

Title

**Enhancing Writing Proficiency: An Investigation into The Impact
Of AI-assisted Tools in EFL Education (ChatGPT and Grammarly)**

**Case study: 1st Year Masters Students of Naama University Centre -
Salhi Ahmed**

*Dissertation Submitted to the English Department in Partial Fulfilment of the Requirements
for the Degree of Master in Linguistics*

Presented by:

Hamzi madani

Supervised by:

Dr. El Hadj Said

Board of Examiners:

Dr Belaid Bekhta

Chairperson

Naama University Centre

Dr. El Hadj Said

Supervisor

Naama University Centre

Dr. Chikh Imane

Examiner

Naama University Centre

ACADEMIC YEAR: 2023/2024

Résumé

Cette étude examine l'impact des outils d'écriture assistés par l'intelligence artificielle, en particulier ChatGPT et Grammarly, sur l'amélioration de la compétence rédactionnelle en anglais langue étrangère (EFL) dans l'éducation. Avec la croissance rapide de la technologie, il est évident que le domaine de l'éducation en général, notamment les universités et les établissements d'enseignement supérieur, mise sur l'utilisation de ces outils car ils fournissent un excellent soutien pour le processus d'enseignement et d'apprentissage. La recherche vise à explorer comment ces outils peuvent être intégrés efficacement dans l'enseignement de l'écriture en EFL pour améliorer les compétences rédactionnelles des étudiants. L'étude utilise une approche mixte, combinant la collecte de données quantitatives via un questionnaire dédié aux étudiants et des méthodes qualitatives à travers des entretiens menés avec les enseignants. Les résultats indiquent un impact positif des outils assistés par l'IA sur la motivation et le niveau de compétence. En outre, ces outils peuvent améliorer significativement la compétence rédactionnelle des étudiants en fournissant des retours instantanés, en favorisant les compétences d'auto-correction et en augmentant l'engagement dans les tâches d'écriture. Cependant, une considération éthique attentive doit être accordée à la sélection des outils d'IA appropriés, au développement professionnel des enseignants et aux stratégies des enseignants pour éviter les aspects négatifs de ces outils.

Mots-clés : EFL, outils d'écriture assistés par l'IA, compétence rédactionnelle, amélioration des compétences rédactionnelles, motivation, considérations éthiques, stratégies des enseignant

ملخص

تستقصي هذه الدراسة تأثير أدوات الكتابة المدعومة بالذكاء الاصطناعي، وخاصة ChatGPT و Grammarly، على تعزيز الكفاءة الكتابية في تعلم اللغة الإنجليزية كلغة أجنبية في مجال التعليم. ومع التطور السريع للتكنولوجيا، يُلاحظ أن المؤسسات التعليمية بشكل عام، والجامعات ومؤسسات التعليم العالي بشكل خاص، تعتمد بشكل متزايد على استخدام هذه الأدوات لما تقدمه من دعم كبير لعملية التعليم والتعلم. تهدف هذه الدراسة إلى استكشاف كيفية دمج هذه الأدوات بشكل فعال في تعليم الكتابة باللغة الإنجليزية كلغة أجنبية لتحسين مهارات الكتابة لدى الطلاب. تستخدم الدراسة منهجية مختلطة، تجمع بين جمع البيانات الكمية من خلال استبيان موجه للطلاب، والأساليب النوعية من خلال مقابلات أجريت مع المعلمين. تشير النتائج إلى أن الأدوات المدعومة بالذكاء الاصطناعي تساهم بشكل إيجابي في تعزيز الدافعية ومستوى الكفاءة الكتابية. إضافة إلى ذلك، يمكن لهذه الأدوات تحسين الكفاءة الكتابية لدى الطلاب بشكل كبير من خلال تقديم تغذية راجعة فورية، وتعزيز مهارات التحرير الذاتي، وزيادة التفاعل مع مهام الكتابة. ومع ذلك، يجب مراعاة الاعتبارات الأخلاقية بعناية عند اختيار الأدوات المناسبة للذكاء الاصطناعي، وتطوير مهارات المعلمين المهنية، واستراتيجيات التدريس لتجنب الآثار السلبية لهذه الأدوات.

الكلمات المفتاحية: EFL، تعلم اللغة الإنجليزية كلغة أجنبية، أدوات الكتابة المدعومة بالذكاء الاصطناعي، مهارة الكتابة، الكفاءة الكتابية، التحفيز، الاعتبارات الأخلاقية، استراتيجيات التدريس

Statment of originality

I, Hamzi Madani, hereby declare that my master thesis entiteled: Enhancing writing proficiency: An investigation into the impact of AI-assisted tools in EFL education (ChatGPT and Grammarly) is entirely my own work and that I have written it in my own words, it contains no material that has been submitted previously, for that award of any other academic degree or diploma except where otherwise indicated. I also confirm that the present work contains no plagiarism and that any information taken from published or unpublished sources has been acknowledged



Abstract

This study investigates the impact of AI-assisted writing tools, specifically ChatGPT and Grammarly on enhancing writing proficiency in English as a Foreign Language (EFL) in education. With the fast-growing rate of technology, it is noticeable that the education field in general especially universities and higher educational institutions is counting on the use of these tools since they provide a great backup for the teaching and learning process. The research aims to explore how these tools can be effectively integrated into EFL writing instruction to improve students' writing skills. The study employs a mixed-methods approach, combining quantitative data collection through the questionnaire that was dedicated to the students and qualitative methods through the interviews that were done with the teachers. Findings indicate the positive impact of AI-assisted tools on motivation and the level of proficiency in addition it can significantly enhance students' writing proficiency by providing instant feedback, promoting self-editing skills, and increasing engagement with writing tasks. However, careful ethical consideration should be given to the selection of appropriate AI tools, professional development for teachers, and the teacher's strategies to avoid the negative side of these tools.

Dedication

I dedicate this work to my parents who were my daily supporters especially my mother and my father who was the one who inspired me to study English and surpass him in this field hopefully.

I also would like to thank my sisters and my brother who may Allah protect all my family Without forgetting my friends, the source of motivation and my colleagues whom I spent these beautiful years.

Last but not least **alhamdulillah**

Acknowledgements

First of all, all thanks and gratitude are owed to Allah, Lord of the world who guides and helps us and to whom we owe everything.

I am sincerely grateful to my supervisor **Mrs. Nabila El Hadj Said** who has never missed a chance to provide guidance, wise advice and encouragement throughout this work.

I wish to express my deepest respect and gratitude to the board of examiners starting with Mrs. Belaid Bekhta the examiner DR. Chikh Imen and the supervisor Dr. Hadj Said Nabila

I also take this opportunity to express my thanks to my teachers who taught us from primary school to university.

Finally, I have to also acknowledge all the students involved in our study for their patience and participation and colleagues for all that they offered to me. I am truly grateful.

Table of contents

Abstract.	I
Dedication	IV
Acknowledgements.....	V
Table of Contents	VI
List of Abbreviations.....	VI
List of Maps	VI
List of Figures	X
List of Tables	XI
General Introduction.....	01
Chapter One: Literature Review.....	03
1.1. Introduction.....	04
1.2. Brief History of English Language.....	04
1.3. English writing	05
1.4. Information and Communication Technology (ICT) in education	06
1.5. Artificial intelligence definition	06
1.5.1. AI in education	06
1.5.2. How AI programs improve academic writing skills	07
1.6. Technology Integration in Learning English	09
1.7. Overview of AI-Assisted Writing Tools	10
1.7.1. ChatGPT	12
1.7.2. Characteristics of CHATGPT	12
1.7.3. ChatGPT interface	13
1.7.4. Grammarly	15

1.7.5. Characteristics of Grammarly	15
1.7.6. Grammarly interface	16
1.8. Comparison between ChatGPT and Grammarly	18
1.9. Conclusion	19
Chapter two: Data Analysis and Results.....	20
2.1. Introduction.....	21
2.2. The higher education in Algeria	21
2.3. Research methodology	22
2.4. Data collection	22
2.5. The setting	22
2.6. Participants profile	23
2.7. Research instruments	23
2.7.1. Teachers' interview	24
2.7.2-Students questionnaire	24
2.8. Data analysis and interpretation	25
2.8.1. The analysis of teacher's interview	25
2.8.2 The analysis of student's questionnaire	31
2.9. Suggestions and limitations	44
2.9.1. Suggestions.....	44
2.9.2. Limitations	45
2.10. Discussion and Interpretation of the Main Results.....	45
2.11. Conclusion.....	46
General Conclusion	49
References.....	50
Appendices	54

List of abbreviations

AI: Artificial Intelligence

APA: The American Psychological Association

BMD: System (Bachelor-Master-Doctorate),

EFL: English as a Foreign Language

GPT: Generative Pre-trained Transformer

ICT: Information Communication Technology

IT: Information Technology

LMD: System License Master Doctorate

NLP: Natural Language Processing

TEFL: Teaching English as a Foreign Language

List of maps

Number	Title	Page
Map 01	Countries with English-speaking population	07

List of Figures

Number	Title	Page
Figure 01	ChatGPT main screen in light mode	15
Figure 02	ChatGPT main screen in dark mode	16
Figure 03	The column where the previous research has been done before	16
Figure 04	The payment options to upgrade ChatGPT	17
Figure 05	Grammarly main screen in light mode	18
Figure 06	Adjusting goals of text correction	19
Figure 07	Mistake highlights and correction suggestions	19
Figure 08	Grammarly premium payment options	20
Figure09	Teacher familiarity with Grammarly and ChatGPT	30
Figure10	Students age	33
Figure11	Students' gender	34
Figure12	Students' number of years studying English	35
Figure13	Students writing English for academic purposes	36
Figure14	Students use AI-assisted writing assessment tools in language learning	37
Figure15	Student's choice of using AI apps or websites	38
Figure16	Student's frequency of use of ChatGPT and Grammarly	39
Figure17	Students' motivation to engage with writing while using AI-assisted writing tools	42
Figure18	Students believe that using AI-assisted writing tools has helped them improve their writing skill	43

List of tables

Number	Title	Page
--------	-------	------

Table 01	General information about the participants.	25
Table02	Teacher familiarity with Grammarly and ChatGPT.	29
Table03	Teacher POV on their student's response towards using AI-assisted tools to improve their writing skills.	32
Table04	Students age.	33
Table05	Students' gender.	34
Table06	Students' number of years studying English.	35
Table07	Students writing English for academic purposes.	36
Table08	Students' feelings about using technology for learning language purposes.	36
Table09	Students' use of AI-assisted writing assessment tools in Language learning.	37
Table10	Student's choice of using AI apps or websites.	38
Table11	Students' percentage of using both Grammarly and ChatGPT.	39
Table12	The overall rate of satisfaction with the AI-assisted writing tools.	40
Table13	Students believe that AI-assisted writing tools can improve their writing proficiency.	40
Table14	How students believe that AI-assisted writing tools can improve their writing proficiency.	41
Table15	Students' motivation to engage with writing while using AI-assisted writing tools.	42
Table16	Students believe that using AI-assisted writing tools has helped them improve their writing skills.	43
Table17	Students' suggestions of how AI-assisted writing tools have helped them improve their writing skills.	44
Table18	Students' opinions on additional features or improvements they would like to see in AI-assisted writing tools.	45
Table19	Students' additional comments and experiences regarding the impact of AI-assisted writing tools in enhancing writing proficiency.	46

General introduction

General Introduction

English as a Foreign Language (EFL) education often faces challenges in enhancing students' writing proficiency, particularly in contexts where students have limited exposure to English outside the classroom. Traditional methods of writing instruction may not always provide students with the necessary support and feedback to improve their writing skills effectively. With the advancement of technology, AI-assisted writing tools such as ChatGPT and Grammarly have emerged as potential resources to aid EFL learners in developing their writing abilities.

These tools offer various features, including grammar and spell-checking, style suggestions, and contextual word predictions, which can assist learners in generating coherent and grammatically correct texts. Despite their potential benefits, the impact of these AI tools on writing proficiency in EFL education remains underexplored. This study seeks to address this gap by investigating the effectiveness of ChatGPT and Grammarly in enhancing students' writing proficiency in an EFL context.

By examining the impact of AI-assisted tools on students' writing skills, this research aims to contribute to the existing literature on technology-enhanced language learning and provide insights into effective practices for integrating AI tools into EFL writing instruction. The findings of this study could inform EFL teachers, curriculum developers, and educational policymakers about the potential benefits of incorporating AI-assisted tools into EFL pedagogy to improve students' writing proficiency.

To construct this work interview with the teachers and questionnaire with the students took place in order to collect sufficient data for generalization and they took place in one institution in the same day

- AI-assisted writing tools or any AI tool now are a trend in the world because of how helpful they can be, since they can provide and create a new learning way, the purpose of this study is to investigate the impact of AI-assisted writing tools on the actual performance of EFL students to make it easy modern and simple.

- This work is based on multiple quizzes that are considered research questions of this research and which three and they are as follows:

- ✓ What teaching strategies can be employed to maximize the benefits of AI-assisted writing tools in enhancing writing skills among EFL learners?
- ✓ To what extent does using AI-assisted writing apps and websites affect the motivation and performance of students?
- ✓ What ethical confederations should be taken into account when using AI in enhancing writing proficiency in EFL education?

- The build-up of this academic research is strongly build-up on the different and necessary hypotheses that are mentioned below:

- ✓ Ethical considerations, such as data privacy and security concerns, will impact the willingness of students to use AI-assisted writing tools in EFL education.
- ✓ Teachers using AI writing tools such as ChatGPT and Grammarly will notice improvements in students' writing accuracy and proficiency. These tools can identify grammatical errors, suggest vocabulary enhancements, and provide structural feedback, leading to refined writing skills among students over time.
- ✓ Students who utilize AI-assisted writing tools such as ChatGPT and Grammarly in EFL education will demonstrate higher levels of motivation compared to those who rely solely on traditional methods.

