRISMA methodology and bibliometric analysis, focuses on studies from 2019 to 2024, examining how digital tools impact writing clarity, adherence to academic standards, and structured argumentation.

The review reveals that while digital tools significantly improve writing skills, their overuse can lead to dependency that hinders the development of critical thinking and creativity two essential components of strong writing.

The findings of this study underscore the importance of integrating digital skills training into the curriculum to ensure students use digital tools responsibly and enrich their writing skills with analytical and creative thinking. Furthermore, professional development for teachers is essential to enable them to guide students in effectively integrating these tools.

Ultimately, a balanced approach to digital tool use can enhance academic writing and contribute to the broader goal of developing well-rounded, digitally literate learners. (Salman, 2024).

1.9 Examples of studies on the impact of AI tools like Grammarly on academic writing:

1. After reviewing the theoretical aspects of the importance of academic writing as a constant variable and its effective role in academic achievement, and given the emergence of AI applications and their proven advantages, it is necessary to provide an overview of some of these applications, particularly Grammarly and ChatGPT.

These two applications are the subject of our study as non-constant variables, as we examine their impact on academic writing in English language learning.

We can pose the following question:

- ✓ How can we achieve a balance in the use of these tools without compromising critical thinking skills?

Writing is considered one of the most difficult language skills due to the complexity of its grammar, vocabulary, and the organization of ideas.

Based on our knowledge and experience, we will explore the benefits of Grammarly as a tool for reducing errors in students' academic writing (Pohan, 2025).

This study explores the benefits of the Grammarly program in improving the quality of students' writing by analyzing empirical studies published between 2018 and 2023.

The review results show that Grammarly provides immediate feedback that helps students correct grammatical and spelling errors, improves the clarity and coherence of their academic writing, helps maintain consistency in writing style and tone, and enriches their vocabulary.

Case studies demonstrate the program's effectiveness in identifying grammatical errors and providing feedback that complements manual correction methods and their impact on thinking.

Grammarly significantly helps students improve the quality of their writing by reducing errors and enhancing the clarity and coherence of their work.

2. Integrating AI-powered writing assistants into academic writing offers an opportunity to improve formative assessment in higher education and develop critical thinking skills.

Data was collected through semi-structured interviews and focus group discussions with 30 postgraduate students and five writing instructors with over three years of experience teaching postgraduate writing at a Malaysian public University.

The results showed that Grammarly enhanced student motivation, engagement, and writing proficiency by providing continuous and detailed feedback, compared to traditional methods that are time-consuming and highly subjective.

However, the results also highlighted Grammarly's shortcomings, particularly in meeting the specific needs of academic writing, adapting suggestions to complex content, supporting self-directed learning, and reducing writing anxiety.

This finding contributes to the ongoing debate about integrating AI into education and adopting a balanced approach that combines AI-powered feedback with human supervision.

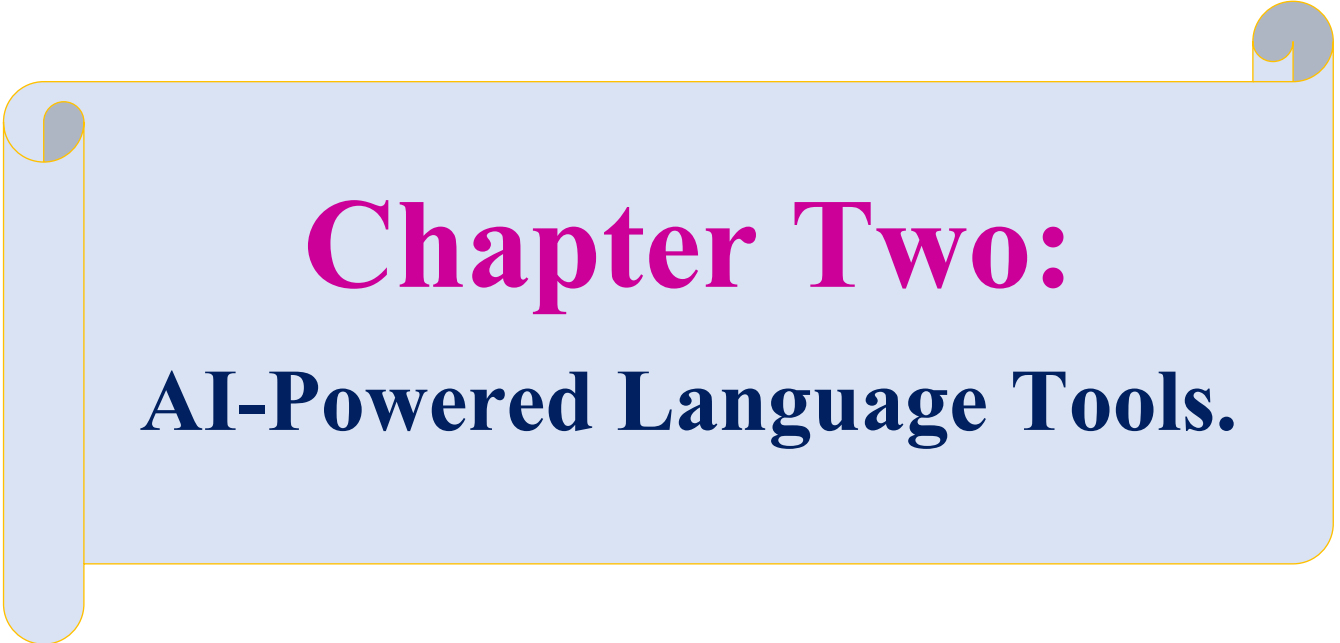
These shortcomings underscore the importance of using Grammarly as a supplement, not a standalone solution.

In short, the responsible integration of AI tools can contribute to creating a more conducive learning environment for students' future academic and professional endeavors. (Lo, 2025)

1.10 Conclusion: Theoretical Framework:

The theoretical framework demonstrates the role of AI-powered language applications in enriching the English language and the extent to which they can be used in Educational Curricula, including methods for integrating and utilizing.

This is followed by a detailed explanation and then a practical application section that showcases real-life examples and testimonials from students.



Chapter Two:

AI-Powered Language Tools.

Chapter Two: AI-Powered Language Tools.

2.1 Artificial Intelligence

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2.3 Characteristics of ChatGPT

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2.12 The Impact of Grammarly on the Quality and Accuracy of Writing in English as a Foreign Language.

2.1 Artificial Intelligence:

In light of today's rapid technological advancements, academic tools have shifted from traditional methods to intelligent systems that mimic the human mind.

Artificial intelligence is the most significant change in this evolution, opening new horizons for scientific research based on collaboration between the researcher's intellect and the machine's ability to create and review texts.

Artificial Intelligence is defined as systems capable of processing data and information in a way that mimics intelligent behavior, typically encompassing aspects of reasoning, learning, perception, prediction, planning, and control. (Wayne, 2017).

Good writing is a fundamental element of academic excellence for students of English as a foreign language, as most assignments require writing and note-taking of key points.

Writing is also considered an essential lifelong learning skill (Wayne, 2017). However, students often face numerous challenges, ranging from small details such as grammar and vocabulary to larger issues like organizing and logically sequencing ideas. (Faisal & Carabella, 2023).

To solve these problems, many students today are turning to technology, particularly AI-powered writing tools. (Nasrullah, 2024)

2.2 Definition of ChatGPT:

ChatGPT (Chat Generative Pre-Trained Transformer) is an advanced Artificial Intelligence (AI) Chabot developed by OpenAI, built upon large language models (LLMs) that utilize deep learning techniques to understand and generate human-like text based on user prompts (AI, 2022).

Unlike traditional Automated Writing Evaluation (AWE) tools such as Grammarly which primarily focus on Rule-based grammar correction and surface-level editing, Chat GPT operates on a generative and conversational framework.

According to (Zahi, 2022) this technology marks a significant shift from passive error-detection to interactive AI, allowing users to engage in contextual dialogues and receive tailored linguistic feedback.

In the field of academic writing and English for Specific Purposes (ESP), ChatGPT is increasingly recognized not merely as a mechanical spell-checker, but as an adaptive writing assistant. As noted by (Kohnke, 2023), it is a pivotal tool in modern computer-assisted language learning environments, capable of restructuring complex sentences, improving academic style, and facilitating brainstorming, making it a valuable tool for this purpose.

2.3 Characteristics of ChatGPT:

2.3.1 Natural Language Processing and Text Generation (NLP/NLG):

At its core, ChatGPT is characterized by its advanced Large Language Model (LLM) architecture, which enables highly sophisticated Natural Language Processing (NLP) and Natural Language Generation (NLG).

Unlike traditional keyword-based systems, ChatGPT processes complex syntactic structures and semantic nuances (Qradford., 2018).

This fundamental technological capability allows the model to produce human-like, coherent, and contextualized academic prose, making it an efficient tool for structuring academic text, generating smooth transitions, and maintaining formal linguistic standards during the writing process (Browen, 2020).

2.3.2 Multilingual Competence:

ChatGPT exhibits a profound capacity to operate across diverse linguistic frameworks, demonstrating high proficiency in translation, cross-lingual summarization, and grammatical refinement (Zhai, 2022).

In the field of English for Special Purposes (ESP), this multilingual capability serves as an essential support mechanism for researchers and is suitable for high-level doctoral dissertation standards.

It enables non-native English speakers to bridge gaps in academic writing, self-correct complex lexical errors, and convert colloquial expressions into formal academic English (Al-Zahrani, 2024).

2.3.3 Adaptability to Rhetorical Styles:

The architectural flexibility of ChatGPT allows it to dynamically adjust its output to align with specific rhetorical genres, structural conventions, and professional styles.

Academic writers can systematically instruct the model to adopt an objective, cautious, and analytical research persona, or require it to format complex textual datasets into structured tables (wang, 2023).

This contextual adaptability ensures that the generated text adheres closely to the rigorous stylistic and qualitative expectations of scholarly and academic discourse across various disciplines. (Dwivedi, 2023)

2.3.4 Functional Versatility in Academic Workflows:

Beyond mere text generation, ChatGPT is characterized by its operational multi-tasking capabilities within the higher education and research ecosystem (Atlas, 2023).

It serves as an automated cognitive assistant capable of brainstorming research methodologies, generating comprehensive chapter outlines, synthesizing dense literature reviews, and proofreading technical drafts.

This functional versatility significantly optimizes the pre-writing, structuring, and editing phases of dissertation production, allowing researchers to manage data more systematically (Gimpel, 2023).

2.3.5 The Role of ChatGPT in Organizing Ideas and Research Planning:

The field of academic writing the initial stages of research specifically brainstorming, structuring arguments, and outlining pose a significant cognitive load for students.

Artificial Intelligence Generated Content (AIGC) tools, particularly Large Language Models (LLMs) like ChatGPT, have emerged as powerful cognitive assistants that facilitate these formative phases.

According to (Yang, 2023), ChatGPT can act as an interactive sounding board, helping researchers deconstruct complex, abstract topics into manageable conceptual frameworks and systematic research questions.

By analyzing prompts, the model assists students in mapping out their initial thoughts, ensuring a logical flow before the actual drafting process begins with research planning and time management. Novice researchers often face anxiety when starting to write.

According to (Zhai, 2022), ChatGPT can reduce this stress by creating clear outlines and suggesting step by step methods for the research.

Additionally, it helps students design timelines and organize their literature reviews easily.

However, (Fitria, 2023). Emphasizes that ChatGPT is only a helper; students must still think critically and take full responsibility for their own work.

This simple way of organizing ideas is very useful for English for Specific Purposes (ESP) students.

It helps them manage difficult vocabulary and Academic terms more easily during the planning stage.

2.4 The Importance of ChatGPT in Paraphrasing and Summarizing Information:

Today, artificial intelligence (AI) tools are changing the way students write and research. ChatGPT is one of the most popular tools that helps students improve their academic writing and understand research papers easily.