- This research chapters are divided into two chapters The first chapter offers various definitions that have erupted among researchers and linguists in addition to information collected from previous studies and different articles, it includes the brief history of the English language, writing English, artificial intelligence, going to AI in education and How AI programs improve academic writing skills, plus technology integration in learning English, moving to ICT in education and finally overview of ai tools which are Grammarly and ChatGPT with presentation of their interface and characteristics in addition to a comparison between them. The second chapter contains answers to the existing challenges by undertaking a series of questionnaires to the sample of this research who are the students and the teachers followed by the results and discussion of those questions.

Chapter one

Literature review

1.1. Introduction:

Nowadays, schools and institutional environments should not be the only way to learn a language, we can learn now from any place or location at any time whether morning, evening or even night, thanks to the development of technology now we have mobile applications and websites that are under our fingerprints. This chapter will inspect smoothly from narrow to broad and will focus on two extraordinary AI-assisted tools and applications that open several doors for learning and acquiring the English language in a simple, easy, and comfortable manner as a means of motivating learners to learn and study more and more which are CHATGPT and Grammarly.

1.2. Brief History of the English Language:

The evolution of the English language throughout the centuries, as meticulously recorded by scholars and linguists, is truly captivating. It originated as Old English, also referred to as Anglo-Saxon, and was spoken by the Anglo-Saxon tribes who established themselves in Britain during the 5th century. This early version of English was greatly shaped by Germanic dialects, as well as by Latin, Norse, and Celtic languages. Middle English then emerged between the 12th and 15th centuries, following the Norman Conquest of 1066, which introduced French influences. During this period, English evolved into a bilingual society, with French serving as the language of the nobility and administration, and English as the vernacular of the common people. Notable literary works from this era include Geoffrey Chaucer's "The Canterbury Tales."

During the Early Modern English period, which lasted from the 15th to the 17th centuries, the invention of the printing press revolutionized the way information was disseminated and significantly influenced the standardization and widespread distribution of the English language. This era witnessed a substantial expansion of the English vocabulary, largely due to the influence of the Renaissance, which brought an influx of words from Latin, Greek, and the lexicon of exploration and trade. Notably, the publication of the King James Bible and the literary works of William Shakespeare played pivotal roles in shaping the trajectory of modern English. Their contributions are extensively explored in scholarly works such as "A History of the English Language" by Albert C. Baugh and Thomas Cable, which delve into the profound impact of these influential literary and linguistic developments.

Throughout the Modern English period, from the 18th century to the present day, the English language has continued to evolve due to factors such as industrialization, British colonial expansion, and the global influence of the United States.

It has become a global lingua franca, incorporating new words and expressions from technology, media, and multiculturalism. English has adapted and thrived throughout its history, reflecting the dynamic nature of human communication.

For further exploration of the history of English, scholars and enthusiasts often turn to resources such as David Crystal's "The Cambridge Encyclopedia of the English Language." These texts provide in-depth analyses of linguistic developments and cultural influences that have shaped the English language into what it is today.

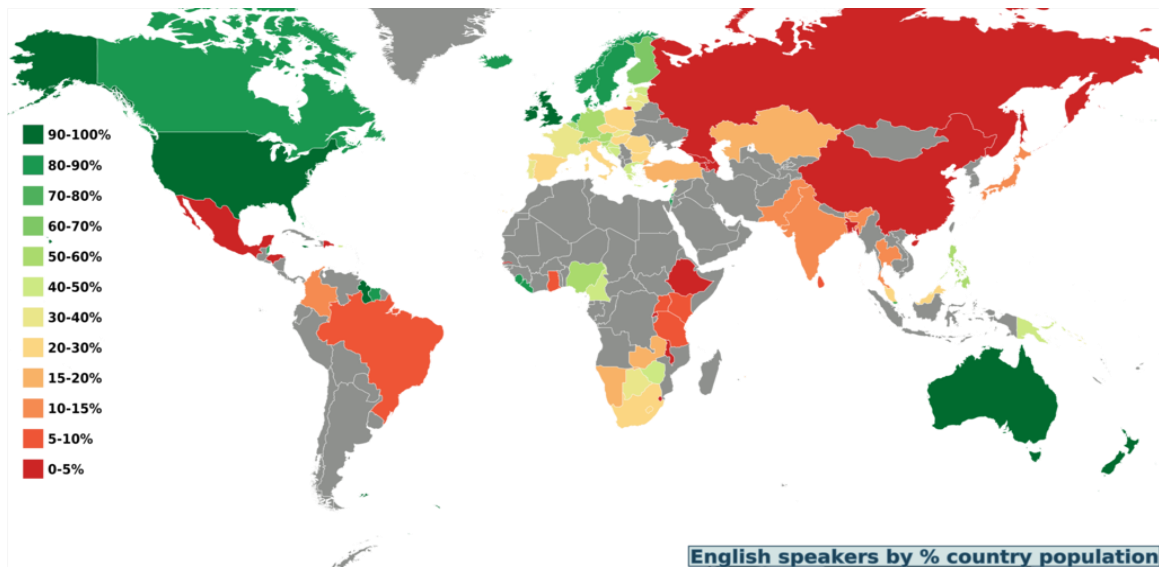


Figure 1: Map of countries by English-speaking population

1.3. writing English:

Conversing about writing English a lot of linguists and experts have many definitions for it where they stated According to Tarigan (1985:5) writing is a productive skill for writing an indirect communication and the nature of the character is very different from that expressed by speaking directly, therefore writing is included an ability, according to Harmer (2007: 4-5) states that writing process that is process the stages a writer goes through in order to produce something in its final writer form. Suparno, Jonah (2006:14) argues that writing is a series of activities going on and involves several phases, the preparatory phase, the content development and review, as well as revisions or improvements post. another definition of writing is proposed by Nation (2009:112) who states that writing is an activity that can usefully be preferred for my work in other skills of listening, speaking and reading. According to Huy (2015) states that writing is a complex metacognitive activity that offers an individual's knowledge. Writing often is seen as a process of exploration and discovery (Langan, 2010). Heaton (1975:138) states that writing skills are more complex and difficult to teach, and require mastery not only of grammatical and rhetorical devices but also of conceptual and judgment.

1.4. Information and Communication Technology (ICT) in Education:

ICT stands for “Information and communication technology”. It refers to technologies that provide access to information through telecommunication. It is similar to Information Technology (IT) but focuses primarily on communication technologies. This includes the internet, wireless networks, cell phones and other communication mediums. It means we have more opportunities to use ICT in teacher training programs nowadays and improve the quality of teachers to teach effectively.

According to UNESCO: “ICT is a scientific, technological and engineering discipline and management technique used in handling information, its application and association with social, economic and cultural matters”. Teacher is the main part of the educational field in our society. He more works for the improvement level of our society in every field. Skilled teachers can make creative students in form of the good social workers, politicians, poets, philosophers etc. for society. Teachers can play a friendly role with the learner. The rapid development in technology has made creative changes in the way we live, as well as the demands of society. Recognizing the impact of new technologies on the workplace and everyday life, today’s teacher education institutions try to restructure their education programs and classroom facilities, to minimize the teaching and learning technology gap between today and the future.

Information and Communication Technologies (ICTs) are instigating profound societal shifts, exerting influence across all facets of existence. This impact is increasingly discernible within educational institutions, where ICTs afford both students and educators expanded opportunities to tailor learning and pedagogical approaches to individual requirements. Consequently, educational establishments are being compelled by society to adeptly accommodate this technological advancement.

1.5. Artificial intelligence:

John McCarthy (1956): McCarthy, one of the pioneers of AI, defined it as "the science and engineering of making intelligent machines." He described it as the effort to create machines that can perform tasks that, when done by humans, typically require intelligence. Stuart Russell and Peter Norvig (2010): In their influential textbook "Artificial Intelligence: A Modern Approach," Russell and Norvig define AI as "the study of agents that receive percepts from the environment and perform actions. Kurzweil (2005): Kurzweil, a futurist and AI enthusiast defines AI as "the art of creating machines that perform functions that require intelligence when performed by people. Andrew Ng, a renowned expert in artificial intelligence (AI), provided a definition of AI in (2018 that is often cited in the context of AI applications and advancements. He described AI as "the new electricity," emphasizing its transformative potential across various industries. This metaphor highlights how AI, like electricity, is a general-purpose technology that can

drive significant changes and innovations in numerous fields. “Marvin Minsky (1967): Minsky, another AI pioneer, defined AI as "the science of making machines do things that would require intelligence if done by men."

1.5.1. AI in Education:

In educational settings, AI has the capability to make intelligent decisions akin to human decision-making (Akerkar, 2014). AI-assisted online platforms can be employed to generate the necessary language input and output, aiding language learners in their language development. These AI tools, accessible on computer and mobile devices, particularly support the enhancement of writing skills. One noteworthy AI-powered tool is ChatGPT, an AI-assisted Chatbot created by OpenAI (Barrot, 2023). The AI-powered tool facilitates the production of coherent and cohesive text by providing learners with immediate feedback and alternative grammatically correct sentences (Huang and Tan, 2023).

The world is now moving towards a new digital era, and artificial intelligence technology is one of its fundamental pillars. Its concept revolves around creating computer devices and software that can think in a way that simulates the human brain's functioning. It can learn, acquire information, analyze data, make decisions, and solve various problems. Artificial intelligence is considered one of the most significant inventions of the modern age. Artificial intelligence has managed to penetrate all areas of our lives including learning and teaching, starting from electronic applications that perform tasks automatically and quickly, to computer devices that input data and save files (Ma & Siau, 2018). Artificial intelligence systems can manage the educational process and provide high-quality services by transforming traditional management systems into electronic systems based on artificial intelligence. This, in turn, contributes to making sound administrative decisions and distributing courses and lessons to teachers according to their abilities and preferences. It also enables the discovery and enhancement of talented students, identification of learning difficulties, provision of special programs for them, monitoring learning progress with students, and direct and continuous communication with parents without human effort.

1.5.2. How AI tools improve academic writing skills:

Artificial intelligence writing tools are concerned with writing and computer-assisted writing. They can function in different ways, such as suggesting possible words to replace misspellings, converting text into different languages, providing more context for word choices or even correcting word form.

AI writers are still in the early stages of development, but they can provide the assistance that many writers need. AI writing tools such as Grammarly provide excellent features such as grammar correction and word replacement in addition to paraphrasing sentences depending on the writer's preferences.

AI programs also include the meanings and inflexions of vocabulary that students need. This makes it easy to recall vocabulary quickly and expands it as much as possible to include a large amount of vocabulary, as well as sentences and essays.

When it comes to writing better introductions and conclusions, the main idea is to provide the reader with all the available information to help them build a framework for what they are about to read. To achieve this, learners simply need to type in keywords, and AI writing tools like Word Hero will provide them with a set of introductions and conclusions.

Furthermore, learners can ask AI for feedback on their writing, which could help them with their creative process. This technique allows the writer to learn from the AI, which will improve their writing skills. AI uses various analytical methods that enable it to provide feedback with great accuracy (Alastal, 2022; Yuting, 2019, Chong, 2020).

1.6. Technology Integration in Learning English:

The rapid technological growth in the past decade has captured the attention of educational practitioners, inspiring them to utilize technology as a powerful educational tool to aid students in their learning journey. There is compelling evidence that incorporating technology into instruction leads to improved academic outcomes for students. This presents students with new opportunities to learn and elevate their achievements through the use of technology. Recognizing that most learners are influenced by their surroundings, educators should remain undeterred by challenges and instead strive to effectively harness the potential of technological devices. Technology, like any other tool, should be embraced in schools as a language-learning facilitator.

The importance of technology in the classroom cannot be overstated, as it provides rapid access to knowledge. Smartphones, laptops, and tablets have become integral parts of both students' and instructors' daily lives. Therefore, it is essential to explore the use of these technological tools in the classroom to ensure that students of all ages benefit from meaningful learning experiences.

Learners who are actively engaged with learning objectives are created when different forms of technology, including a virtual classroom, are used anytime and anywhere. Technology also paves the way for individualized education to fulfil the specific requirements of students as individual learners within a larger classroom environment.

New technology items, such as cell phones, are progressively influencing the lives of many people nowadays. For instance, the Coronavirus disease 2019(COVID-19) pandemic struck at a time when science was advancing rapidly and the world was becoming increasingly digital. Due to the COVID-19 pandemic. Schools, institutions, and businesses have shifted to digital platforms for online courses and remote employment

because of the national closure. This new way of life, imposed by quarantine and keeping at home, has created new social issues. (Corona virus Update (Live) statistics, 2019).

Agreeing on a survey conducted in Jordan (Saadeh, et al, 2021), a great majority of people (85%) claimed that their smartphone usage grew or considerably increased during the quarantine (27.6 and 57.2 %, respectively), with 42 % using their devices for more than 6 hours each day.

The current circumstances have resulted in a decrease in social activities such as social visits and travel, as well as a shift in work dynamics for many individuals, with a majority of workers now conducting their work activities from home. Moreover, the pandemic has significantly impacted the realm of education, particularly in the mode of teaching and learning. Traditional face-to-face meetings in educational institutions have been replaced by remote online learning, posing a considerable challenge for both students and educators. The unexpected and rapid changes brought about by the coronavirus outbreak have necessitated a complete transformation in learning methodologies and environments. As a result, the adoption of new approaches to learning, including the integration of applications to support students in enhancing their skills, has become increasingly crucial. The availability of applications catering to a wide range of needs, including those designed to assist English as a Foreign Language (EFL) students in classroom and home-based learning, is noteworthy. Additionally, there are applications tailored to specific skills such as listening comprehension, speaking, and grammar.

1.7. Overview of AI-Assisted Writing Tools:

According to Walden's statement on the use of AI tools Generative artificial intelligence (AI) tools, such as ChatGPT, Bard, Claude, and others, afford new opportunities to stimulate thinking and supplement learning and assessment in higher education. Using AI tools responsibly for academic purposes and in the classroom is an emerging competency for both students and faculty. While we all continue to better understand and evaluate the evolving use of AI-assisted research and writing tools, students and faculty are expected to use them responsibly by ensuring transparency about the use of AI tools in the writing process. Doing so includes citing whole sentences or paragraphs written by an AI-assisted writing tool that is integrated into one's writing, just as if using content from any other source. Additionally, when citing or quoting the output of an AI tool, students should include the AI tool input/output transcript in an appendix at the end of the paper.

As we work together to use these new innovative tools ethically and responsibly, setting our course for change does come with some challenges, which we will continue to navigate together. Walden students and faculty can expect ongoing support and training on the ethical and appropriate use of AI tools. Because of the rapid and ongoing changes

Chapter one : Literature review

in the AI landscape, this guidance page will be updated as relevant. AI tools can be helpful in the research and writing processes. If the use of an AI tool informs your writing or if you use the output of an AI tool in your writing for Walden assignments, it will be important to acknowledge the role of the AI tool.

The American Psychological Association (APA) Style staff recommends that if you use an AI tool in your research and writing process, you should disclose and explain the use of that tool (McAdoo, 2023). Additionally, individual AI tools may have use guidelines that students need to be aware of. For example, OpenAI (2023), the creator of ChatGPT, provided the following conditions for the use of its tools:

- ✓ The published content is attributed to your name or company.
- ✓ The role of AI in formulating the content is disclosed in a way that no reader could miss, and that a typical reader would find sufficiently easy to understand.
- ✓ People should not represent API-generated content as being wholly generated by a human or wholly generated by an AI, and it is a human who must take ultimate responsibility for the content being published.

In academic writing, we ensure clarity and transparency by citing and referencing when we use others' ideas in our writing. Similarly, we should be clear and transparent when we use the output of an AI tool in our writing. As a Walden student, if you use an AI tool in the writing process, follow APA's guidelines as well as the individual AI tool's guidelines, as applicable, in describing and citing.

Among the well-known applications to many users. CHATGPT and Grammarly, respectively. ChatGPT is a conversational AI developed by OpenAI, based on the GPT (Generative Pre-trained Transformer) architecture. It's designed to engage in natural language conversations with users, providing responses that are contextually relevant and coherent. ChatGPT learns from vast amounts of text data and is trained to understand and generate human-like text across a wide range of topics and conversation styles. It can be used for various purposes, including customer support, virtual assistants, language practice, and creative writing prompts. As an AI language model, ChatGPT aims to simulate human-like conversation and provide helpful, informative, or entertaining responses to user inputs. And Grammarly is a writing assistant tool that helps users improve their writing by detecting and correcting grammar, spelling, punctuation, and style errors. It provides real-time suggestions and feedback to enhance the clarity, correctness, and effectiveness of written communication across various contexts, including emails, documents, social media posts, and more. Grammarly offers both a browser extension and a standalone application, making it accessible and convenient for users to integrate into their writing workflow.

1.7.1. CHATGPT:

ChatGPT is a natural language processing system developed by OpenAI. It is designed to generate human-like conversations by understanding the context of a conversation and generating appropriate responses. It is based on a deep learning model called GPT-3, which is trained on a large dataset of conversations.

1.7.2. Characteristics of CHATGPT:

possesses several characteristics that make it a versatile and powerful tool for natural language processing. Some of its key features include:

- ✓ **Language Understanding and Generation:** ChatGPT successfully makes use of natural language processing (NLP) to apprehend and generate human-like responses. It can understand language nuances including sarcasm, irony, puns, and cultural references, permitting it to generate suitable responses.
- ✓ **Large Vocabulary:** Trained on textual content databases from the internet, ChatGPT has a big vocabulary, permitting it to apprehend and reply to an extensive variety of subjects and queries.
- ✓ **Contextual Understanding:** The version makes use of deep learning algorithms to analyze complicated styles and relationships in language statistics, permitting it to offer contextually applicable responses.
- ✓ **Multilingual Capabilities:** ChatGPT is a flexible device with multilingual capabilities, as it's miles skilled in textual content statistics from more than one language. This permits it to generate responses in diverse languages, which include English, French, German, and Spanish, amongst others.
- ✓ **Privacy and Security:** ChatGPT affords non-public and stable surroundings for conversations, the usage of AI to perceive spam, censorship, and malicious content material to ensure a stable interaction.
- ✓ **Integration with Different Technologies:** It is designed to paintings nicely with different conversational gear like bots and digital assistants, permitting builders to enhance present bot answers and construct particular AI-powered chatbots which can realize and reply to personal wishes in real-time

1.7.3. ChatGPT interface:

ChatGPT has a lot of cool features that can help make it easier to work with and use in the figure below there is a column called Write Here where you can ask any question or any kind of confusion and it will write the answers fast and clearly with easy language that is suitable for formal writing and any level of English (beginner intermediate advanced) in addition to another feature where you can ask it to rewrite the answers with a click that looks like a circle named regenerate It also is free to use.

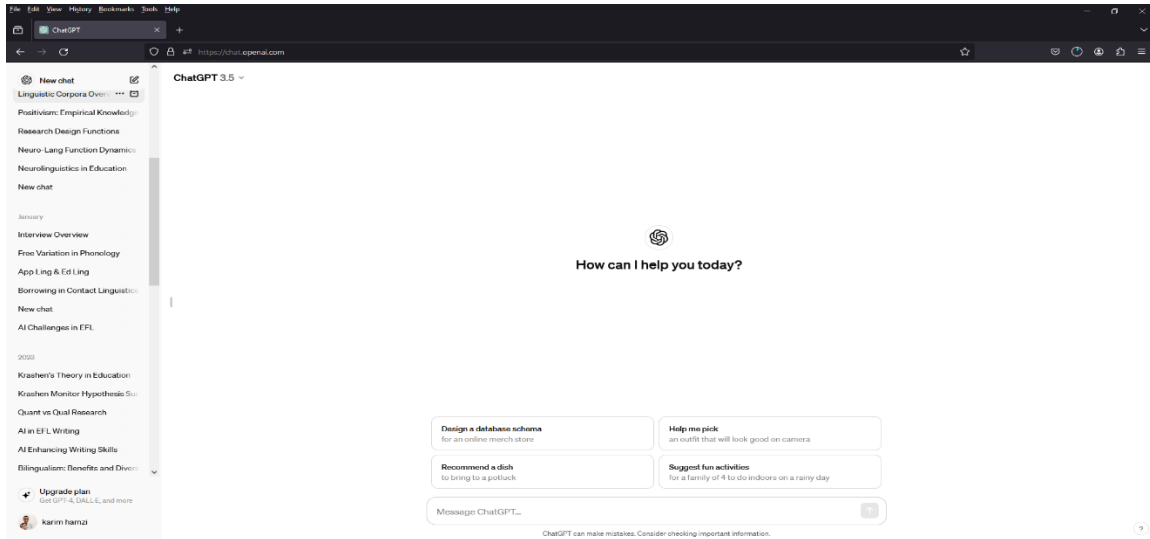


Figure 01: ChatGPT main screen in light mode

It has another feature which is the dark theme where it turns onto black mode for persons who have problems with a light mode that can damage their eyes at night or under low light

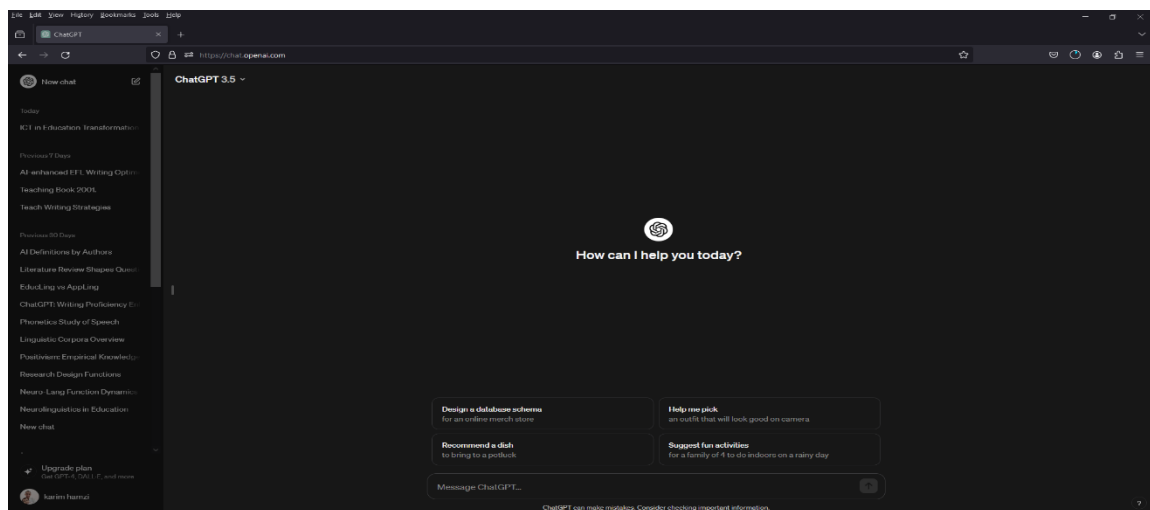


Figure 02: ChatGPT main screen in dark mode

If you notice ChatGPT on the first try will demand you to log in and it is completely easy but I did it for a reason everything you have looked for will be added to your drive account where you'll find a column on your left screen in it all the researches that have been done before.

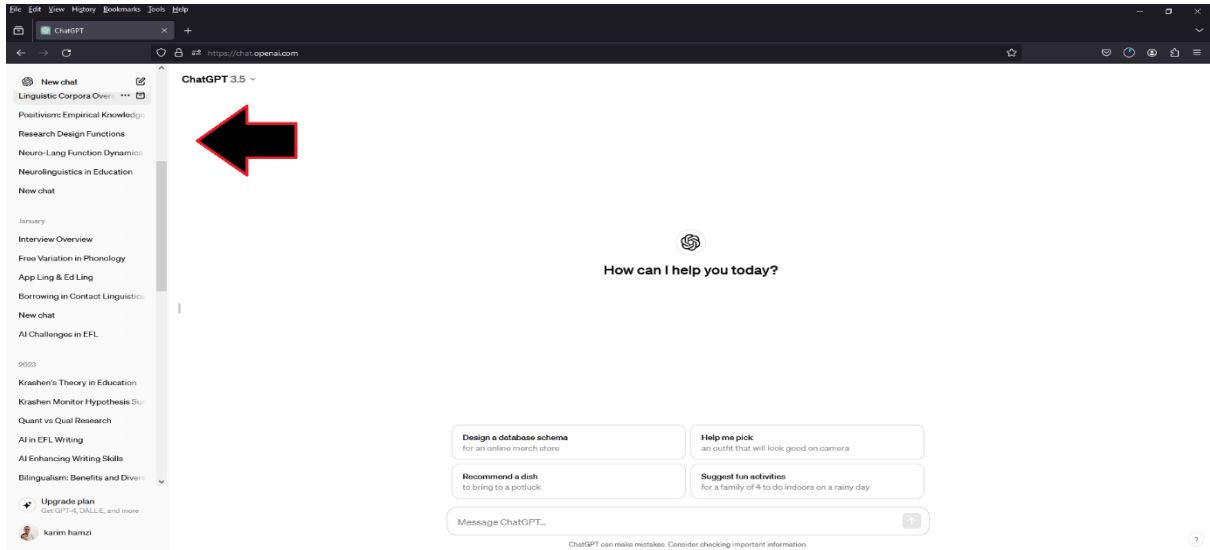


Figure 03: the column where the previous researches that have been done before

In addition to the fact that ChatGPT provides all of these features, it can be even more if it is upgraded but that demands payment of 25 dollars each month if you want the latest version which is ChatGPT Plus and another offer called ChatGPT team

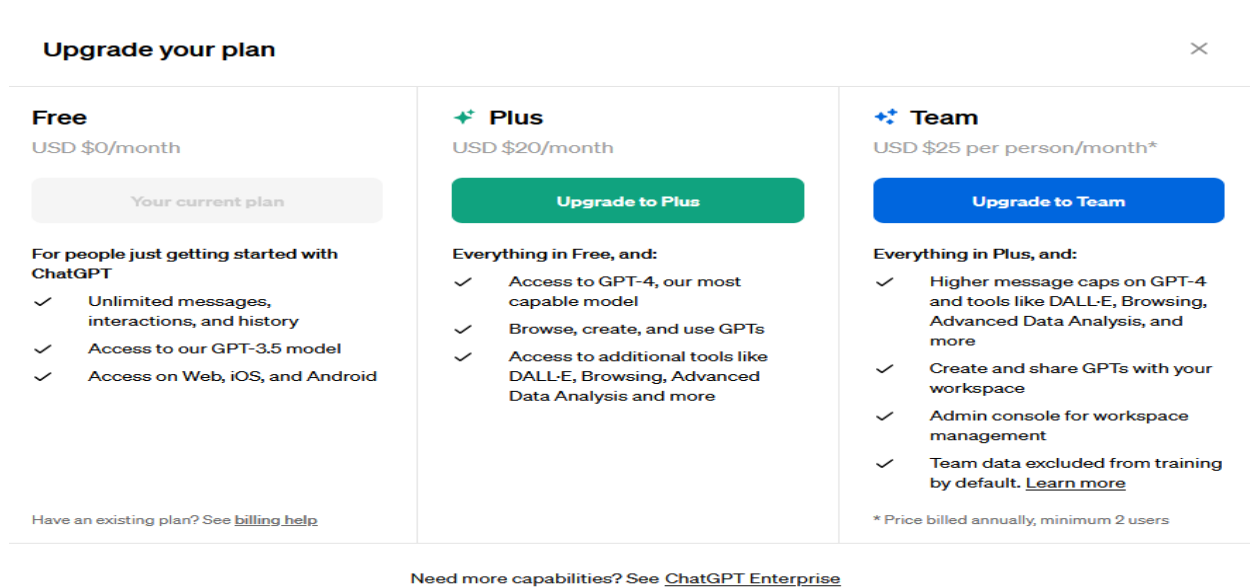


Figure 04: The payment options to upgrade ChatGPT

1.7.4. Grammarly:

Grammarly, according to its authors, is an AI-powered writing assistant designed to help users communicate effectively by providing real-time feedback on grammar, punctuation, spelling, clarity, conciseness, and tone. It offers suggestions and corrections to improve writing quality across various platforms, including emails, essays, social media posts, and more. The authors emphasize its ability to enhance clarity and professionalism in written communication, making it a valuable tool for students, professionals, and anyone looking to improve their writing skills.