According to UNESCO (Education, 2023), AI tools can help University students do many tasks like drafting text, editing, and getting new ideas.

For English students, ChatGPT is especially useful for two main things:

- Paraphrasing.
- and summarizing information.

2.4.1 ChatGPT in Paraphrasing:

Paraphrasing means rewriting someone else's ideas using your own words while keeping the same meaning.

This can be difficult for students who do not have a large vocabulary in English. (Cheng, 2024) studied how students use ChatGPT for rewriting.

They found that the tool helps students by giving them many new words (synonyms) and different ways to build sentences.

This helps students avoid using the same words again and again (Cheng, 2024).

Also, ChatGPT can change difficult sentences into simpler ones, or change passive voice to active voice.

This makes the text sound more professional and academic.

By using ChatGPT to rewrite difficult paragraphs, students can avoid plagiarism (copying words directly from the source) and feel more confident about their writing (Cheng, 2024).

2.4.2 ChatGPT in Summarizing:

When writing a dissertation, students have to read many long articles and books.

This takes a lot of time and effort. ChatGPT solves this problem because it can make long texts much shorter. (Alchahrani, 2025).

Found that ChatGPT is very good at extracting the main ideas, the research methods, and the final results from long academic papers.

This helps students save time because they can read a short summary first to see if the paper is useful for their research (Alchahrani, 2025).

Moreover, ChatGPT can present these summaries as short paragraphs or clear bullet points, making it easy to use them in the dissertation.

However, students must always be careful.

Academic honesty means that students should check the text generated by ChatGPT.

They need to make sure that the summary or the paraphrased text is correct and does not change the true meaning of the original author (Education, 2023).

2.5 Scientific Integrity and Ethical Guidelines for Using These Tools:

When learners use AI tools like ChatGPT or Grammarly, they must follow academic rules. These rules are called scientific integrity and ethics. AI can help learners learn and write better, but

learners must use it responsibly. Higher education institutions must create clear guidelines to ensure that AI does not Replace the learners' critical thinking and honest work.

2.6 The Problem of Plagiarism and Text Generation:

One of the biggest ethical problems is academic Plagiarism.

This Happens when a learner asks ChatGPT to write a full paragraph or an entire essay and claims it as their own work. (Turney, 2024), explained that generating complete texts using AI is a violation of Academic.

Honesty, Learners should only use AI as a writing assistant to improve their grammar or to brainstorm ideas, not to write the research for them (Turney, 2024).

The learner must always remain the real author of the dissertation.

2.7 The Danger of AI Hallucinations:

Another important issue is accuracy, AI tools sometimes create false information, fake facts, or fake reference citations. This problem is called "AI hallucination." (Smith, 2025) noted that learners cannot trust AI blindly.

Scientific integrity means that learners must verify every piece of information and check every reference by themselves before putting it in their final draft (Smith, 2025).

2.8 Practical Rules for Using AI Safely:

To use AI tools safely and ethically, learners should follow these basic guidelines:

2.8.1 Transparency:

Learners should be honest with their teachers about using AI tools for editing or paraphrasing.

2.8.2 Human Control:

The learner must review, edit, and approve every sentence generated or changed by AI tools. (Education, 2023).

2.9 Grammarly:

2.9.1 Definition of Grammarly:

Grammarly was launched in 2009 by its founders, Max Litvin, Alex Shevchenko, and Dmytro Lider.

Initially, its purpose was to provide students with a grammar-checking tool.

Since then, it has undergone significant development, becoming a comprehensive artificial intelligence system that supports millions of users worldwide in improving the quality and impact of their digital communication and writing.

The platform's role is no longer limited to supporting traditional writing; it has become an intelligent work environment that seamlessly integrates with various programs and applications that people rely on for their daily writing to help users write better, Grammarly instantly checks written texts for grammar, spelling, and punctuation errors.

Using artificial intelligence, the platform not only corrects errors but also helps improve the clarity and style of the text to suit different audiences.

In addition, Grammarly includes a plagiarism checker that compares text against millions of web pages and academic papers, helping students and researchers maintain academic integrity in their work. (Grammarly, 2024).

Many studies have shown that Grammarly is very useful for students writing in English as a second language.

Researchers have found that using this tool helps students correct their mistakes quickly and improves the quality of their writing (O'Neill, 2019).

Studies also indicate that Grammarly helps students learn how to correct their own mistakes and improves their academic writing skills over time (Karyuatry, 2018).

2.9.2 Grammarly Features:

Grammarly is widely recognized as a sophisticated machine learning (AWE) tool, offering a variety of features to support academic writing.

Its key features, according to scientific research, include:

2.9.2.1 Immediate Feedback:

Unlike traditional programs that only detect basic spelling errors, Grammarly provides immediate, automated feedback. (O'Neill, 2019).

2.9.2.2 Grammarly analyzes text:

instantly for grammar, punctuation, and contextual spelling errors as the user types, helping researchers correct mistakes immediately (Syafi'i, 2020)

2.9.2.3 Multi-Level Grammar Correction:

Unlike traditional spell checkers, Grammarly evaluates text across multiple dimensions of writing quality, including:

- ✚ Grammarly's accuracy, identifying grammatical, spelling, and punctuation errors.
- ✚ Grammarly's clarity, making writing more concise and coherent, which improves argumentation by up to 60%.
- ✚ Grammarly's effectiveness Linguistic Clarity Making writing more concise and coherent, which enhances argumentation by up to 60%.

- ✚ 4. Interaction and Implementation through improved vocabulary choice and tone of voice.
(Koltovskaia, 2020).

2.10 Objective Quality Assessment:

The tool includes an objective assessment system that evaluates text quality out of 100 points.

This feature provides students and researchers with a clear and measurable indicator of their writing progress and overall clarity (Ghufron, 2019).

Academic Integrity and Integrity Grammarly is easy to use and secure.

In addition to its built-in plagiarism checker, it is a reliable platform for maintaining academic integrity (Cavaleri, 2016).

2.11 Grammarly's Role in Correcting Grammatical Errors:

Grammarly's technical foundation relies heavily on advanced artificial intelligence models and natural language processing to identify grammatical anomalies, as well as on automated error detection mechanisms and AI systems.

According to Grammarly's official documentation (2024), the platform utilizes a sophisticated combination of rule-based systems and machine learning algorithms trained on massive datasets of high-quality text.

This hybrid design allows the tool to go beyond the superficial work of traditional spell checkers.

It actively scans text for structural inconsistencies, assesses contextual sentence dynamics to identify subject-verb agreement errors, incorrect tense adjustments, and syntactic issues (Grammarly, 2024).

This is corroborated by (Fitria, 2021) who notes that Grammarly functions as a highly effective alternative English writing assistant by systematically linking users' writing to standard

grammar rules, providing immediate automated corrections that significantly improve structural clarity.

2.12 The Impact of Grammarly on the Quality and Accuracy of Writing in English as a Foreign Language:

The empirical impact of automated grammar correction on English as a Foreign Language (EFL) students has been extensively documented in digital databases such as Google Scholar and Research Gate.

For example, Karyuatry conducted an applied research study (Karyuatry, 2018) Investigating how Grammarly feedback affects descriptive writing.

The results revealed that the program significantly reduced superficial grammatical errors, leading to a marked improvement in overall text quality; approximately 82% of participating students achieved the required writing proficiency standards.

Furthermore, quantitative evidence presented by (Fitria, 2021) Demonstrated a significant increase in students' academic writing performance, with average assessment scores rising from 34 to 77 out of 100 after using the program.

These statistics confirm Grammarly's ability to improve technical accuracy in academic tasks.

Automated Corrective Feedback (ACF) and its educational value, along with its provision of clear explanations for students, were emphasized by Miftah, this continuous cognitive interaction transforms the program from a mere editing tool into a self-support tool.

Over time, this interactive learning process reduces teacher fatigue from providing feedback. (Muftah, 2025).

The educational benefit of Grammarly extends beyond immediate error correction to encompass long-term language development.

It explains the reasons behind grammatical errors in certain phrases, allowing students to grasp grammatical principles rather than passively accepting corrections. (Hyland, 2025).

This fosters a sense of self-reliance, enabling ESL learners to develop strong self-correction habits and reduce the recurrence of basic grammatical errors in their future academic endeavors. (Fernando, 2022).

Conclusion:

To sum up this chapter, we have explored the role of Artificial Intelligence in academic writing.

We looked closely at two main tools: ChatGPT and Grammarly.

As we discussed, these applications offer many benefits for EFL learners, such as correcting grammar, improving vocabulary, and helping to organize ideas.

However, we also highlighted the ethical rules, the danger of AI hallucinations, and the problem of over-reliance.

This marks the end of our theoretical part.

Now that we understand the concepts and the tools, Chapter Three will present the practical part of our research.

In the next chapter, we will analyze the data collected from our fieldwork to see how students actually use these smart applications in their daily academic writing.

Part Two:
Practical Part

Chapter Three:

Case Study and Data Analysis

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introduction

3.1 Introduction

3.2 Research design

3.3 Research Sample

3.4 Data collection Tools

3.5 Description of Students' Questionnaire

3.6 Data analysis

3.7 Conclusion.

3.1 Introduction:

This chapter outlines the research methodology adopted in this study.

It provides a detailed description of the research design, the study sample, the data collection instrument used, and the procedures followed for data analysis.

The chapter also presents and interprets the results obtained from the questionnaire distributed primarily to university English language students and, as a control group, to senior secondary school students.

This questionnaire forms the core of the data collection process in this study.

3.2 Research design:

To achieve the objectives of this study and answer its main research questions, a descriptive case study design was adopted, employing a mixed-methods research Approach.

This approach combines quantitative and qualitative data collection tools to provide a comprehensive understanding of the phenomenon under investigation.

Quantitative data is used to identify general patterns and the frequency of AI tool use among students, while **Qualitative** insights gathered through open-ended inquiries offer a deeper understanding of students' perceptions, challenges, and experiences in academic writing.

3.3 Research Sample:

The target group for this study includes secondary and university students during the 2025/2026 academic year.

A purposive sampling technique was used to select a total sample of 60 respondents. Based on the study's questionnaire design, this sample bridges the gap between pre-university and post-university levels.

This comprehensive sampling strategy allows the research to examine a transitional developmental trajectory.

By engaging third-year secondary school students (baccalaureate track), the study investigates how academic writing challenges and AI-assisted language tool usage habits evolve as students transition from secondary school to undergraduate and then to advanced graduate studies.

3.4 Data collection Tools:

To achieve the research objectives, the study employed a quantitative and qualitative data collection method through a structured questionnaire.

The questionnaire was designed to survey students' opinions regarding the use of artificial intelligence tools Grammarly and ChatGPT in improving academic writing in English.

This tool enabled the researcher to efficiently collect a wide range of responses and statistically analyze the results to draw meaningful conclusions.

3.5 Description of Students' Questionnaire:

A structured questionnaire was distributed to undergraduate and master's students in the English as a Foreign Language department at the University of Ghardaïa.

The questionnaire consisted of thirteen items, divided into three main sections:

-  **Section 1:** General Information
-  **Section 2:** Use of Artificial Intelligence Tools
-  **Section 3:** Impact on Academic Writing
-  **Section 4:** Learning and Reliance
-  **Section 5:** Challenges and Attitudes
-  **Section 6:** Open-Ended Questions

Most of the questions were closed-ended, requiring students to choose one answer from several options, or to indicate their level of agreement on a five-point Likert scale (ranging from "Strongly Agree" to "Disagree").

This structure was chosen to ensure clarity and ease of analysis.