1.7.5. Characteristics of Grammarly:

In writing activities, Grammarly has several advantages such as helping students be more confident in their writing because Grammarly has features of a grammar checker, proofreading, plagiarism checker, and spelling checker. Lailika's (2019) study found that Grammarly is a useful tool to assist users in checking their writing and grammar. Similarly, Fitriana & Nurazni (2022) also stated that Grammarly is convenient for correcting grammar and helps students correct grammar. Not only that, Grammarly gives an improvement in the students' punctuation use, synonyms, and pronunciation (Mubarak & Syafi'i, 2020). Students in Pratama's (2020) study also believed that Grammarly is easy, and it only takes them a short time to use it. They believed that Grammarly could assist them in developing their grammar knowledge (Pratama, 2020). Hakiki (2021) also said that Grammarly can help to develop English writing skills,

understand English grammar rules, and increase students' confidence in writing. Finding in Dewi's (2021) study also showed that Grammarly assists individuals with sentences, offers fixes, provides succinct explanations for writing faults, and enhances their overall writing skills. These advantages could help students reduce the errors in their writing, improve their writing quality, and also give them more confidence in their writing.

1.7.6. Grammarly interface:

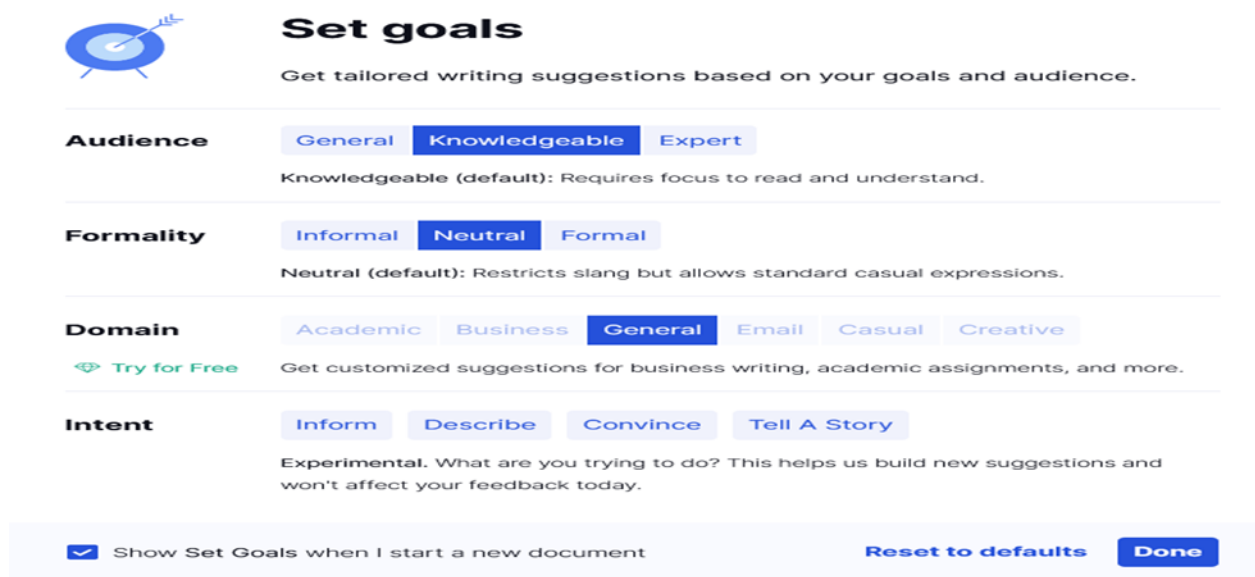
Grammarly's main screen is simple and easy to use you'll find a text input This is where you paste or type the text you want to check for grammar, spelling, and style. And you can even upload a document.

Untitled document

|Type or paste (Ctrl+V) your text here or [upload](#) a document.

Figure 05: Grammarly main screen in light mode

Once you write on the screen what you want to check it will start calculating every word to correct and you can choose in what way you want your writing to be corrected such as audience, familiarity, domain and intent.



Set goals

Get tailored writing suggestions based on your goals and audience.

Audience General Knowledgeable Expert

Knowledgeable (default): Requires focus to read and understand.

Formality Informal Neutral Formal

Neutral (default): Restricts slang but allows standard casual expressions.

Domain Academic Business General Email Casual Creative

[Try for Free](#) Get customized suggestions for business writing, academic assignments, and more.

Intent Inform Describe Convince Tell A Story

Experimental. What are you trying to do? This helps us build new suggestions and won't affect your feedback today.

☒ Show Set Goals when I start a new document [Reset to defaults](#) [Done](#)

Figure 06: Adjusting goals of text correction

If you make any mistake in your text, it will show a list of suggestions on your right where the mistakes have red highlights under them to correct them just click on them and click accept, they will be corrected right away.

4 All suggestions

Correctness · Change the form of the verb ⓘ

...forests, there **lives** lived a young girl...

[Accept](#) Dismiss ...

Correct your spelling

listenin

Correct your spelling

thi

Correct your spelling

leaved

Once upon a time, in a quaint village nestled between rolling hills : whispering forests, there **lives** a young girl named Elara. Elara had been drawn to the mysteries of the woods, spending her days exp every nook and cranny, **listenin** to the songs of birds and **thi** rustle **leaved**.

Figure 07: mistake highlight and correction suggestions

Another important feature of Grammarly is that it has a plagiarism checker which makes it the perfect AI writing tool that helps learners as much as teachers to handle a lot of situations but this feature is premium meaning you need to pay to get an extra feature but you'll have a free 4 tries every 24h.

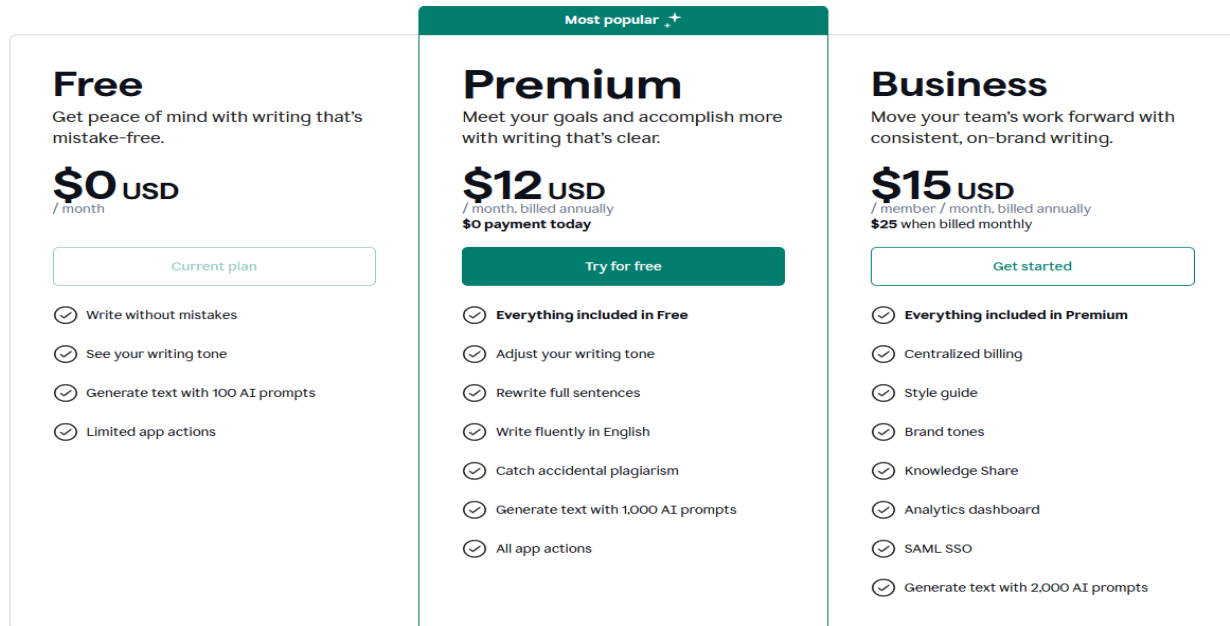


Figure 08: Grammarly premium payment options

1.8. Comparison between CHATGPT and Grammarly:

In writing, Grammarly and ChatGPT have different purposes. Grammarly helps with grammar and plagiarism in real time without changing the content much. ChatGPT is an AI tool that can create content, rephrase sentences, and answer questions. Grammarly is best for perfect, polished, and error-free writing, while ChatGPT is good for accurate and engaging content. Some users suggest using both tools together. After using ChatGPT to edit grammar, it's important to manually check for mistakes and plagiarism.

1.9. Conclusion:

To improve writing abilities, it is crucial to employ AI-powered tools like Grammarly and ChatGPT to reach a wide range of learners. Teachers may successfully assist students

in taking charge of their learning journeys in both academic and real-world contexts by embracing a holistic learner perspective. Strong AI writing helper Grammarly excels in enhancing short-form content quality and producing flawless, error-free writing. Conversely, ChatGPT, a sophisticated artificial intelligence chatbot, is exceptional in producing lengthy material and imaginative, human-like prose in response to user input. Each tool has certain advantages that can make a big difference in how well students perform and use the language. These AI-powered tools may be used by educators to build a better

Chapter two

Data analysis and results

2.1. Introduction:

The integration of techs in the educational system in Algeria has been noticeable nowadays since the whole world is using artificial intelligence in various fields one of them, is the educational field, Algeria the system, is working hard to accomplish enhancing the 4 skills of a language that are the most important part to be sufficient and capable to master the language especially English language by the use of ai and merging technology in the classroom, and giving the students the full access with observation to the use of these tools to keep the thing from going in another way, to achieve the final purpose which is to investigate the impact of ai assisted tools in EFL education (ChatGPT and Grammarly).

This chapter explains and discusses the research techniques used in the study, including data collection, analysis, and hypothesis testing. It also responds to the research questions and a solution to the provided problem. This chapter identifies areas such as the location of the study, research methodology, sampling and sample size, types of data, data collection methods.

2.2. The High Education in Algeria:

The Algerian higher education sector has been marked by two major forms of policy since its independence: the former and the most recent system - the adoption of a three-cycle higher education framework, called the BMD system (Bachelor-Master-Doctorate), in existence since 2004/2005.

Algerian universities have implemented a reform aiming at integrating the Bologna process standards: 3 years of study for the bachelor's degree and 2 years for the master's degree. Since the introduction of the three-cycle degree system in 2004, universities have awarded a bachelor's degree for having achieved 180 credits (the first cycle), a master's degree for having achieved 120 additional credits (the second cycle) and, following a course of study, a doctorate (third cycle). Bachelor's or master's degrees can take two different forms: "academic" or "applied", i.e. specialized or technical. In parallel to the Bologna process system, there are other scales of classification for qualifications in Algeria, as is the case of the so-called "single cycle" or "long" qualifications, which last five to seven years, such as medical studies.

2.3. Research Methodology

The upcoming step in any research design is moving from the theoretical part to the practical part. This section will provide a full overview of the research methods by justifying utilizing the case study as well as a discussion of the benefits of employing the combination techniques, i.e. both quantitative and qualitative methods, which are regarded as an effective means for a clear understanding of the research. In practice, both

of the procedures mentioned above are commonly seen as appropriate within single research.

According to Kothari, C.R. (2004) Research methodology is a way to systematically solve the research problem. It may be understood as a science of studying how research is done scientifically. In it, we study the various steps that are generally adopted by a researcher in studying his research problem along with the logic behind them.

This work presents both EFL teachers and students of Salhi Ahmed University of Naama, in the case study of understanding the use of AI-assisted tools for enhancing EFL students' writing proficiency (the case under investigation in this work), combining both qualitative and quantitative approaches helped to seek more reliable and valid results, so that data can be representative of a true and complete picture of integrating artificial intelligence in English courses.

2.4. Data collection:

Data collecting is an important part of every research it is surely challenging and very demanding. According to Leedy and Ormrod (2014): Data collection is the process of obtaining information from the world for the purpose of describing, explaining, predicting, or controlling some phenomenon of interest. provide me with the resource of this one, and Kothari (2004): Data collection is the process of gathering and measuring information on variables of interest, in an established systematic fashion that enables one to answer stated research questions, test hypotheses, and evaluate outcomes.

2.4.1. The setting:

The setting for this dissertation was Salhi Ahmed University of Naama. The researcher dealt with both EFL teachers and students as a sample population during the academic year of 2023/2024

A population according to Kothari (2004): includes all the elements that meet the criteria or specifications set by the researcher. It is the group of people, objects, or items that possess the characteristics of interest to the study.

2.4.2. Participants profile:

➤ Teachers' Participants

The main goal of working with the teachers is to give their point of view concerning the use of ai assisted tools to enhance writing proficiency in EFL education in Algeria universities, 4 teachers of different modules were selected with the present study to give reliable conclusions about the topic discussed.

Table 01: general information about the participants

The teachers	Teacher 01	Teacher 02	Teacher 03	Teacher 04
Gender	Female	Male	Female	Female
Teaching experience	14	02	19	10

✓ **Students Participants:**

At the University Center, Salhi Ahmed in Naama, Algeria, the sample for the study consisted of 28 LMD students. For representativeness and generalization, they were randomly chosen from both groups of the master 1 level. Students between the ages of 21 and 35 were selected as study participants for a variety of reasons. These include the researcher's ability to contact them quickly and consideration of their ages and the number of years they spent studying English.

2.5. Research instruments:

The collected data for this work is based on the teacher's interview as a primary instrument and the students' questionnaire as a secondary instrument. According to Sekaran and Bougie (2016): Research instruments are tools or devices used to collect data or information for the purpose of research. They can include surveys, questionnaires, interviews, observations, and tests, among others.

2.5.1. Teacher's interview

The interview is used for data collection from individuals. It was used in the form of a conversation to have a better understanding of the topic of the research. According to Marshall and Rossman (1989): An interview is a purposeful conversation in which one person asks questions and another person responds. The interviewer's purpose is to obtain information from the interviewee.

The semi-structured interview was used since it is only concerned with four EFL teachers because it is more convenient for smaller groups. the teachers concerned with the present study are from Salhi Ahmed University of Naama. they were selected randomly without looking at the level of experience to seek how they perceive using AI-assisted tools in EFL classrooms and to enhance their student's performance in writing skills specifically.

The interview consisted of eleven questions One question is concerned with the experience of the teacher in teaching English, especially at the university level. and ten

questions deal with the way teachers teach with the support of technology and the integration of AI-assisted writing tools in their teaching process.

2.5.2. Students' questionnaire:

Questionnaires are essential tools in research for gathering data from participants. They consist of a series of questions presented in written form to collect information such as attitudes, opinions, behaviours, and demographic details. They offer the advantage of efficiently collecting data from a large number of respondents within a short timeframe through methods like paper surveys, online forms, or telephone interviews. Questionnaires can be structured with fixed-response options or unstructured to allow open-ended responses. According to Creswell and Plano Clark (2011): A questionnaire is a self-report data collection instrument consisting of a set of questions presented to participants in a written format

The effectiveness of a questionnaire lies in its design. Researchers must create clear, concise, and unbiased questions while considering the sequence and layout to maintain respondent engagement. Well-designed questionnaires can yield valuable quantitative or qualitative insights across various research areas when administered correctly.

The questionnaire of this work was addressed to the master one English student whose specialty is linguistics which aims at knowing the reach to which students use AI in their writing or another context; the researcher wants to figure out if they are using AI-assisted writing tools to enhance their writing proficiency in particular. The questionnaire includes five parts

The first part contains four questions about students' profiles, the second part looks at the Usage of AI-Assisted Writing Tools, the third part seeks to find out about the Impact on Writing Proficiency, while the fourth and fifth parts inspect to find Usage Preference and Recommendations and Additional Comments.

2.6. Data Analysis and Interpretation

Data analysis is a method used to shift, arrange, summarize, and synthesize research data acquired to derive findings and conclusions. It involves systematically applying statistical and logical techniques to describe, condense, evaluate, and illustrate data. This process aids in looking at various outcomes collected during research to extract relevant information that can help solve problems and draw conclusions. Data analysis is crucial for making informed decisions by transforming raw data into valuable insights that empower better decision-making processes according to John W. Creswell (2009): "Data analysis is the process of bringing order, structure, and meaning to the mass of collected data. It is a messy, ambiguous, time-consuming, creative, and fascinating process. It does not proceed in a linear fashion; it is not neat."

This part analyzes the information collected from the two data resources which are the teacher interview and the student questionnaire, the previously discussed information allowed the researcher to gather a large quantity of data concerning the impact of AI-assisted writing tools in EFL education furthermore, the data collected are presented in forms of table and other statistical forms.

2.6.1. Analysis of Teachers' Interview

The interview is addressed to four EFL teachers of the English language, it aims at reporting their point of view about the impact of AI-assisted writing tools on enhancing writing proficiency in EFL education, in addition to that its goal is to show their reaction to integrating AI in education, in general, This interview includes eleven questions that will be analyzed and presented as follows.

✓ **Question one:** years of experience (at university)

Every teacher has different years of experience two of them are the most experienced with 14 years and 19 years and 10 years while the other teacher has only 2 years of experience in the university. this question was asked in order to know how experienced the teachers are.

✓ **Question two:** Can you describe your experience with teaching English as a Foreign Language (TEFL)?

By the results gathered from this question all the teachers think that Teaching is a challenging yet rewarding responsibility, especially in helping students grasp complex concepts in a foreign language. The user employs various techniques to enhance understanding, noting that students' oral skills often excel over their written skills. Overall, the user finds teaching to be a fulfilling and dream-like experience, achieved through hard work. This question was given to know what the teachers think about their teaching experience as EFL teachers.

✓ **Question three:** How do you currently assess and address writing proficiency among your students?

Based on the responses of the four teachers, these are their answers concerning How they currently assess and address writing proficiency among their students:

- **Teacher 01:** During tests and exams, to evaluate their capacities in writing through discussing and analyzing topics/quotes in their style in terms of essays, whereas, with the first year, I ask for paragraphs.
- **Teacher 02:** Through correcting their assignments and exams.

- **Teacher 03:** Mostly based on their tests and exams and also writing assignments in the written expression module.
- **Teacher 04:** I utilize a combination of methods, including essays, research papers, and creative writing assignments. I provide detailed feedback to help students improve their writing skills, and I encourage them to seek additional support through writing centers or online resources.
- ✓ **Question four:** What challenges do you typically encounter when teaching writing skills in an EFL context?

This question shows us the challenges that teachers need to deal with while teaching writing skills to their students, two of the teachers stated the challenges while one teacher stated that she hasn't faced any challenges so far, the answers are discussed as follows:

- **Teacher 01:** Students are usually reluctant to write or when they do write they depend on Google translation or writing AI
- **Teacher 02:** I never teach it, so no idea!
- **Teacher 03:** When the students are given the primordial techniques for academic writing (as components of a paragraph vs an essay, coherence and cohesion, argumentation...), I imagine that the students will write perfectly, but the reality is quite different. However, many problems still appear, such as lack of vocabulary, grammatical mistakes, misuse of possession and contraction (e.g. its/it's), and errors in written form (e.g. Linguistics*/friend*.)
- **Teacher 04:** One of the main challenges in teaching writing skills at the university level is ensuring that students have a solid understanding of grammar, syntax, and vocabulary. Additionally, students may struggle with academic writing conventions and the nuances of argumentation and analysis in their writing.
- ✓ **Question five:** Are you familiar with AI-assisted writing tools such as ChatGPT and Grammarly?

From the data acquired from this question three of the teachers stated that they are familiar with the AI-assisted writing tools such as ChatGPT and Grammarly, while one teacher stated that she is not familiar with such tools This is discussed in the following table and graph.

Table 02: teacher familiarity with Grammarly and ChatGPT

Are you familiar with AI-assisted writing tools such as ChatGPT and Grammarly?	Yes	No
Participants	03	01
%	75%	25%

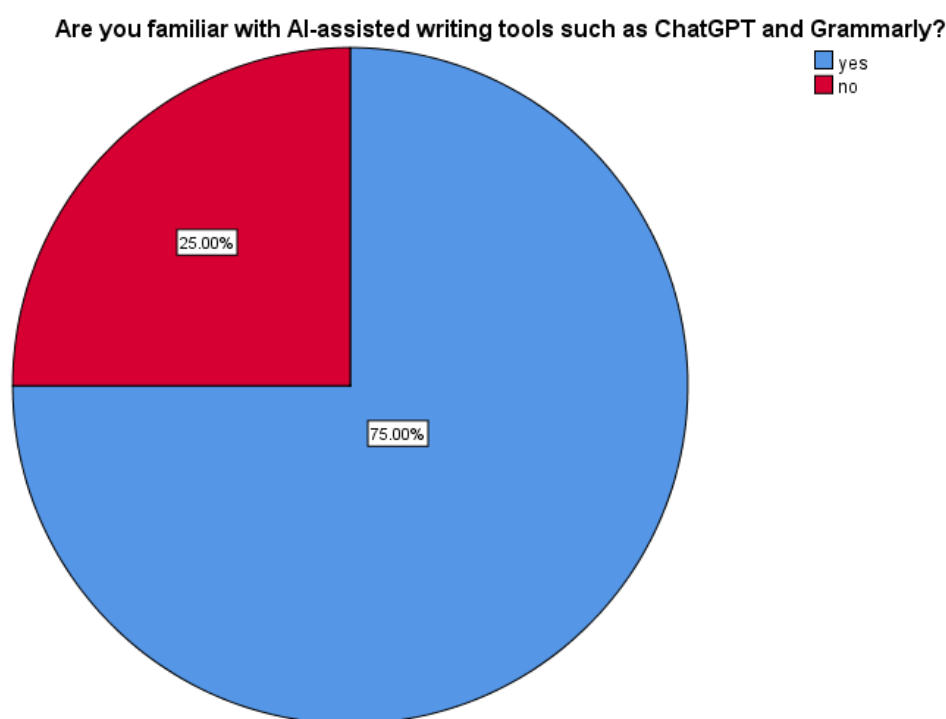


Figure 09: teacher familiarity with Grammarly and ChatGPT

- ✓ **Question six:** Have you ever used AI-assisted writing tools in your teaching? If so, what was your experience?

For this question, and based on the perspectives of three teachers, they use these tools in their teaching process to prepare their lessons and correct dissertations and articles, while one teacher hasn't used these tools yet.

- ✓ **Question seven:** What do you see as the potential benefits of using AI-assisted tools to enhance writing proficiency in EFL education?

Three teachers answered this question with positive different answers while one teacher stated that she had no idea the answers are discussed as follows:

- AI can help learners write more efficiently as it can offer corrections, suggestions and feedback.
 - No idea.
 - AI-assisted tools have the potential to enhance writing proficiency in EFL education by providing students with immediate feedback on their writing, helping them to identify and correct errors more effectively.
 - It is useful for saving energy and time when classifying the mistakes of a large sample of students.
- ✓ **Question eight:** How do you think AI-assisted writing tools could complement or enhance traditional teaching methods for writing skills?

Based on the answers provided by the participants, all of them have the same perspective that AI-assisted writing tools could complement or enhance traditional teaching methods for writing skills by providing students with additional practice and feedback outside of the classroom, serving as assistants in writing or a proof-reader and so they can use it as a technique to fit some learning styles.

- ✓ **Question nine:** What concerns, if any, do you have about integrated AI-assisted tools into your teaching practice?

All of the participants had different answers and valuable ones only one teacher stated that she had no experience with these tools concerning this question which seeks to discover what concerns the teachers have when integrating AI-assisted writing tools in their teaching process the answers are presented as follows:

- **Teacher01:** I need to experience it first to have an experience with it.
- **Teacher02:** Students will surely be overdependent on them.
- **Teacher03:** over-reliance on these tools, Additionally, there may be concerns about the accuracy and reliability of the feedback provided by these tools.
- **Teacher04:** my concern is about ethics and data safety.

- ✓ **Question ten:** How do you think students might respond to using AI-assisted tools to improve their writing skills?

All the answers of the participants were very positive and had another negative side which was a fact the data gathered from this question was to find out what teachers think their students' responses will be towards using AI-assisted tools to improve their writing skills the answers are discussed in the following table:

Table 03: teacher POV on their students' response towards using AI-assisted tools to improve their writing skill

Answers Teachers	Positive answers	Negative answers
Teacher 01	- respond positively to using AI-assisted tools to improve their writing skills, as they can provide immediate feedback and help students see tangible improvements in their writing.	- some students may be hesitant to use these tools if they feel that they are being replaced by technology.
Teacher02	- Some will use them efficiently to improve their wiring	- others may simply depend on them in their writing tasks.
Teacher03	- I think they will be very motivated since they are in the age of technology	
Teacher04	- some of them may enjoy new things	- others may not, they hate stability and commands....

✓ **Question eleven:** In your opinion, what role should AI-assisted tools play in the future of EFL education, particularly in improving writing proficiency?

By this question participants gave their points of view and opinions on what role should AI-assisted tools play in the future of EFL education, particularly in improving writing proficiency, answers were unique and different where they think It should be used as no more than a facilitator otherwise students will lose their writing proficiency, It helps in conducting research, in correction, translation, self-evaluation for students and teachers as well, Assistance and feedback and These tools have the potential to revolutionize the way writing is taught and assessed, providing students with personalized feedback and support to help them become more confident and proficient writers.

2.6.2. The Analysis of Students' Questionnaire

This questionnaire's main goal is to analyze students and reveal their perspectives on the impact of AI-assisted writing tools on enhancing writing proficiency in EFL education. After treating teachers' interviews, the current part is devoted to data analysis from student's questionnaires. Twenty-eight students from two groups of the same year and stream completed this questionnaire. the questions were easy and in clear English no misleading words or complicated words were used. The questionnaire consists of fourteen questions.

✓ Part one: the participants' background information

• Age

Table 04: students age

Years	20	21	22	23	25	28
Number	1	16	7	2	1	1

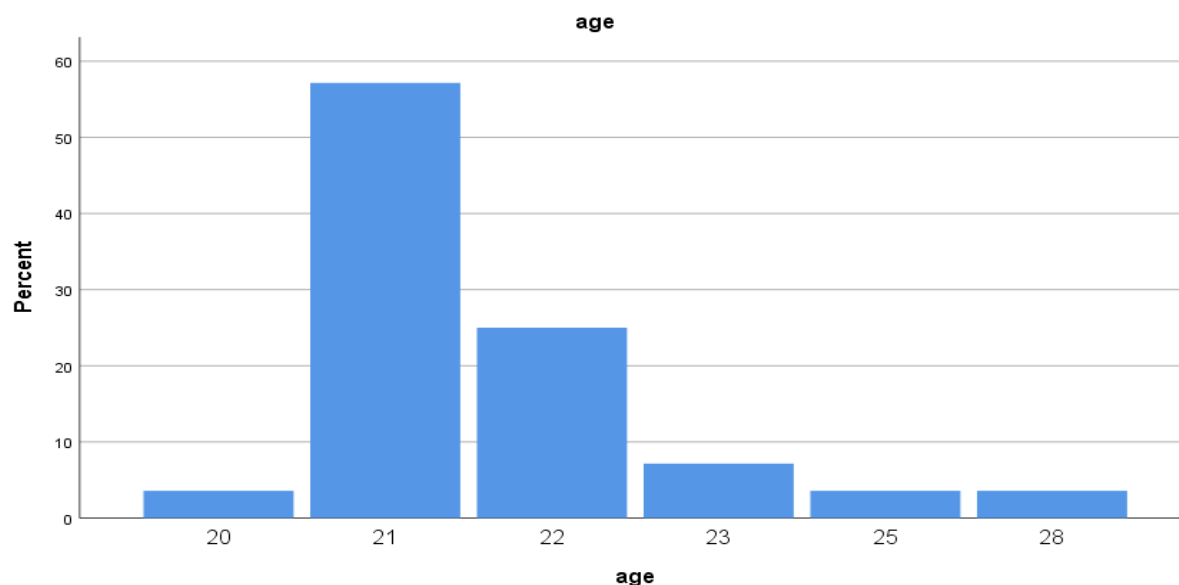


Figure 10: students age

The result from the table and graph 03 above shows a great diversity concerning the age of the students in our sample. The age students are divided into 06 groups, most of the participants are adults whose ages at 21 years old.