3.6 Data analyses :

Section 1: General Information:

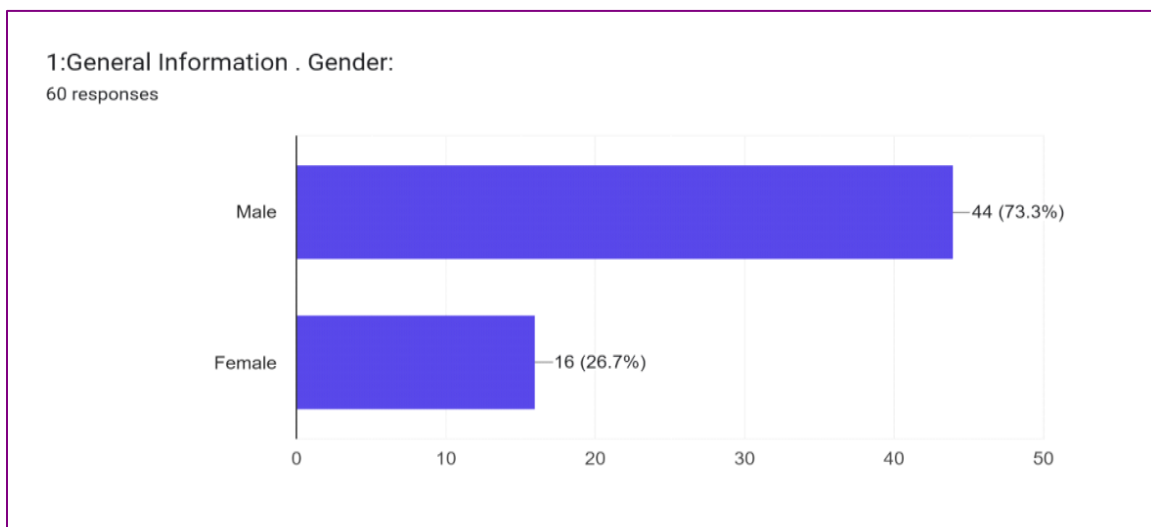


Figure 1.1: Gender Distribution of Participant.

Analysis:

As shown in the data, the majority of participants were male, representing 73.3% (44 participants) of the total sample size of 60.

In contrast, females represented 26.7%, totaling 16 participants.

Discussion:

This gender distribution indicates a high proportion of male students in this particular study.

While gender is not a primary variable directly affecting the educational outcomes of the research, a diverse sample ensures that the collected perspectives on the phenomenon under study are not significantly biased in favor of one gender group.

1.2 Academic Level of Participants:

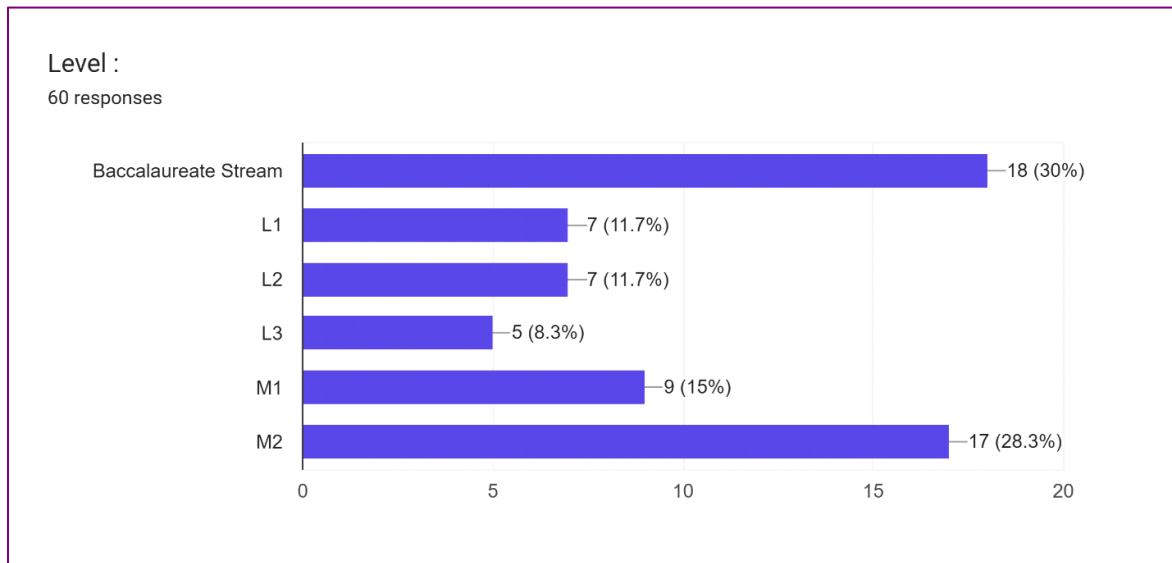


figure 2. Generale information: level.

Analysis:

The data present the academic status of the 60 participants across different levels. Undergraduate students constituted the largest subgroup at 30% (18 participants), followed by second-year Master's students at 28.3% (17 participants). First-year Master's (M1) students comprised 15% (9 participants), followed by first-year (L1) and second-year (L2) students, each representing 11.7% (7 participants).

Third-year (L3) students made up the smallest percentage of the sample at 8.3% (5 participants).

Discussion:

The inclusion of diverse Academic levels, particularly the significant presence of advanced students such as second-year Master's students, adds considerable value to the study.

Advanced and postgraduate students often possess broader experience in academic writing and a deeper understanding of research tools.

This diversity allows for a comprehensive understanding of how language and research tools are perceived and used at different stages of University Education.

1.3 Students' Self-Assessment of Their English Language Proficiency:

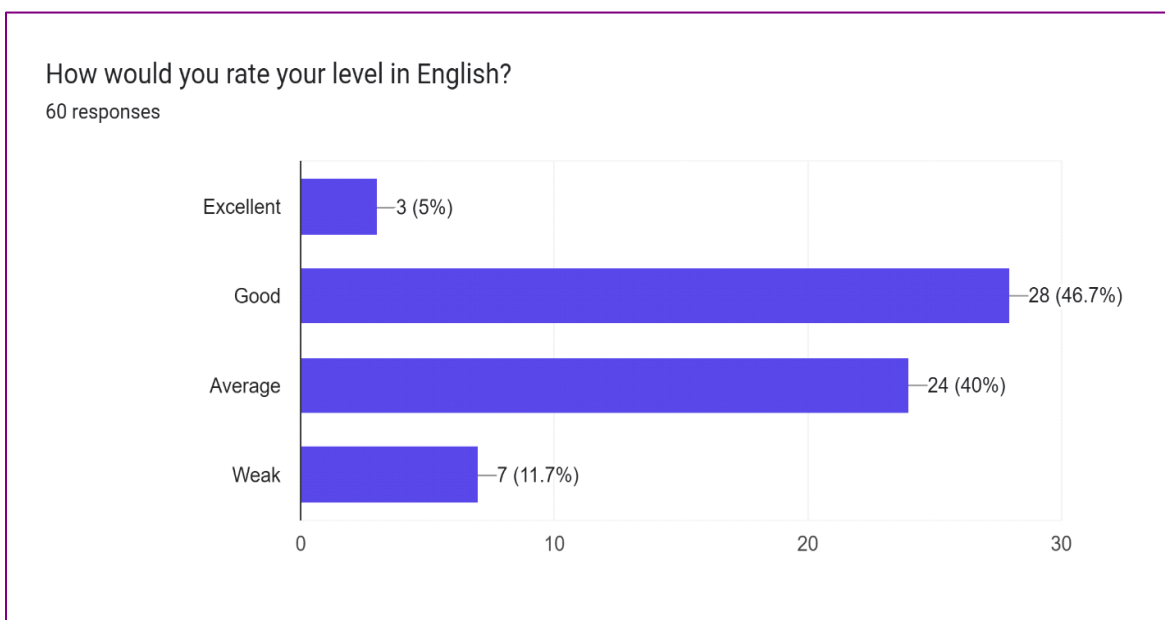


figure 3. how wold you rate your level in english?

Analysis:

When participants were asked to self-assess their English language proficiency, the largest proportion rated their level as “good” (46.7%, or 28 students), followed closely by those who considered their level “average” (40%, or 24 students). Meanwhile, 11.7% of students

Chapter Three:

Case Study and Data Analysis.

(7 students) rated their proficiency as “weak,” while a small minority (5%, or 3 students) considered their level “excellent.”.

Discussion:

This self-assessment provides an important contextual basis for the study.

Since the vast majority (86.7%) fall into the “good” and “average” categories, this indicates that although these learners possess a solid foundation in English, they still encounter subtle linguistic differences and academic grammar challenges that require assistance.

Students in these categories are likely to use artificial intelligence tools not to write texts from scratch, but as an advanced mechanism for structuring and styling to improve their academic output.

Section 2: Using AI Tools (figu4)

2.1 Do you use AI tools such as Grammarly or ChatGPT?

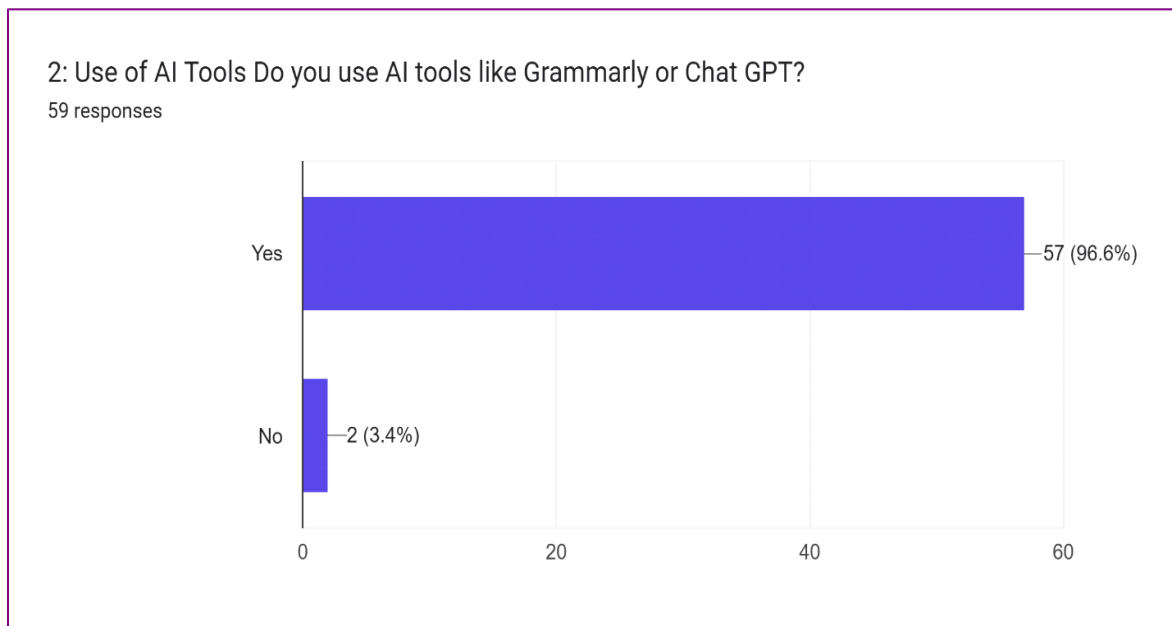


figure 4. 2: use of AI Tools do you use AI tools like Grammarly or chat GPT.

Analysis:

The vast majority of survey participants, 96.6% (57 respondents), responded positively to the use of AI-powered language tools.

In contrast, a small percentage, 3.4% (2 respondents), reported that they do not use such tools.

Discussion:

This striking result clearly demonstrates that the use of AI is no longer a fringe phenomenon but has become a firmly established norm in higher education academic writing environments.

For learners of English for Specific Purposes (ESP), this widespread adoption highlights a radical shift towards digital writing practices, indicating that students are actively seeking technological assistance to meet the rigorous requirements of university-level academic writing.