- **Gender**

This pie chart and table will reveal that female students are more than male. Just 12 males have been recorded out of twenty-eight in total (**42.9 %**); whereas the rest were female subjects this to say 16 (**57.1 %**), this state adds nothing but that there are more females than males in this study.

Table 05: students' gender

gender	Female	Male	Total
Number	16	12	28
Percentage %	57.1 %	42.9 %	100 %

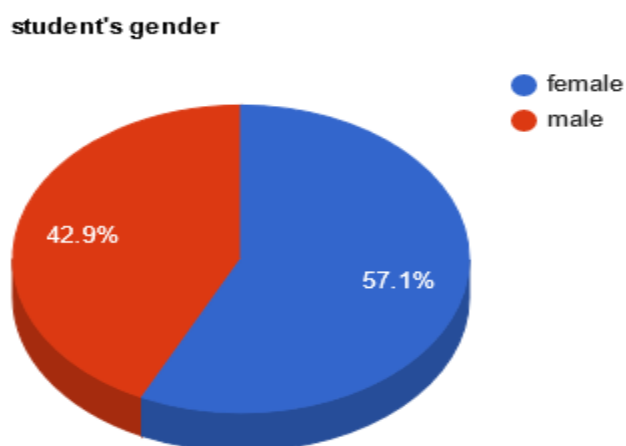


Figure 11: students' gender

The highest percentage (**57.1 %**) represents the females that they filled in the questionnaire whereas (**42.9 %**) of males answered the questionnaire.

- **How many years have you been studying English?**

The table and the figure down below show the number of students and how many years they have been studying English.

Table 06: students' number of years studying English

Years	4	10	11	12	14	16	Since childhood
Number	11	1	11	1	1	1	2



Figure 12: students' number of years studying English

✓ Part Two: Usage of AI-Assisted Writing Tools

- **Question one:** how often do you write in English for academic purposes

The majority of the students eighteen which is (64.3%) stated that they often write in English for academic purposes while six others (21.4%) stated that they always do and just four students making up (14.3%) stated that they partly do write English for academic purposes.

Table 07: students writing English for academic purposes

answers	Always	Often	Partly	Never	Total
Participants	06	18	04	0	28
Percentage	21.4%	64.3%	14.3%	0%	100%

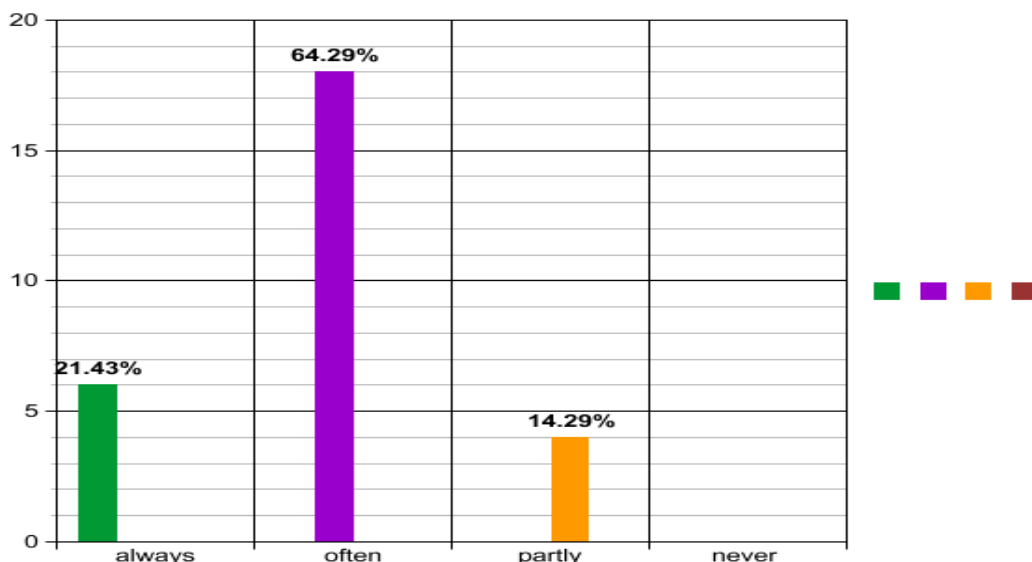


Figure 13: students writing English for academic purposes

- **Question two:** How comfortable are you with using technology for language learning purposes?

The researcher chose this question to know how comfortable the students are with using technology for language learning purposes, it was predictable that the majority were comfortable with it since 14 students stated that and the other 14 stated that they are very comfortable, it is noticeable that no one said they are not comfortable with using technology in learning language.

Table 08: Students' level of confidence with using technology for learning purposes

answers	Very comfortable	Comfortable	Uncomfortable
Students' numbers	14	14	0
Per cent	50%	50%	0%

- **Question three:** Have you ever used AI-assisted writing assessment tools in your language learning? AI apps or websites?

The overwhelming majority (**96.43%**) stated that they have used AI-assisted writing assessment tools in their language learning whether apps or websites while only one student (**3.57%**) said no, he never used them, is it clear in the table and graph below:

Table 09: students' use of AI-assisted writing assessment tools in Language learning

Students answer	yes	no	total
Participants	27	1	28
%	96.43 %	3.57 %	100 %

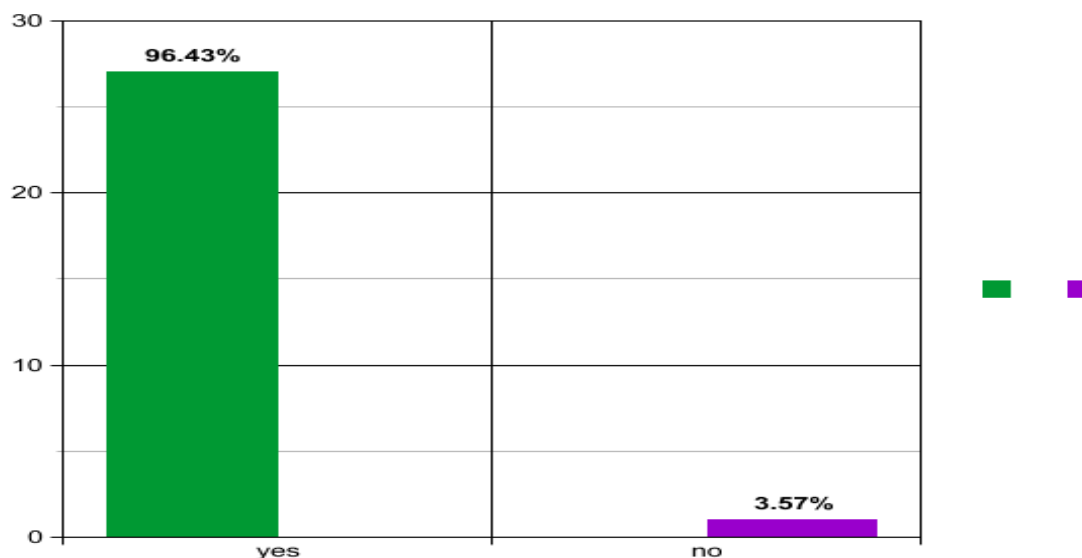


Figure 14: students use AI-assisted writing assessment tools in language learning

- **B.** If yes what are these tools?

Through the data collected for this question, It Is clear that the majority of the students had the same answer which was ChatGPT software and some others had multiple different software.

Table 10: student's choice of using AI apps or websites

AI-tools	ChatGPT	Grammarly	Duolingo	Write sonic	Quill Bot	AI-explorer	bard AI	Moodle	YouTube
Number of users	22	6	1	1	1	1	1	1	1
Percentage	62.9%	17.1%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%

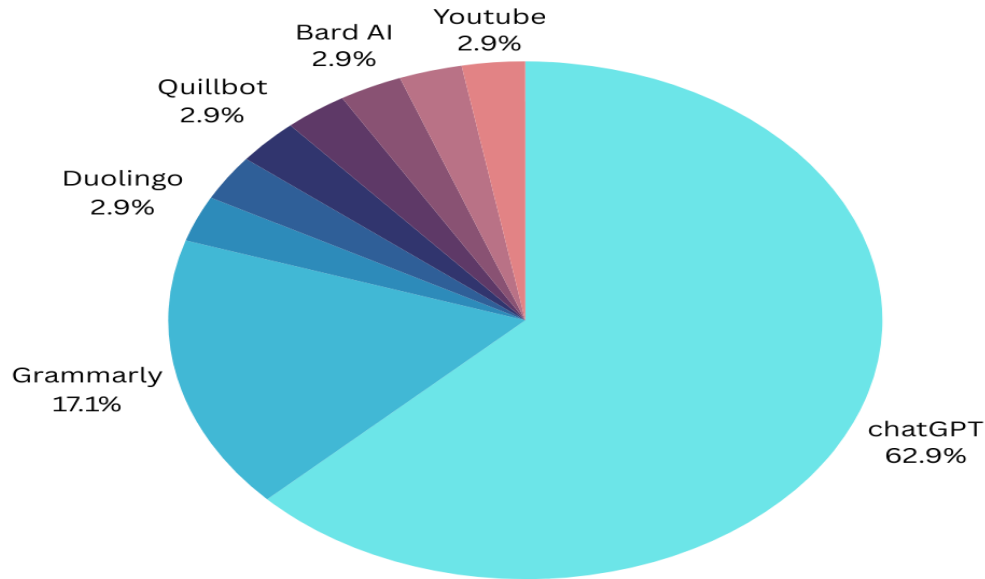


Figure 15: student's choice of using AI apps or websites

- **Question three:** Have you used AI-assisted writing tools such as ChatGPT or Grammarly before?

This question indicates if the students use the AI-assisted writing tool that this work is built upon investigating their impact on enhancing writing proficiency, this question was specific since it mentioned only the two AI writing tools that are mostly related to enhancing writing skills among EFL students. The majority of the students said yes they used them with (92.9%) and only two said no with (7.1%).

Table 11: students' percentage of using both Grammarly and chatgpt

answers	yes	No
Students number	26	2
Per cent	92.9%	7.1%

- **b. if yes, please indicate the frequency of use**

this question seeks to know how many times EFL students use these AI-assisted tools in their writing 11 of the students stated that they rarely use them (39.3%) while 8 said monthly (28.6%) and 7 stated weekly (25%) and only 2 stated that they never used these ai tools with (7.1%).

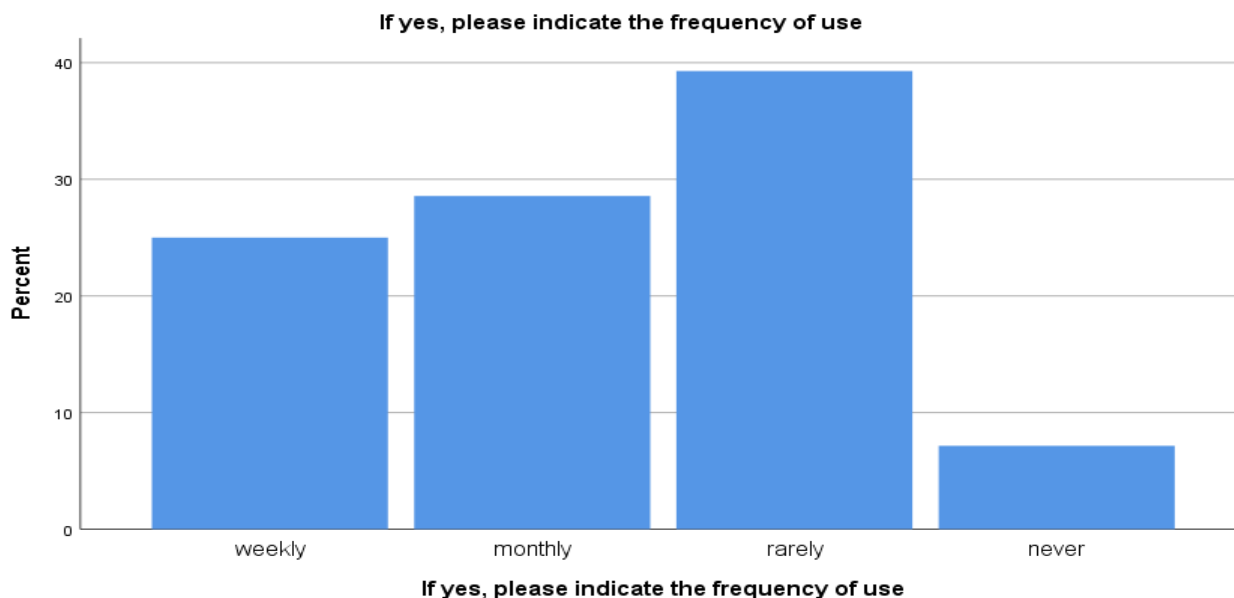


Figure 16: student's frequency of use of ChatGPT and Grammarly

- **Question four:** How would you rate your overall satisfaction with the AI-assisted writing tools you have used?

This question was presented to find out the overall rate of satisfaction with the AI-assisted writing tools that the students have used in their learning process 18 students stated that they were satisfied making up (64.3%) while 8 chose neutral making up (28.6%) and 1 student stated very satisfied making up (3.6%) on the other hand 1 student said very dissatisfied making up (3.6%).

Table 12: the overall rate of satisfaction with the AI-assisted writing tools

Answers	very satisfied	satisfied	neutral	very dissatisfied
Students number	18	8	1	1
Total percentage	64.3%	28.6%	3.6%	3.6%

✓ Part three: the Impact on Writing Proficiency

Question one: Do you believe that AI-assisted writing tools can improve your writing proficiency? If so, how?

By this question, the researchers seek to find out the possibility that AI-assisted writing tools can improve their writing proficiency and 26 students stated their agreements making up to (92.9%) while only 2 students didn't see how it can improve their writing proficiency making up to (7.1%) these findings are described in the following table:

Table 13: students' belief that AI-assisted writing tools can improve their writing proficiency.

Answers	yes	No
Student number	26	2
%	92.9%	7.1%

- If so, how?

The examiner asked this question to understand precisely how participants believe that AI-assisted writing tools can improve their writing proficiency, 24 participants answered this question by giving different answers while some gave the same answer, and only 4 participants chose not to answer this question.

Table 14: how students believe that AI-assisted writing tools can improve their writing proficiency

Positive answers	Negative answers	Chose not to answer
- Because it is more helpful x2 - Because it has the potential to improve writing proficiency by providing instant feedback x2 - Because of the immediate correction of errors x4 - I believe that it did - By giving alternative ideas so that individuals can work on - It can improve writing proficiency x3 - Because it leads you to develop your writing skills x4 - It can provide vocabularies and help you learn new words x2 - Because it develops and reproduces useful existing knowledge - It helps with grammar x3 - In The process of classroom assessment, students learn to take learning by implementing - By providing professional steps to reach it	- No not at all	4 students chose not to answer

- **Question two:** How motivated do you feel to engage with writing tasks when using AI-assisted writing tools?

Substantially, 21 students were motivated to engage with writing tasks when using AI-assisted writing tools presenting a total of (75%) other 5 students were very motivated making up (17.9%) and only 2 students stated that they were not motivated with only (7.1%) these results are described in following the table and graph:

Table 15: students' motivation to engage with writing while using AI-assisted writing tools.

Answers	Very motivated	Motivated	Unmotivated
Students number	5	21	2
%	17.9 %	75 %	7.1 %

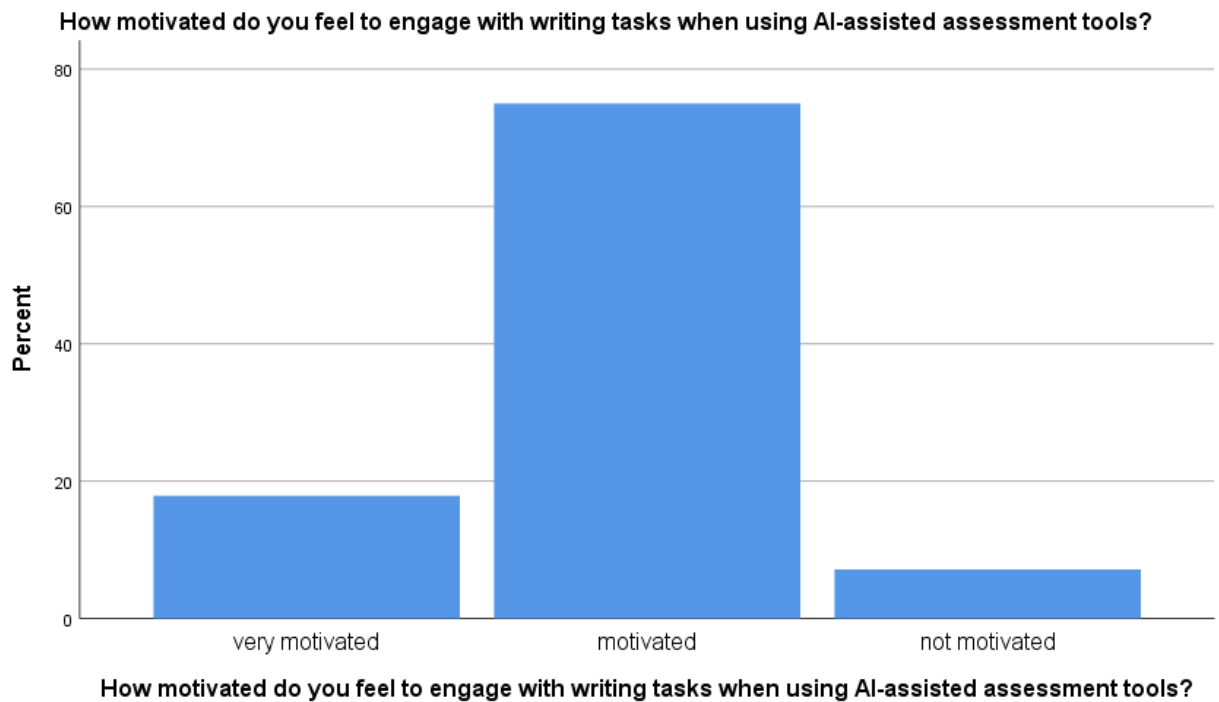


Figure 17: students' motivation to engage with writing while using AI-assisted writing tools

- **Question three:** Do you believe that using AI-assisted writing tools has helped you improve your writing skills?

As presented in the following table and graph for this question significantly, the majority of the participants 24 declared that yes it did help to improve their writing skills making up (85.7%) while the other 4 participants stated that no it did not make up (14.3%) the question was an open-ended question which means the participants were not chained with specific answers.

Table 16: students' belief that using AI-assisted writing tools has helped them improve their writing skills.

answers	yes	No
Participants	24	4
%	% 85.7	%14.3

Do you believe that using AI-assisted assessment has helped you improve your writing skills?

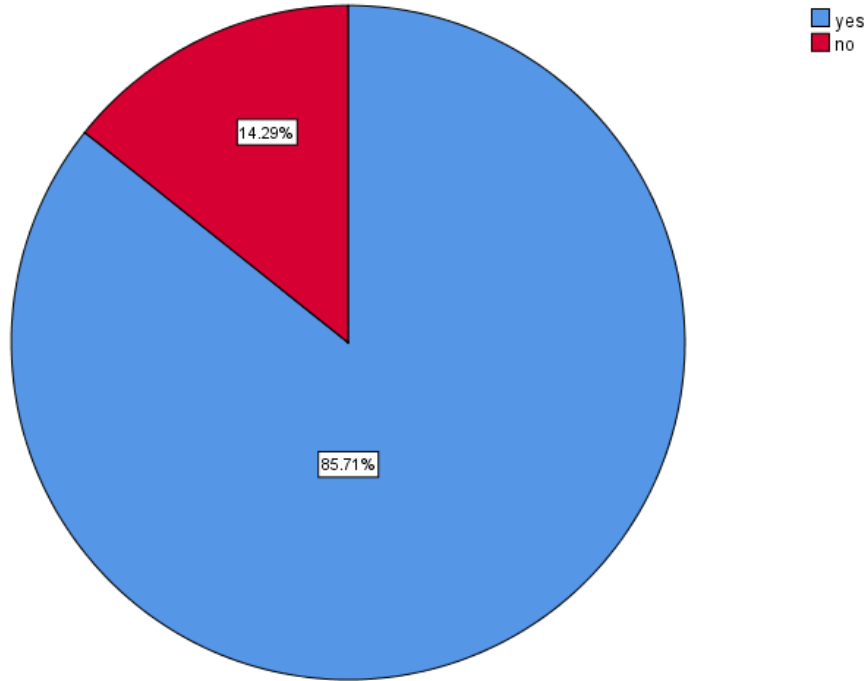


Figure 18: students' belief that using AI-assisted writing tools has helped them improve their writing skill

- If yes, how?

The researcher asked the participants to justify their answers, and he collected different justifications, which are presented in the following table:

Table 17: students' suggestions of how AI-assisted writing tools have helped them improve their writing skills.

Positive suggestions	Negative suggestions	No answer
- it helped me to write essays x2 - it helped me evolve at my own pace - it is helpful for acquiring the language - it gives me ideas and I go deeper processing them - correcting my writing errors x2 - seeing the words generated by AI helps me memorise it - helps you to correct your grammar mistakes x2 - it guides you and gives you feedback -it customized learning paths, AI tools adapt to individual learning styles - shows you different styles of writing and some professional designs of essays - learn how to write words in the correct form - it can give personal suggestions and feedback avoiding mistakes - gain time - sometimes it makes the rules and tasks - fast and easy - learn from mistakes and analyze examples of good writing - offering tips and correcting errors - develops your ideas	- I don't believe so	- 5 participants chose not to answer

✓ **Part four: Usage Preference and Recommendations**

- **Question one:** Are there any additional features or improvements you would like to see in AI-assisted writing tools?

This question was given to find out and discover if the participants have any additional features or improvements they would like to see in AI-assisted writing tools, different answers and points of view given by the participants are presented in the following table:

Table 18: students' opinions on additional features or improvements they would like to see in AI-assisted writing tools.

Positive suggestions	Negative suggestions	No answers
- vocals assisted feature. - advanced grammar and style, contextual feedback integration. - offering a range of tools. - using speech instead of typing would be great. - look for opportunities that build your skills as you go along in writing assignments.	- I want it to disappear because it ruins people's minds.	- 78.6% chose not to answer.

✓ **Part five: Additional Comments**

- **Question one:** Please share any additional thoughts, experiences, or suggestions regarding the use of AI-assisted language assessment in enhancing writing proficiency in EFL education.

As for this question, it was necessary to be asked to let the participants have free comments on the topic that is being studied, unfortunately, 16 participants chose not to answer the question while the other 12 participants gave their point of view on the question and what they think about it, the results will be provided in the following table:

Table 19: students' additional comments and experiences regarding the impact of AI-assisted writing tools in enhancing writing proficiency

Participants answer	Chose not to answer
- teachers' obligation falls on balancing integrating AI feedback with the human one since humans are complex. - students should put some effort not only copying everything from AI. - students can use AI and reformulate what they generate. - I would like to tell you that these AI-assisted language assessments have helped me a lot to develop my language skills. - users may appreciate a user-friendly interface compatibility with various writing styles. - it helped me consider and learn new knowledge. -reading and searching and rewriting and watching movies with English sub. - AI apps can teach by making activities. - I hate how we always rely on it rather than making any effort to search or discover we became lazy. - the use of AI shouldn't be locked down but rather a regulated use of AI tools should be advised. - evaluating statement learning can provide different options including plagiarism detection, self-assessment, and classroom polling. - mainly AI tools always offer some ideas with the same structure and the same way of stating words in this sense it will hinder the learner's creativity.	- 16 participants.

2.7. suggestions and limitations:

2.7.1. suggestions:

Incorporating AI tools like ChatGPT and Grammarly as supportive resources alongside traditional teaching methods. These AI tools can assist students in drafting, editing, and refining their writing assignments. I can encourage students to utilize Grammarly for practicing grammar and syntax improvements and leverage ChatGPT for brainstorming sessions and generating ideas and outlines for their writing tasks. By combining AI feedback with personalized feedback from teachers, we can address specific student needs effectively.

Additionally, we should provide training sessions for teachers to familiarize them with AI tools and their potential applications in the classroom. It's important to educate students about the significance of academic integrity and the responsible use of AI tools to avoid plagiarism. We also need to ensure that students understand the privacy implications of using AI tools and how to protect their personal information.

2.7.2. Limitations:

While AI tools offer valuable support for students, it's important to be mindful of potential challenges. Students should be encouraged to use AI tools as aids rather than replacements for independent thinking and writing skills. To ensure equitable outcomes, personalized support and training should be provided to students based on their proficiency and familiarity with technology. Additionally, educators and institutions should prioritize data privacy and security when implementing AI tools. By providing proper guidance and training, students can harness the full potential of AI tools while developing essential critical thinking and writing skills.

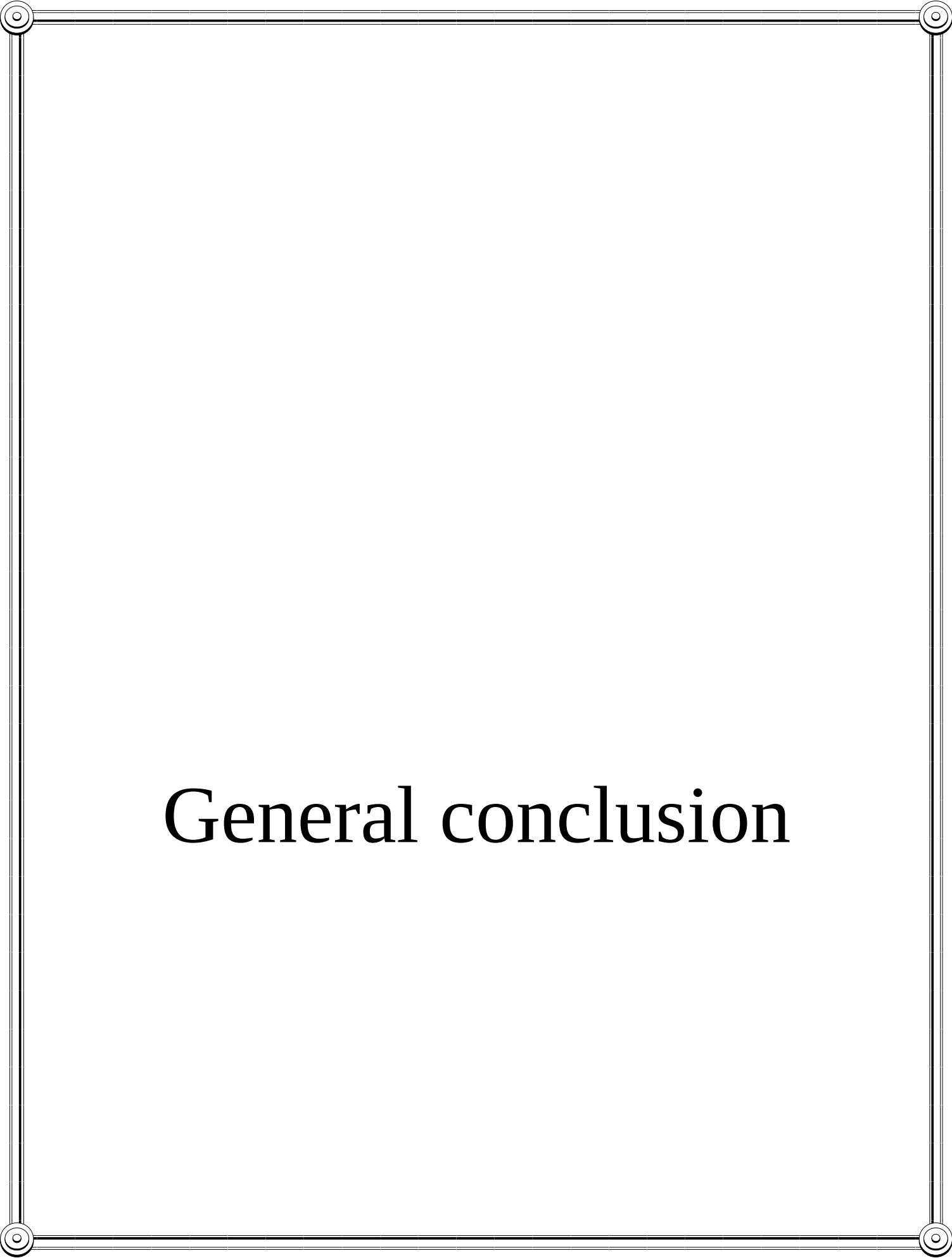
2.8. Discussion and Interpretation of the Main Results:

The main results from each study instrument will be presented about the hypotheses that have previously been proposed in the section that follows:

The teachers' interviews and students' questionnaires have enabled the researcher to collect a large amount of data concerning the impact of ai assisted writing tools in enhancing EFL students' writing proficiency. The aim was to help learners enhance and improve their level, through using the technology of artificial intelligent supported tools as a medium for language development. This is preceded by mentioning and drawing the readers' attention to the three hypotheses developed by the investigator and thus confirming or informing them.