2.2 How often do you use these tools?

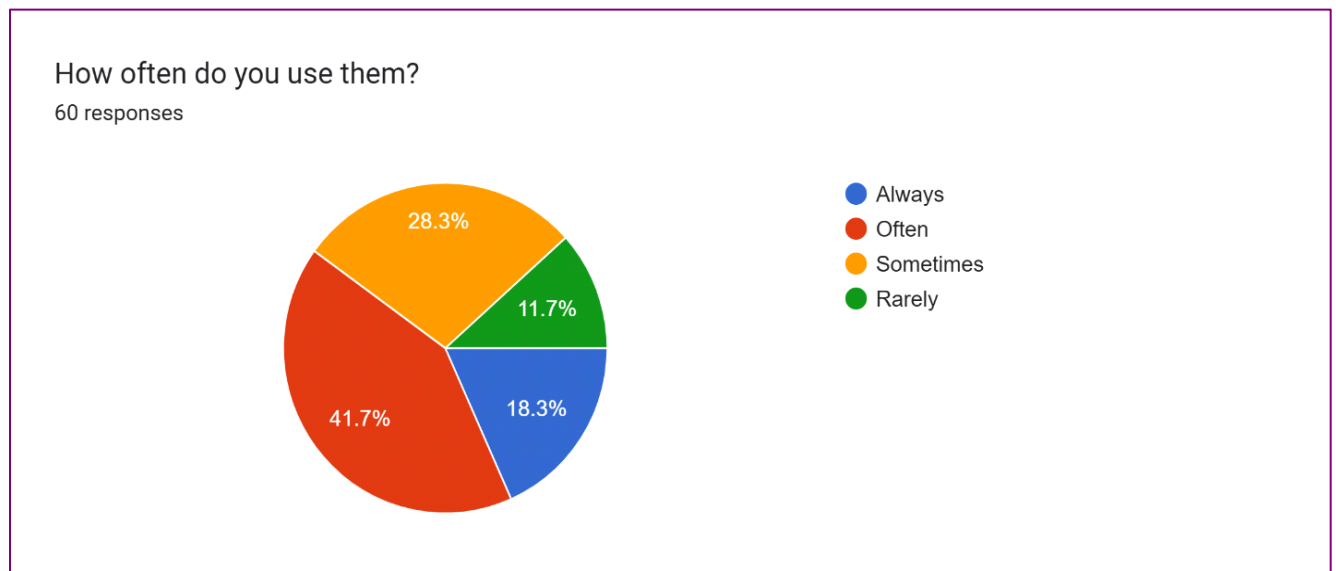


figure 5. How often do you use them?

Analysis:

Regarding the frequency of AI tool use, the data shows that 41.7% of participants use them "often," and 18.3% use them "always," representing a combined majority of 60% of regular users.

Additionally, 28.3% of respondents use these tools "sometimes," while only 11.7% reported "rarely" integrating them into their tasks.

Discussion:

The fact that 60% of students consistently rely on AI tools ("always" or "often") indicates that these tools have become an integral part of their regular writing routine.

This high level of reliance underscores the potential benefit of AI in reducing the cognitive burden associated with specialized writing, allowing English for Specific Purposes (ESP) students to focus more on the core content rather than being preoccupied with superficial errors.

2.3 Timing of Use and Tool Preferences:

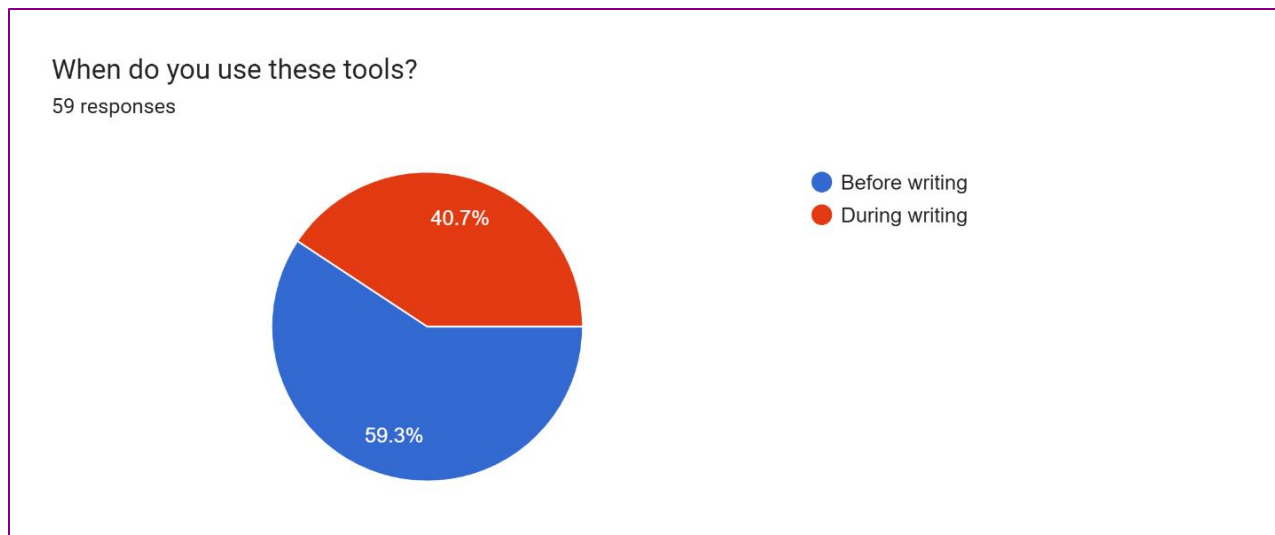


figure 6. When do you use these tools?

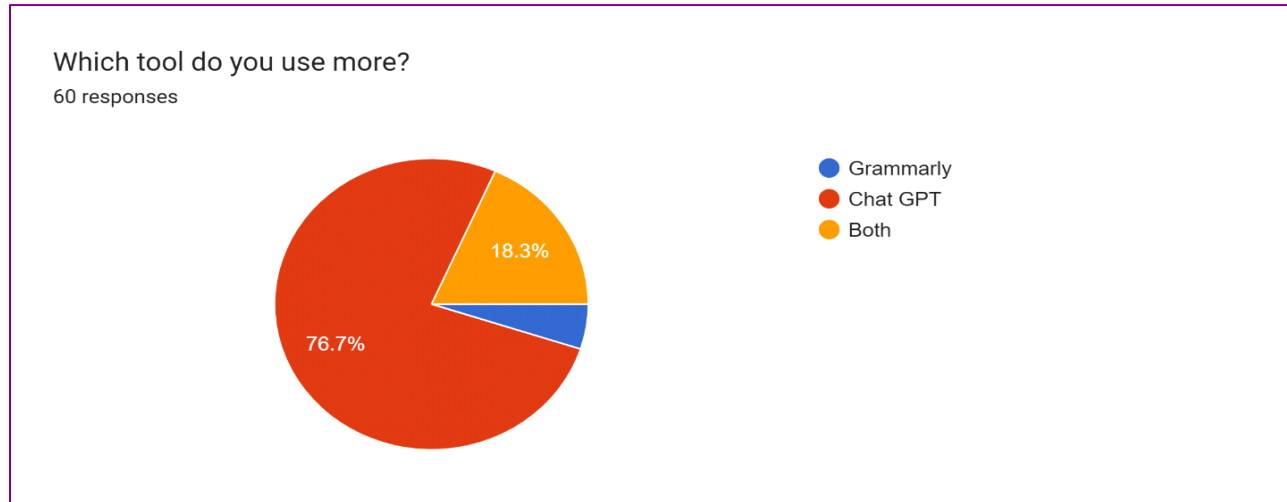


figure 7. Wich tool do you use more?

Analysis:

Regarding timing, 59.3% of students reported using AI tools “before writing,” while 40.7% used them “during writing.” When exploring tool preferences, ChatGPT emerged as the dominant choice, preferred by 76.7% of the sample. On the other hand, 18.3% of participants used “both tools” simultaneously, while a small percentage indicated exclusive reliance on Grammarly.

Discussion:

The preference for using AI “before writing,” along with the clear dominance of ChatGPT (76.7%), reveals a key insight: students primarily use AI in pre-writing stages, such as brainstorming, conceptual mapping, and idea generation.

ChatGPT’s generative nature allows it to function as an interactive dialogue partner, which explains its greater popularity compared to Grammarly, which primarily acts as a superficial grammar checker. Students prefer dynamic generation to passive error correction.

Section 3: Impact on Academic Writing

3.1 These tools help me improve my grammar:

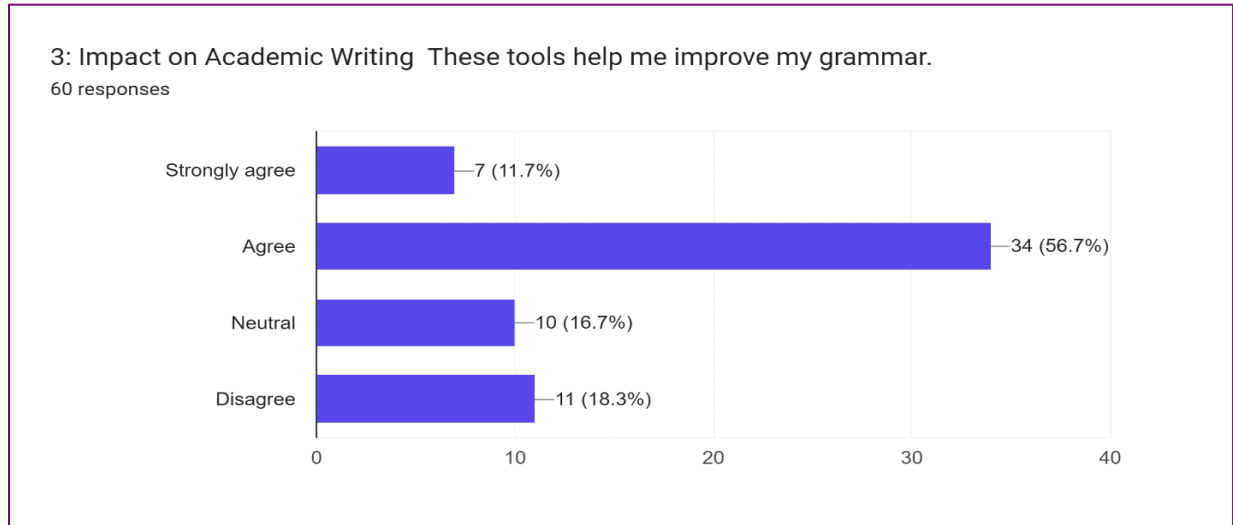


figure 8. 3: Impact of Academic Writing These tool help me grammar.

Analysis:

Reactions to the improvement in grammar were overwhelmingly positive; 56.7% (34 students) agreed with this statement, and 11.7% (7 students) strongly agreed, resulting in an overall agreement rate of 68.4%. In contrast, 16.7% (10 students) remained neutral, while 18.3% (11 students) disagreed with the idea that AI helps them improve their grammar.

Discussion:

The overall agreement rate of nearly 68.4% confirms that AI tools effectively fulfill their primary purpose as automated language tutors. Because sentence structure and grammar accuracy are frequent hurdles for learners of English for Specific Purposes (ESP), these tools provide immediate feedback, reducing grammatical errors and giving students immediate reassurance about the technical correctness of their writing.

3.2 Vocabulary and Style Improvement:

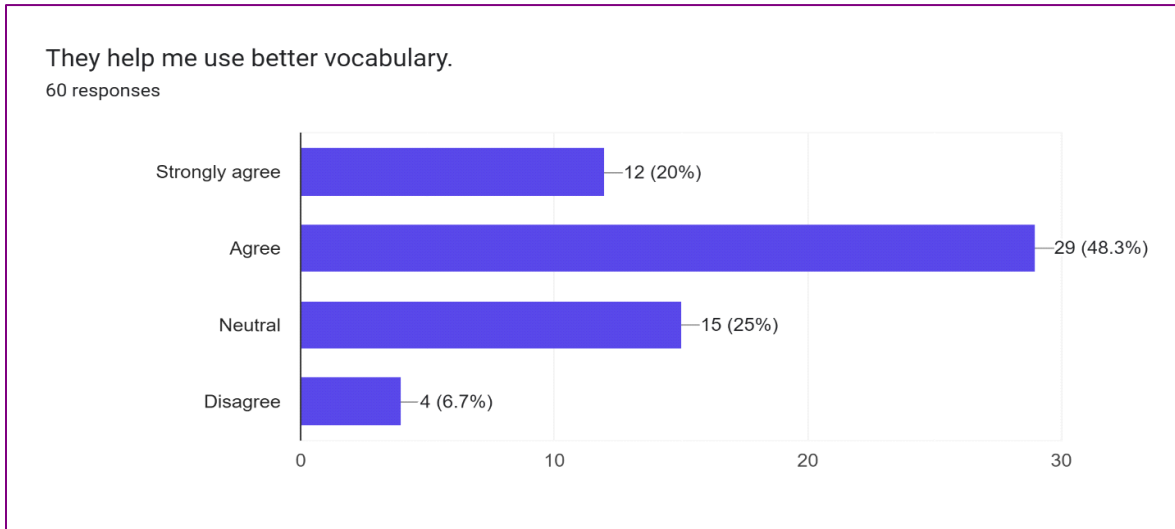


figure 9. They help me use better Vocabulary.

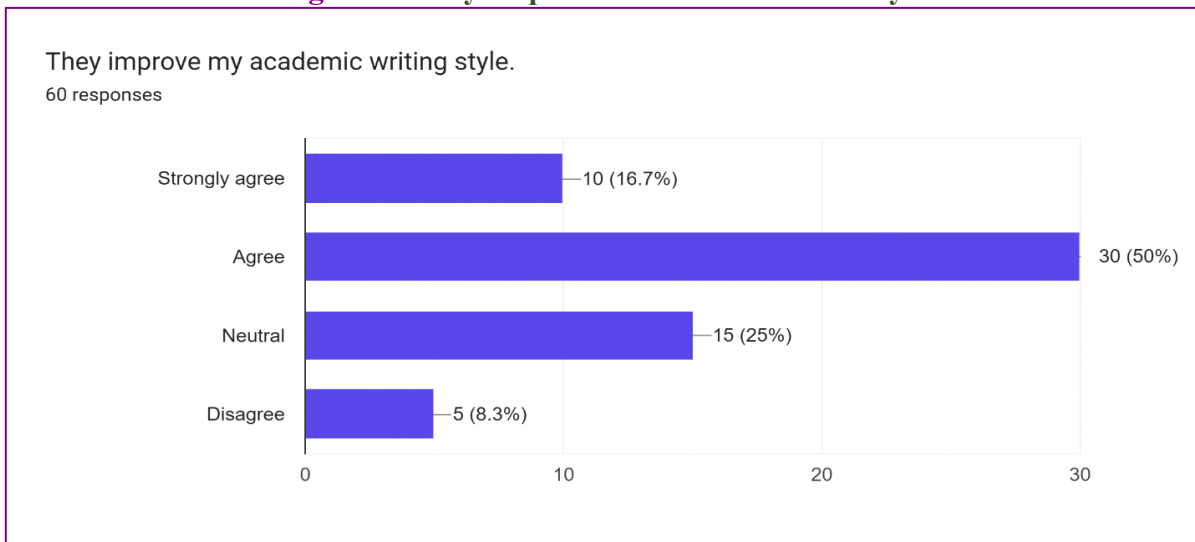


figure 10. They improve my academic writing style.

Analysis:

Regarding vocabulary improvement, 48.3% (29 students) and 20% (12 students) strongly agreed that AI helps them use better phrasing (total agreement rate 68.3%). 25% (15 students) were neutral, and only 6.7% (4 students) disagreed. As for style, 50% (30 students) and 16.7% (10 students) strongly agreed that their academic writing style has improved (total agreement rate 66.7%), while 25% remained neutral and 8.3% (5 students) disagreed.

Discussion:

These high levels of agreement (approximately 67-68%) demonstrate that the perceived impact of AI seamlessly extends from basic grammar correction to advanced writing skills such as vocabulary and style.

Students of English for Specific Purposes (ESP) often struggle to find specialized formal synonyms; Therefore, AI tools serve as a dynamic dictionary and contextual style guide, elevating their writing from colloquial to Academic level.

3.3 Organization and Writing Confidence (figu11) (figu12)

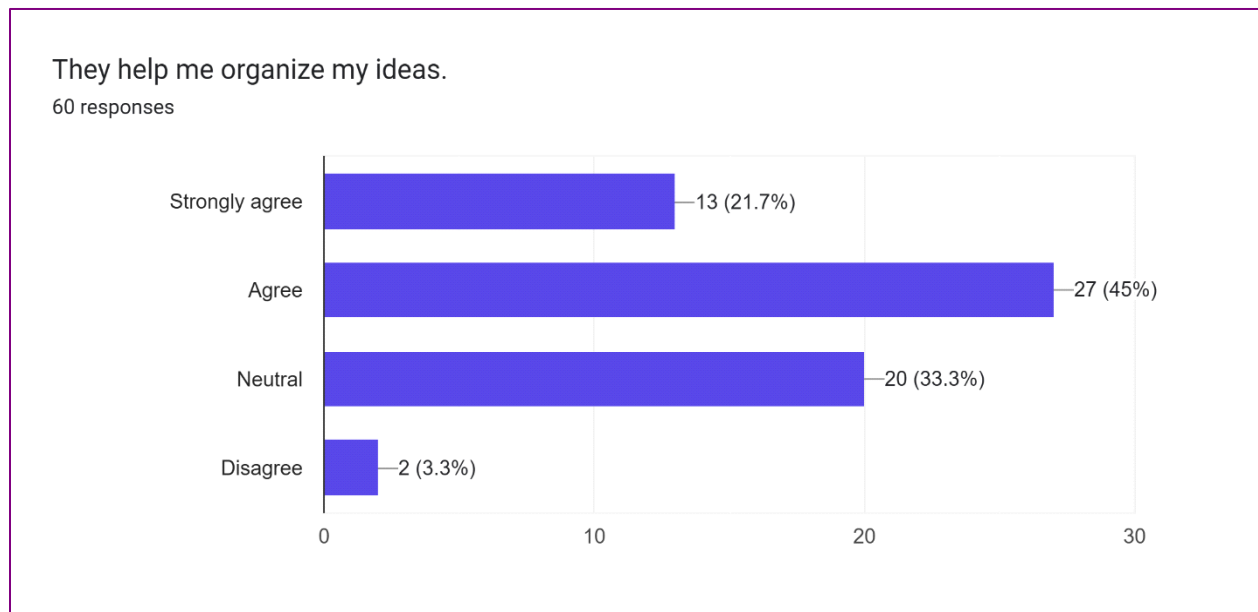


figure 11. They help me organize my ideas.

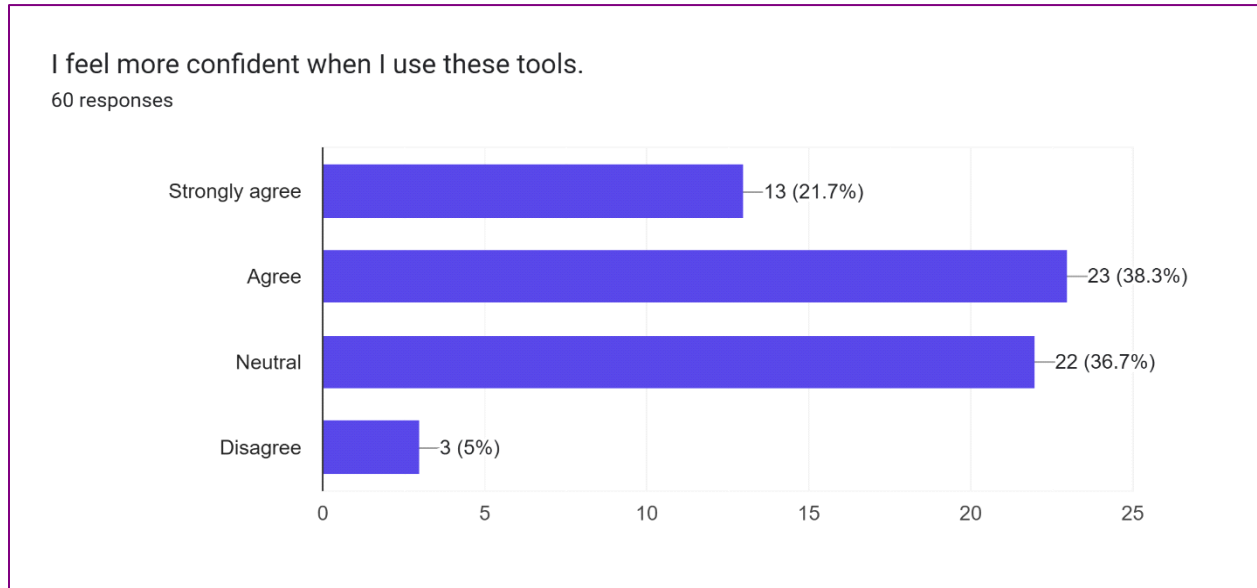


figure 12. I feel more confident when use these tool.

Analysis:

Regarding structural organization, 45% (27 students) and 21.7% (13 students) strongly agreed that AI helps organize ideas, while 33.3% were neutral and only 3.3% disagreed.

Psychologically, 38.3% (23 students) and 21.7% (13 students) strongly agreed that they feel more confident using these tools, while 36.7% were neutral and 5% disagreed.

Discussion:

Organizing arguments logically in a second language is known to be challenging. The fact that two-thirds of the sample credit AI for helping organize ideas highlights its value as a cognitive framework. Most importantly, the significant improvement in confidence levels (with a 60% agreement rate) indicates that AI tools provide considerable psychological comfort.

By filtering out errors, AI alleviates "foreign language anxiety," enabling learners of English for Specific Purposes (ESPs) to share their specialized academic knowledge with greater confidence.

Section 4: Learning and Dependence:

4.1 I depend too much on these tools:

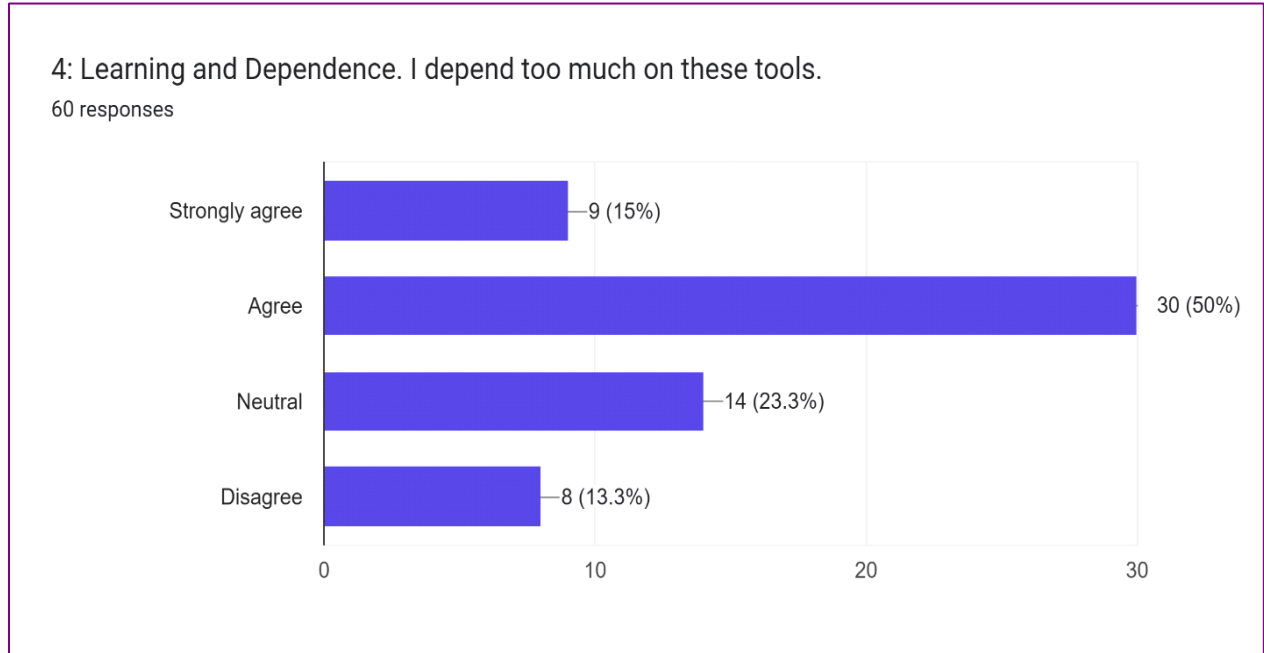


figure 13. 4: Learning and dependence. I depend too much on these tools.