2.9. conclusion:

In conclusion, the analysis of the teacher's interviews and students' questionnaires provided a very precious insight into the impact of using AI-assisted writing tools in EFL education to enhance students writing proficiency in the Algerian university. The findings support fully the hypotheses that were presented suggesting that Students who utilize AI-assisted writing tools such as ChatGPT and Grammarly in EFL education will demonstrate higher levels of motivation compared to those who rely solely on traditional methods and teachers using AI writing tools such as ChatGPT and Grammarly will notice improvements in students' writing accuracy and proficiency and Ethical considerations, such as data privacy and security concerns, will impact the willingness of students to use AI-assisted writing tools in EFL education.



General conclusion

General conclusion

The purpose of this research is to discover how AI-assisted writing tools affect students writing proficiency and their main influence on the learner's motivation, sense of ethical consideration and writing accuracy and proficiency. The English learning process now is developing at a very high speed governments are competing with each other to adopt the most effective way to enhance their learning abilities although the classic way has its positive sides now it is the generation of speed where the applications and the websites that use AI as the main source and engine for it are now the leading tools when it comes to learning process the downloaded apps such as Grammarly which covers topics like grammar, spelling and usage, wordiness, style, punctuation, tone, and even plagiarism checker in addition of its ease of use and free also it can help learners to enhance their writing proficiency and performance, whereas ChatGPT is the most AI site that it is used now to complete a different task where it can provide any topic or answers any question in many ways which means it can provide different versions and writing of the same answer.

Interesting findings were found after the analysis of the student questionnaire and teachers' interviews which confirms that the majority of the voices are for applying these tools to help increase and enhance the level of education in general and the writing performance in a specific way, these tools are found completing each other where ChatGPT doesn't have that significant writing and can have mistakes of words that are not in the perfect position while Grammarly can easily correct that and keep the writing perfect and more suitable.

The data can be analyzed and explained in connection to these hypotheses based on the information supplied in the analysis of teachers' interviews and students' questionnaires, the discussion is summarized as follows:

- ✓ Students who utilize AI-assisted writing tools such as ChatGPT and Grammarly in EFL education will demonstrate higher levels of motivation compared to those who rely solely on traditional methods.

The analysis of the student's questionnaire revealed that (17.9 %) of the students were very motivated and (75 %) were motivated and (7.1 %) were not motivated. These findings confirm the hypotheses that using AI-assisted writing tools such as ChatGPT and Grammarly in EFL education will positively impact higher levels of motivation compared to those who rely solely on traditional methods.

- ✓ Teachers using AI writing tools such as ChatGPT and Grammarly will notice improvements in students' writing accuracy and proficiency. These tools can

identify grammatical errors, suggest vocabulary enhancements, and provide structural feedback, leading to refined writing skills among students over time.

The teacher's interview shows that the majority of the teachers have declared a positive answer when three out of four teachers stated that it can help learners write more efficiently as it can offer corrections, suggestions and feedback. It has the potential to enhance writing proficiency in EFL education by providing students with immediate feedback on their writing, helping them to identify and correct errors more effectively. It is useful for saving energy and time when classifying the mistakes of a large sample of students. While teacher had no idea since she didn't use these tools in the first place.

This analysis confirms that teachers using AI writing tools such as ChatGPT and Grammarly will notice improvements in students' writing accuracy and proficiency.

- ✓ Ethical considerations, such as data privacy and security concerns, will impact the willingness of students to use AI-assisted writing tools in EFL education.

For this hypothesis and according to both of the teacher's interview and student's questionnaires the great majority confirm that they have some concerns about over-dependence on them. there may be concerns about the accuracy and reliability of the feedback provided by these tools. my concern is about ethics and data safety. Additionally, both the teachers and students aligned with the hypotheses that stated that ethical consideration will impact the willingness to use these AI-supported writing tools.

Finally, this work provides a unique look at the world of English learning through AI-assisted writing tools mobile apps or websites and sheds light on where language course apps stand in terms of technology and pedagogy. And the last point is What potential developments in AI-assisted tools could further enhance writing proficiency in EFL education, and how might they address existing limitations?

Bibliography

• Books

- Akerkar, R. (2014). *Introduction to artificial intelligence* (2nd ed.). PHI Learning.
- Baugh, A. C., & Cable, T. (2018). *A history of the English language*. Routledge.
- Barber, C. (1993). *The English language: A historical introduction*. Cambridge University Press.
- Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research* (2nd ed.). Sage Publications.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Sage Publications.
- Crystal, D. (2003). *The Cambridge encyclopedia of the English language*. Cambridge University Press.
- Delong, E. R., & Langley, P. (1981). *Principles of artificial intelligence* (Vol. 1 & 2). Morgan Kaufmann.
- Harmer, J. (2007). *The practice of English language teaching*. Pearson Education.
- Heaton, J. B. (1975). *Writing English language tests*. Longman Group Ltd.
- Hogg, R. M., & Denison, D. (Eds.). (2006). *A history of the English language*. Cambridge University Press.
- Kothari, C. R. (2004). *Research methodology: Methods and techniques* (2nd ed.). New Age International Publishers.
- Kurzweil, R. (2005). *The singularity is near: When humans transcend biology*. Viking.
- Langan, J. (2010). *Exploring writing: Sentences and paragraphs* (2nd ed.). McGraw-Hill.
- Leedy, P. D., & Ormrod, J. E. (2014). *Practical research: Planning and design* (11th ed.). Pearson.
- McCrum, R., Cran, W., & MacNeil, R. (1987). *The story of English*. Penguin Books.
- Minsky, M. (1967). *Finite and infinite machines*. Prentice-Hall.
- Nation, I. S. P. (2009). *Teaching ESL/EFL reading and writing*. Routledge.
- Nunan, D. (2003). *Practical English language teaching*. McGraw-Hill.
- Russell, S., & Norvig, P. (2010). *Artificial intelligence: A modern approach* (3rd ed.). Pearson.
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill-building approach* (7th ed.). Wiley.
- Tarigan, H. G. (1985). *Menulis sebagai suatu keterampilan berbahasa* (Writing as a language skill). Angkasa.
- Yuting, L. (2019). *Design and application of smart English classroom teaching in senior high school* [Master's thesis, Kashgar University].

Journal Articles

- Alastal, M., Aladini, A., Jalambo, M., & Alattal, H. (2022). The impact of using the Padlet application on improving 7th graders' English speaking and deductive thinking skills. *Journal of Educational Technology Development and Exchange*, 15(2), 120-135.
- Barrot, J. (2023). Enhancing academic writing skills and motivation: Assessing the efficacy of ChatGPT in AI-assisted language learning for EFL students. *Frontiers in Education*.
- Chong, D. (2020). Research on artificial intelligence-based English writing blended teaching mode. *Journal of Physics: Conference Series*, 1852, 032018.
- Deng, J., & Lin, Y. (2022). The benefits and challenges of ChatGPT: An overview. *Journal of Education and Learning*, 2, 45-58.
- Dewi, S. (2021). The impact of Grammarly on individuals' writing skills. *Journal of Writing Tools*, 7(2), 112-125.
- Fitriana, A., & Nurazni, N. (2022). The convenience and effectiveness of Grammarly in correcting grammar for EFL students. *Journal of Language Education*, 10(2), 45-58.
- Galuh Puri, A. A. (2023). The use of Grammarly by tertiary English language learners. *English Education Journal of English Teaching and Research*, 12(2), 164-178.
- Hakiki, A. (2021). The role of Grammarly in developing English writing skills. *Journal of Language Education*, 12(3), 87-102.
- Huang, J., & Tan, M. (2023). The role of ChatGPT in scientific communication: Writing better scientific review articles. *American Journal of Cancer Research*, 13, 1148-1154.
- Huy, N. T. (2015). Problems affecting learning writing skills of grade 11 students at Thong Linh High School. *Asian Journal of Education Research*, 3, 54-60.
- Ma, Y., & Siau, K. L. (2018). Artificial intelligence impacts on higher education. *MWAIS 2018 Proceedings*, 42.
- Mubarak, A., & Syafi'i, A. (2020). The impact of Grammarly on students' punctuation use, synonyms, and pronunciation. *Journal of Educational Technology*, 8(1), 112-125.
- Parrot, J. S. (2023). Using ChatGPT for second language writing: Pitfalls and potentials. *Assessing Writing*, 57, 100745.
- Pratama, R. (2020). Students' perceptions of the ease of use and time efficiency of Grammarly. *Journal of Language Learning*, 6(2), 78-91.

Websites

References

- McAdoo, T. (2023, April 7). How to cite ChatGPT. *APA Style Blog*. Retrieved from <https://apastyle.apa.org/blog/how-to-cite-chatgpt>
- OpenAI. (2022, November 14). Sharing & publication policy. Retrieved from <https://openai.com/policies/sharing-publication-policy>
- Ratheeswari, K. (2018). Information communication technology in education. Retrieved from https://www.researchgate.net/publication/325087961_Information_Communication_Technology_in_Education
- Saadeh, H., R. A, A. R., N. S., H. K., S. A., & M. A. (2021). Smartphone use among university students during COVID-19 quarantine: An ethical trigger. *Public Health Journal*. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8350027/>
- Walden University. (n.d.). Guidelines for using AI tools in writing and research. Retrieved from <https://academics.waldenu.edu/artificial-intelligence>

Thesis

- Maachou, S. (2021/2022). *The acquisition of correct English through the applications (Duolingo and Cake)* [Master's thesis, TAHRI MOHAMMED University].

Conference Proceedings

- Chong, D. (2020). Research on artificial intelligence-based English writing blended teaching mode. *Journal of Physics: Conference Series*, 1852, 032018.

Appendices

Appendices 01

The student's questionnaire

This questionnaire aims to gather information on the use and impact of AI-assisted writing tools in enhancing writing proficiency among EFL (English as a Foreign Language) students. Your responses will help us understand the effectiveness and potential improvements for these tools in an educational context. Please answer the questions as accurately and honestly as possible.

Part One: Participants' Background Information

1. **Age:** _____
2. **Gender:** _____
3. **How many years have you been studying English?** _____

Part Two: Usage of AI-Assisted Writing Tools

4. **How often do you write in English for academic purposes?**
 - Always
 - Often
 - Partly
 - Never
5. **How comfortable are you with using technology for language learning purposes?**
 - Very comfortable
 - Comfortable
 - Uncomfortable
6. **Have you ever used AI-assisted writing assessment tools in your language learning? If yes, what are these tools?**
 - Yes:
 - No
7. **Have you used AI-assisted writing tools such as ChatGPT or Grammarly before? If yes, please indicate the frequency of use.**
 - Yes:
 - Weekly

- Monthly
 - Rarely
 - Never
- No
- 8. **How would you rate your overall satisfaction with the AI-assisted writing tools you have used?**
 - Very satisfied
 - Satisfied
 - Neutral
 - Very dissatisfied

Part Three: The Impact on Writing Proficiency

- 9. **Do you believe that AI-assisted writing tools can improve your writing proficiency? If so, how?**
 - Yes: _____
 - No
- 10. **How motivated do you feel to engage with writing tasks when using AI-assisted writing tools?**
 - Very motivated
 - Motivated
 - Unmotivated
- 11. **Do you believe that using AI-assisted writing tools has helped you improve your writing skills? If yes, how?**
 - Yes: _____
 - No

Part Four: Usage Preference and Recommendations

- 12. **Are there any additional features or improvements you would like to see in AI-assisted writing tools?**
 - _____

Part Five: Additional Comments

- 13. **Please share any additional thoughts, experiences, or suggestions regarding the use of AI-assisted language assessment in enhancing writing proficiency in EFL education.**

Appendices 02

The teachers interview

- 1- years of experience (at university)
- 2- Can you describe your experience with teaching English as a Foreign Language (TEFL)?
- 3-How do you currently assess and address writing proficiency among your students?
- 4-What challenges do you typically encounter when teaching writing skills in an EFL context?
- 5-Are you familiar with AI-assisted writing tools such as ChatGPT and Grammarly?
- 6-Have you ever used AI-assisted writing tools in your teaching? If so, what was your experience?
- 7-What do you see as the potential benefits of using AI-assisted tools to enhance writing proficiency in EFL education?
- 8-How do you think AI-assisted writing tools could complement or enhance traditional teaching methods for writing skills?
- 9-What concerns, if any, do you have about integrated AI-assisted tools into your teaching practice?
- 10-How do you think students might respond to using AI-assisted tools to improve their writing skills?
- 11- In your opinion, what role should AI-assisted tools play in the future of EFL education, particularly in improving writing proficiency?