Analysis:

When presented with the critical statement regarding over-reliance, 50% (30 students) "Agree" and 15% (9 students) "Strongly agree" that they depend too much on these tools. Meanwhile, 23.3% (14 students) are neutral, and 13.3% (8 students) disagree.

Discussion:

This specific finding introduces a critical, balanced dimension to the study. While the previous sections established the pedagogical benefits of AI, this high 65% acknowledgment of dependency signals a potential threat to student autonomy.

Over-reliance can transform AI from a supportive scaffolding tool into a mental crutch, potentially weakening students' independent cognitive development, original drafting abilities, and long-term self-editing skills.

4.2 These tools help me learn from my mistakes:

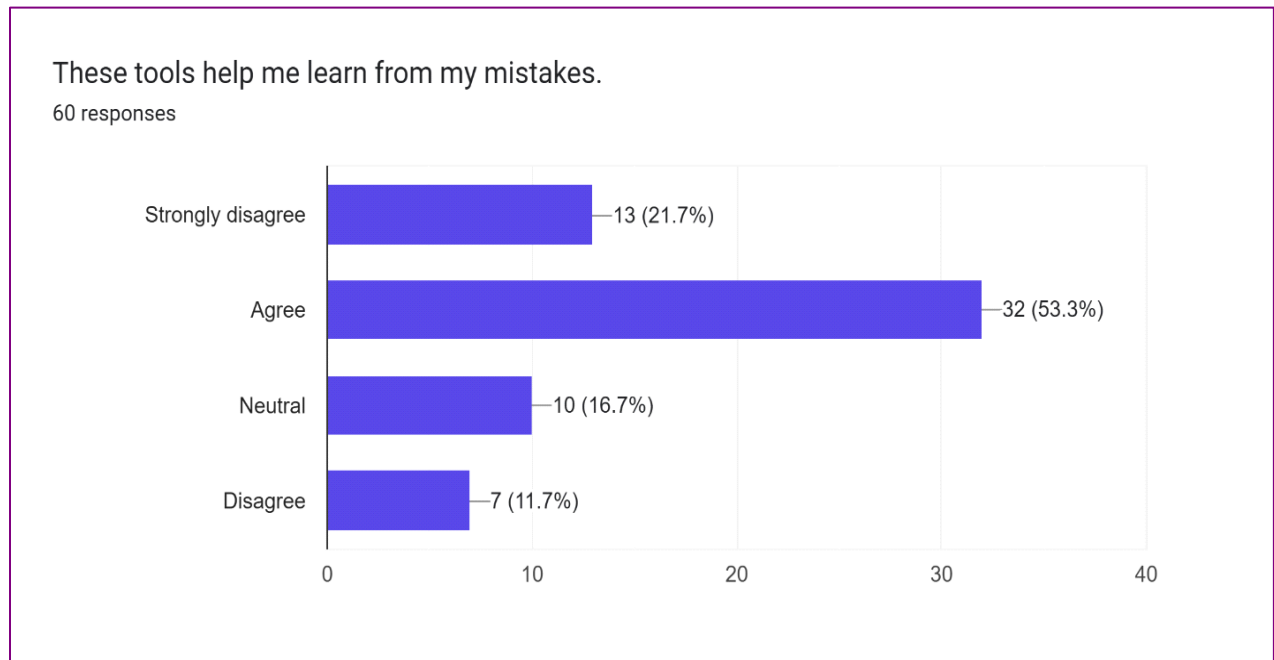


figure 14. These tools help me learn from my mistakes.

Analysis:

Interestingly, despite the dependency, the data shows that a significant portion of the participants lean positively towards the learning aspect, where 53.3% (32 students) "Agree" with the statement that these tools help them learn from their mistakes, while 16.7% (10 students) remained neutral and 11.7% (7 students) disagreed.

Discussion:

This reveals that the dependency is not entirely passive or mindless. Instead, students are utilizing AI tools as formative assessment mechanisms.

By observing the corrections generated by ChatGPT or Grammarly, ESP learners engage in an implicit learning process, transforming the software into an automated personal tutor that helps them internalize correct language patterns over time.

4.3 I can write well without using these tools:

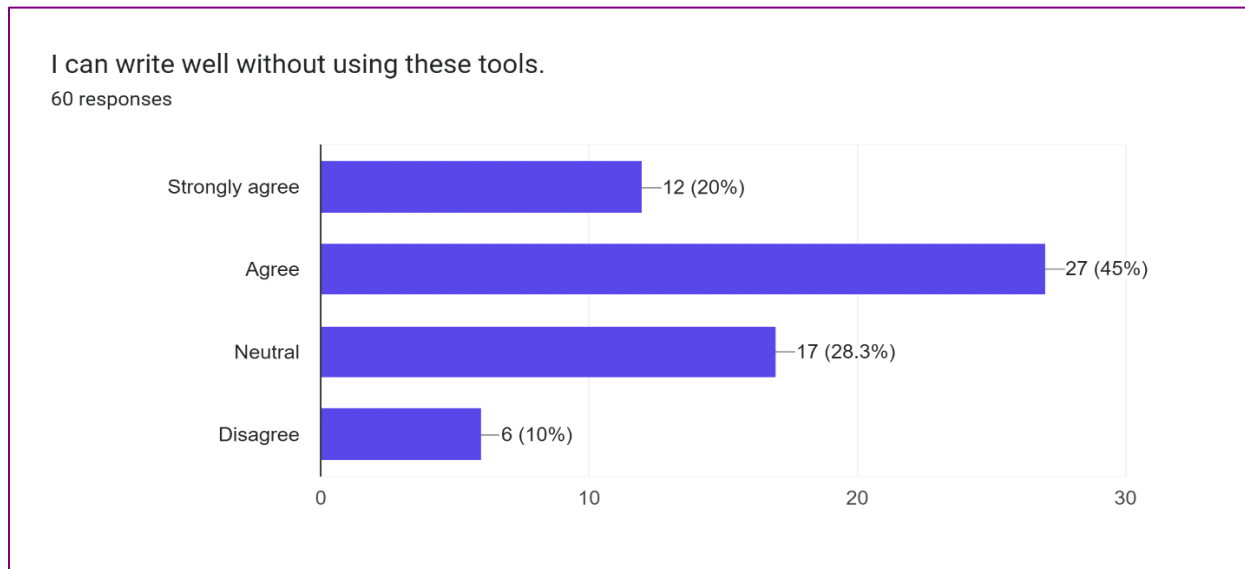


figure 15. I can writ well without using these tools.

Analysis:

When responding to the statement regarding their independent writing capabilities, a substantial cumulative majority of 65% of the participants expressed self-confidence in their writing skills without AI assistance, with 45% (27 students) choosing "Agree" and 20% (12 students) selecting "Strongly agree." On the other hand, 28.3% (17 students) maintained a "Neutral" stance, while only 10% (6 students) "Disagreed."

Discussion:

This result provides a fascinating paradox when cross-referenced with Item 4.1 (where 65% also admitted to relying too much on AI).

It indicates that while ESP learners are structurally dependent on AI tools for efficiency or refinement, they do not perceive themselves as fundamentally incompetent writers. Instead, they view their baseline literacy skills as solid, framing AI tools as an elective optimization mechanism rather than an absolute prosthetic necessity.

This suggests that the deployment of AI among these students is mostly driven by a desire for linguistic polish and academic reassurance rather than absolute deficiency.

Section 5: Challenges and Attitudes

5.1 I trust the corrections provided by these tools:

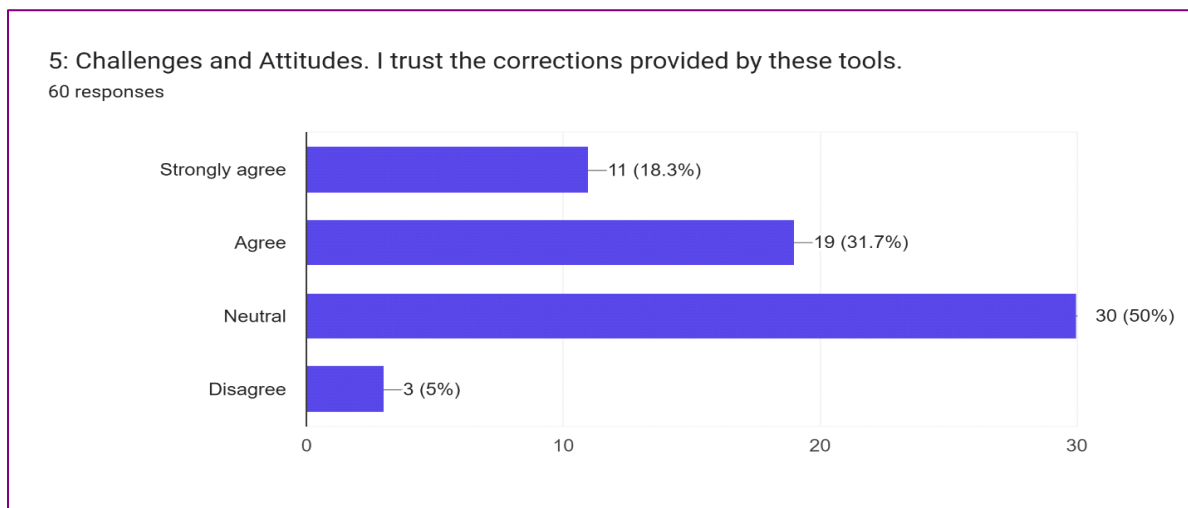


figure 16. 5: I challenges and Attitude. I trust the corrections provided by these tools.

Analysis:

The data concerning students' trust in automated feedback reveals that exactly 50% (30 students) remained "Neutral." Conversely, a combined 50% exhibited an attitude of trust, divided between 31.7% (19 students) who "Agree" and 18.3% (11 students) who "Strongly agree." A minimal fraction of 5% (3 students) explicitly "Disagreed" with trusting AI corrections.

Discussion:

The prominent 50% neutral cluster represents a highly critical finding; it demonstrates that ESP

learners do not exhibit blind faith or total submission to artificial intelligence. Instead, it reflects a cautious, evaluative attitude where suggestions are likely cross-checked or taken with a degree of academic skepticism.

This balanced division of trust implies that students treat AI suggestions as advisory options rather than infallible commands, which is a vital prerequisite for maintaining academic integrity during the writing process.

5.2 these tools sometimes give incorrect results.

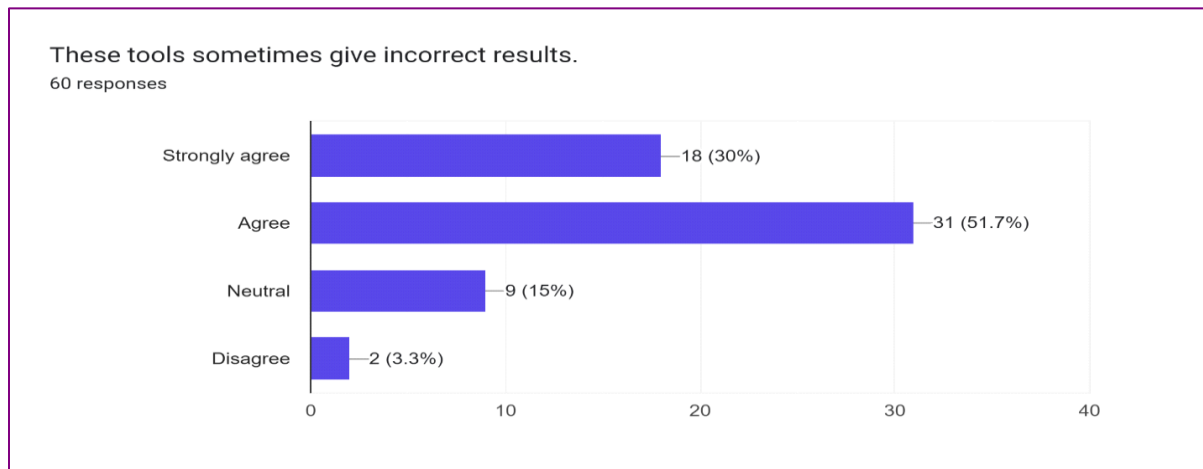


figure 17. These tools sometimes give incorrect results.

Analysis:

Confirming the skepticism observed in the previous item, an overwhelming majority of 81.7% of the respondents acknowledged the fallibility of AI, with 51.7% (31 students) choosing "Agree" and 30% (18 students) selecting "Strongly agree" that these tools yield incorrect results. Only 15% (9 students) remained neutral, and a negligible 3.3% (2 students) disagreed.

Discussion:

This high level of agreement (81.7%) strongly reinforces the idea that students are highly aware of the technical limitations, hallucinations, or contextual mismatches inherent to AI models.

For ESP learners, specialized vocabulary and genre-specific structures can often be misinterpreted by general AI algorithms.

This awareness proves that the student cohort exercises critical digital literacy, reviewing and filtering automated suggestions rather than accepting them unchecked, which diminishes the risk of uncritical errors in their final academic texts.

5.3 Using AI tools is Helpful or Harmful :

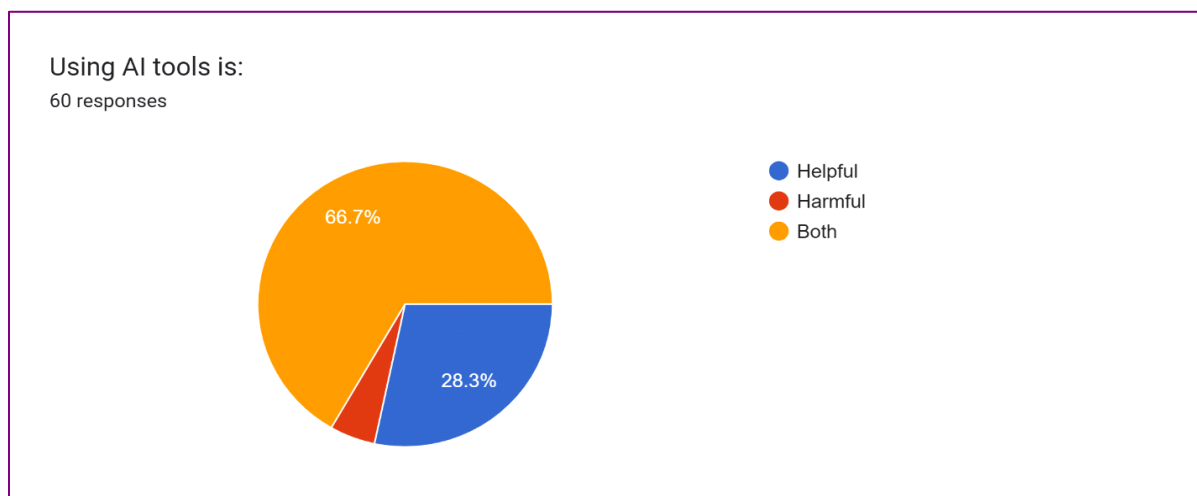


figure 18. Using AI tools is Helpful or Harmful.

Analysis:

When asked to holistically categorize the nature of AI tools, a dominant majority of 66.7% of the participants classified them as "Both" (Helpful and Harmful).

Meanwhile, 28.3% perceived them strictly as "Helpful," and a very small minority of 5% viewed them exclusively as "Harmful."

Discussion:

This distribution encapsulates the overarching sentiment of the student sample.

By identifying AI as a double-edged sword ("Both"), the majority acknowledges that while the structural and mechanical advantages (speed, editing, brainstorming) are immensely helpful, the intrinsic challenges (dependence, risk to personal voice, potential laziness) are equally present. This nuanced worldview among ESP learners indicates that they do not see AI through a utopian lens, but rather as an ambiguous tool requiring strategic, ethical, and monitored implementation.

Section 6: Qualitative Analysis of Open-Ended Questions:

To uncover the qualitative insights underpinning the numerical data, a thematic analysis was conducted on the open-ended responses regarding the advantages and disadvantages of using AI tools in academic writing.

6.1 Advantages of AI Tools:

The thematic analysis of participants' textual entries revealed that students primarily value AI for structural organization, speed, and strategic time management. The core recurring themes include:

Enhanced Structure and Presentation: Students frequently reported that AI models allow them to present their academic arguments in a more professional and systematic manner.

As participants explicitly stated, AI functions "to make your ideas better presented" and helps them remain "organized."

Clarity of Thought: AI serves as a conceptual filter, helping to "organize and structure ideas more clearly," which directly tackles the rhetorical issues faced by ESP learners.

Time Management and Efficiency: Speed was a ubiquitous benefit highlighted across the sample.

Students noted that AI "saves time and speeds up access to information." Another participant summarized this by stating, "It's help me in many situations win the time." **Drafting and Editing Acceleration:**

- ❖ The software significantly optimizes productivity due to its "speed and efficiency," allowing students to "generate, edit, and refine text in seconds, significantly reducing the time needed for drafting and revision.”.
- ❖ Skill Development: Beyond immediate convenience, several students recognized that these tools assist in "time management and developing skills" over long-term usage.

6.2 Disadvantages of AI Tools:

Conversely, when reflecting on the negative outcomes, students showed deep concern regarding cognitive erosion, dependence, and the decay of authentic human creativity.

The primary themes identified were:

Suppression of Originality and Creativity: The most prevalent fear was the homogenization of writing style and loss of individual voice. Students strongly warned to "never use AI to give you an idea or think for you," explicitly declaring that over-reliance "will limit your creativity" or ultimately "kill creativity.”.

Cognitive Laziness and Reduced Critical Thinking: Participants openly admitted that integrating these systems into academic workflows can "sometimes make you lazy," which slows down personal effort.

Increased Dependency Patterns: Corroborating the statistical findings, students noted that AI adoption "can increase dependency on AI tools."

Erosion of Long-Term Intellectual Skills: The qualitative feedback warns that over-reliance "may reduce independent thinking and intellectual productivity." .

Ultimately, students recognized that a mindless interaction with these technologies results in "over-reliance and reduced skill development, critical thinking, and originality over time."

8. Conclusion:

The survey reveals several key advantages of AI tools for EFL learners:

- ✚ **Efficiency and Time Management:** AI tools significantly reduce drafting and revision time by creating, editing, and reviewing texts in seconds. They accelerate access to information and improve overall productivity.
 - ✚ **Organization of Ideas:** These applications help students structure and present their ideas more clearly, providing clear guidance for academic writing.
 - ✚ **Language Improvement:** They enhance the quality, clarity, and grammar of texts while offering a rich vocabulary and correcting errors.
 - ✚ **Psychological Support:** Using these tools gives students greater confidence and facilitates the learning process, assisting them in completing academic assignments.
- ✚ However, the survey also highlights significant disadvantages:
- ✚ **Suppression of Creativity:** Relying on AI to generate ideas can stifle creativity and make learners mentally lazy.
 - ✚ **Increased Dependency:** Over-reliance on these tools reduces independent thinking, intellectual productivity, and the development of critical thinking skills over time.
 - ✚ **Misinformation Risks:** AI may produce inaccurate, ambiguous, or generic content, leading to the spread of false information in academic work.

General Conclusion

General Conclusion

General Conclusion:

The rapid development of Artificial Intelligence has introduced significant changes in the field of education, particularly in language learning and academic writing.

This research aimed to investigate the role of AI-powered language tools, namely ChatGPT and Grammarly, in enhancing the academic writing skills of EFL learners.

The theoretical part of the study highlighted the importance of academic writing as a fundamental skill in higher education and examined the characteristics, benefits, and challenges of AI-based language tools.

It demonstrated how these applications can support learners by improving grammar, vocabulary, coherence, organization of ideas, and overall writing quality.

The practical findings revealed that most participants viewed AI tools positively and considered them valuable assistants in the writing process. Students reported that these tools help them save time, organize ideas, correct language errors, enrich vocabulary, and increase confidence while writing.

At the same time, the study showed that excessive dependence on AI tools may negatively affect learners' creativity, critical thinking, autonomy, and ability to write independently.

Based on these findings, it can be concluded that ChatGPT and Grammarly have a significant positive impact on academic writing when used responsibly and under appropriate educational guidance. However, these tools should be regarded as supportive aids rather than substitutes for learners' own efforts, knowledge, and critical thinking abilities.

General Conclusion

Finally, the study recommends promoting digital literacy among students, encouraging the ethical use of AI tools, and integrating these technologies into language learning environments in a balanced manner.

Future research may further investigate the long-term effects of AI-assisted writing on learners' academic performance and independent writing skills across different educational contexts.

Recommendations:

Based on the findings of this study, the following recommendations are proposed:

- ✚ EFL learners should use AI-powered tools such as ChatGPT and Grammarly as supportive learning aids rather than complete substitutes for their own writing efforts.
- ✚ Students should critically evaluate the suggestions and information provided by AI tools before incorporating them into their academic work.
- ✚ Teachers are encouraged to guide learners on the ethical and responsible use of AI technologies in academic writing and research.
- ✚ Educational institutions should organize training workshops to help students develop the necessary digital literacy skills for effective AI tool usage.
- ✚ Learners should continue practicing independent writing regularly in order to strengthen their critical thinking, creativity, and language proficiency.
- ✚ AI-generated content should always be reviewed, edited, and verified by students to ensure accuracy, originality, and academic integrity.

General Conclusion

- ✚ Universities should establish clear guidelines and policies regarding the acceptable use of AI tools in academic assignments and research projects.
- ✚ A balanced approach should be adopted, combining traditional writing instruction with AI-assisted learning to maximize educational benefits.
- ✚ Future researchers are encouraged to investigate the long-term impact of AI-powered language tools on learners' writing performance, critical thinking skills, and academic achievement.
- ✚ Further studies should examine the effectiveness of AI tools across different educational levels and language learning contexts.
- ✚ Students should respect their professors' academic standing and consult them on all matters related to AI applications and academic language.

Bibliography

Books & Monographs

- Atlas. (2023). *ChatGPT for higher education and professional development: A guide to generative AI*. Island: Faculty Publications (University of Rhode Island), 11-25.
- Aull, L. (2020). *How students write: a linguistic analysis*. New York, USA: The Modern Language Association of America.
- Dussusure, F. (2020). *GOOGLE SCOLARE*. France: PUPLHC TOUFIK.
- Kruk, M. (2017). *Research paper*. Poland: The EUROCALL Review, Volume 25, University of Zielona Gora, No. 2.
- Learning, S. (2026). *Five steps for Academic Writing*. London, United Kingdom. <https://essays.uk/category/academic-writing-process/>
- Lo, Y. (2025). *Experiences of ESL students and instructors using Grammarly in academic writing*. Malaysia: Department of Language and Literacy Education, Faculty of Education, University Kuala Lumpur.
- Nasrullah, S. L. (2024). *The Use of QuillBot in Academic Writing*. Indonesia: Journey Journal of English Language and Pedagogy.
- O'Neill, R., et al. (2019). *AStop! Grammar time*. Australia: Australasian Journal of Educational Technology, 35(4), 92–107.
- Sabyasachi Sengupta. (2014). *Publish or perish: The art of scientific writing*. India: Indian Journal of Ophthalmology.
- Thaiss, C. & Zawacki, T. M. (2017). *Engaged Writers and Dynamic Disciplines. Research on the Academic Writing Life*.
- Tikhonova, E. L. (2022). *An In-Depth Glimpse into Research on Academic Writing*. Russia: People's Friendship University of Russia.

- Wayne, M. F. (2017). *Guidance for generative AI in education and research*. America and the Caribbean: United Nations Educational, Scientific and Cultural Organization.
- Whitaker, A. (2009). *Academic Writing Guide 2010: A Step-by-Step Guide to Writing Academic Papers* (p. 2). City University of Seattle.

Journal Articles:

- Alchahrani. (2025). The efficacy of generative AI tools in condensing and summarizing academic literature for graduate students. *Computers and Education Open*, 6, 100-115.
- Al-Zahrani, C., et al. (2024). Leveraging ChatGPT for English for Specific Purposes (ESP): Opportunities and linguistic challenges. *Journal of Language and Linguistic Studies*, 20(1), 45-59.
- Brown, A. (2020). Language models are few-shot learners. *Advances in Neural Information Processing Systems*, 33, 1877-1901.
- Cavaleri, M., et al. (2016). You want us to use what? Faculty perceptions of Grammarly. *Journal of Academic Language and Learning*, 10(1), A242–A256.
- Cheng, S. (2024). Evaluation of ChatGPT as a tool for academic paraphrasing and lexical enhancement in EFL writing. *Journal of Writing Evaluation*, 17(1), 45–62.
- Dwivedi, A. (2023). "So what if ChatGPT wrote it?" Multidisciplinary perspectives on opportunities, challenges and implications of generative conversational AI for research, practice and policy. *International Journal of Information Management*, 71, 102642.
- Fitria. (2023). Artificial intelligence (AI) technology in research and academic writing: Is it a blessing or a curse? *International Journal of English and Applied Linguistics (IJEAL)*, 3(3), 165-178.

- Fitria, T. N. (2021). Grammarly as AI-powered English writing assistant: Students' alternative for writing English. *Jurnal Bahasa Lingua Scientia*, 13(1), 175-188.
- Ghufroon, M. A. (2019). Exploring an automated writing evaluation (AWE) tool in EFL writing classroom: The case of Grammarly. *Journal of English Education and Linguistics Studies*, 6(2), 179–204.
- Gimpel, A. (2023). Unlocking the power of generative AI models and systems such as ChatGPT: Insights and a research agenda. *Discussion Papers on Information Systems and Innovation*, 2(1), 1-40.
- Hyland, K. (2025). EFL teachers and feedback fatigue: AI to the rescue? *ResearchGate Publications*, 1-15.
- Karyuatry, L. (2018). Grammarly. *Journal of English Language Teaching*, 5(1), 36-42.
- Kohnke. (2023). ChatGPT for language teaching and learning. *RELC Journal*, 54(2), 537–550.
- Koltovskaia, S. (2020). Student engagement with automated writing evaluation (AWE) feedback on language errors. *Journal of XX*, 14(5), 453–466.
- Muftah, M. (2025). The role of automated corrective feedback in improving EFL learners' mastery of the writing aspects. *Google Scholar & ResearchGate Articles*, 14(2), 88-99.
- O'Neill, R., et al. (2019). Stop! Check your Grammarly! An exploratory study of automated writing evaluation in a university context. *Journal of Academic Language and Learning*, 13(1), A1-A12.
- Pohan, R. C. (2025). The benefits of Grammarly as a tool for reducing errors in students' academic writing. *ResearchGate Article*.

- Salman, R. (2024). Improving academic writing through smart applications. *Journal of Language and Literature Studies*.
- Smith. (2025). Dealing with AI hallucinations in student research: Fact-checking and data integrity. *Journal of Academic Ethics*, 23(2), 112-125.
- Syafi'i, A. (2020). Grammarly as an automated writing evaluation (AWE) tool: Academic writing helper. *Journal of English Language Studies*, 5(1), 70–82.
- Turney. (2024). Digital integrity: Redefining plagiarism and authorship in the age of generative AI. *Higher Education Research*, 49(3), 204-219.
- Wang, L. (2023). Chatting about ChatGPT: How may AI and GPT impact academia and libraries? *Information Matters*, 3(1), 1-12.
- Yang, S. (2023). Unlocking the power of ChatGPT: A framework for secondary school students in research planning and conceptualization. *Computers and Education: Artificial Intelligence*, 5, 100154.
- Zhang, B. (2020). Automated writing evaluation to enhance EFL students' writing performance: A case of Grammarly. *International Journal of Emerging Technologies in Learning (iJET)*, 15(12), 232–240.

Websites & Blogs:

- AI, Open. (2022). Introducing ChatGPT. <https://openai.com/blog/chatgpt>
- Grammarly. (2024). How Grammarly uses AI to improve your writing: Core technology and linguistic algorithms. *Grammarly Product & Engineering Insights*.
- Grammarly. The AI Writing Partner for work. <https://www.grammarly.com/about>
- University, K. S., & Science, C. O. Definition and Characteristics of academic writing. (Website – no full URL provided).

Reports & Institutional Documents:

- Education, I. I. (2023). *ChatGPT and artificial intelligence in higher education: Quick start guide*. UNESCO Latin America and the Caribbean.
- *Guidance for generative AI in education and research*. (2017). United Nations Educational, Scientific and Cultural Organization.
- Lecture 1. Introduction to Academic Writing. University of Biskra: Faculty of Letters and Languages, Department of Foreign Languages, Division of English, Master 2 Classes.
- Qradford, A. (2018). *Improving language understanding by generative pre-training*. OpenAI.

Other (Theses, PDFs, Course Materials):

- Akhtar, R. (2021, September 14). *What is Academic Writing* [PDF document].
- Fernando, E. K. (2022). Appropriating Grammarly as a tool in writing activities: Student's perception. *ResearchGate Repository*, 1-12.
- Hartley, J. (2008). *Characteristics Of Good Academic Writing*.
- Headey. (2007). *Following Characteristics of Good Academic Writing*.
- Karabella, F. (2023). [Title missing – incomplete source].
- Lund, B.D. (2026). Ongoing challenges learners face in acquiring writing skills of all kinds. *International Journal of Research and Innovation in the Social Sciences*.
- Style, W. (2012). *Learning Centre*. University of Sydney.
- Zahi. (2022). ChatGPT user experience: Implications for education. *SSRN Electronic Journal*.
- Zhai. (2022). ChatGPT for next-generation science learning. Available at SSRN 4331313. <https://doi.org/10.2139/ssrn.4312418>

Appendices

Appendices

Students' questionnaire:

This research, entitled “Enhancing ESP Students' Academic Writing Through AI-Powered Language Tools (Grammarly and ChatGPT): A Case Study of ESP Learners aims to investigate the role of AI tools in improving ESP learners’ academic writing. Participants are informed that their responses will remain anonymous and confidential and will be used solely for research.

Put ☒ in the appropriate box:

Section 1: General Information

A/ Gender:

☐ Male

☐ Female

B/ Level:

☐ Baccalaureate Stream

☐ L1

☐ L2

☐ L3

☐ M1

☐ M2

C/ How would you rate your level in English?

☐ Weak

☐ Average

☐ Good

☐ Excellent

Appendices

Section 2: Use of AI Tools

A/ Do you use AI tools like Grammarly or ChatGPT?

☐ Yes

☐ No

B/ How often do you use them?

☐ Always

☐ Often

☐ Sometimes

☐ Rarely

C/ When do you use these tools?

☐ Before writing

☐ During writing

D/ Which tool do you use more?

☐ Grammarly

☐ ChatGPT

☐ Both

Section 3: Impact on Academic Writing

A/ These tools help me improve my grammar.

☐ Strongly agree

☐ Agree

☐ Neutral

☐ Disagree

Appendices

B/ They help me use better vocabulary.

☐ Strongly agree

☐ Agree

☐ Neutral

☐ Disagree

C/ They improve my academic writing style.

☐ Strongly agree

☐ Agree

☐ Neutral

☐ Disagree

D/ They help me organize my ideas.

☐ Strongly agree

☐ Agree

☐ Neutral

☐ Disagree

E/ I feel more confident when I use these tools.

☐ Strongly agree

☐ Agree

☐ Neutral

☐ Disagree

Appendices

Section 4: Learning and Dependence

A/ I depend too much on these tools.

☐ Strongly agree

☐ Agree

☐ Neutral

☐ Disagree

B/ These tools help me learn from my mistakes.

☐ Strongly agree

☐ Agree

☐ Neutral

☐ Disagree

C/ I can write well without using these tools.

☐ Strongly agree

☐ Agree

☐ Neutral

☐ Disagree

Section 5: Challenges and Attitudes

A ☐ Strongly agree

☐ Agree

☐ Neutral

☐ Disagree

Appendices

B/ These tools sometimes give incorrect results.

☐ Strongly agree

☐ Agree

☐ Neutral

☐ Disagree

C/ Using AI tools is:

☐ Helpful

☐ Harmful

☐ Both

Section 6: Open-ended Questions

What are the advantages of using AI tools in writing?

.....

.....

.....

What are the disadvantages?

.....

.....

.....

ملخص البحث

أصبح العالم قريةً عالميةً بفضل التطورات التكنولوجية المتسارعة التي سهّلت التواصل والتعلم. وقد أدّى ذلك إلى اعتمادٍ كبيرٍ من قِبَل طلاب اللغة الإنجليزية على أدوات الذكاء الاصطناعي وتطبيقات تعلّم اللغات، مما يثير تساؤلاتٍ حول فعاليتها في هذا المجال. هدفت هذه الدراسة، التي أُجريت مع مجموعةٍ من طلاب الليسانس والماجستير في جامعة غرداية وطلاب المرحلة الأخيرة من الثانوية المتخصصين في اللغة الإنجليزية، إثراء للموضوع إلى تسليط الضوء على أثر تطبيقين لغويين مدعومين بالذكاء الاصطناعي، وهما ChatGPT وGrammarly، في تحسين الكتابة الأكاديمية وتضمنت الدراسة أيضًا تحليلًا لخصائص هذين التطبيقين والنتائج المتوقعة من خلال إدماجهما في التعليم. علاوةً على ذلك، تهدف هذه الدراسة إلى استكشاف تساؤلات وآراء طلاب اللغة الإنجليزية حول استخدام أدوات الذكاء الاصطناعي لدعم الكتابة الأكاديمية، وتحديد الفوائد والقيود التي يواجهونها عند استخدامها، وبيان العواقب المحتملة للإفراط في استخدامها. نهدف أيضًا إلى تحقيق نتائج ذات دلالة علمية تُثبت أن هذه التطبيقات الذكية تُعزز التعلم الذاتي وتُحفز الممارسة المستقلة، وتُسهم في تحسين مهارات الكتابة الأكاديمية لدى متعلمي اللغة الإنجليزية كلغة أجنبية. إضافةً إلى ذلك، نتناول التحديات المحتملة، مثل الاعتماد المفرط عليها، والحاجة إلى استخدامها بفعالية وكفاءة مع توثيق النتائج، الأمر الذي يتطلب توجيهًا تربويًا سليمًا.

الكلمات المفتاحية: الذكاء الاصطناعي، تطبيقات تعلم اللغات، اللغة الإنجليزية كلغة أجنبية، تدريس اللغة الإنجليزية.