

Mohamed Kheider University of Biskra  
Faculty of Letters and Languages  
Department of the English Language and Literature



# MASTER THESIS

Letters and Foreign Languages  
English Language and Literature  
Sciences of the language

Submitted and Defended by: **Mr. Guettas Saad Eddine**

On: .../..../2025

## **The Role of Artificial Intelligence in Enhancing EFL Learners' Writing Skill: Utilizing ChatGPT as a Tool the Case of Second-Year Master Students at Biskra University**

A dissertation submitted in partial fulfillment of the requirements for a  
Master Degree in English: Sciences of Language

### **Board of Examiners**

Mrs. Djouamaa Houda	<b>(President)</b>	(University of Biskra)
Dr. Zeghdoud Meriem	<b>(Supervisor)</b>	(University of Biskra)
Mr. Zennou Bilal	<b>(Examiner)</b>	(University of Biskra)

Academic Year: 2024- 2025

## **Declaration**

I, Guettas Saaddeddine, hereby declare that this submitted work is my original work and has not previously been submitted to any institution or university for a degree. I also declare that all the cited and quoted sources in this work are duly referenced in the references list. This work was certified and completed at Mohamed Kheider University of Biskra, Algeria.

Certified: Mr. Guettas Saaddeddine, Master student, Section of English.

Signature: \_\_\_\_\_

## **Dedication**

Completing a master's thesis is one of the most challenging and rewarding milestones of academic life. It demands persistence, patience, and a great deal of inner strength.

I dedicate this thesis to my beloved family, whose unconditional love, endless support, and constant encouragement have been the foundation of my success. Their sacrifices and belief in me have given me the strength to keep going, even in the most difficult times.

I also extend my deepest gratitude to everyone who stood by me throughout this journey friends, teachers, and colleagues whose encouragement, advice, and kindness made a difference, whether in big ways or small.

Thank you all for being part of this path.

## Acknowledgements

In the name of Allah, the Most Gracious, the Most Merciful.

First and foremost, I offer my deepest praise and gratitude to Allah for granting me the strength, guidance, and opportunity to embark on this profound journey of knowledge.

Without His blessings, this achievement would not have been possible. My faith has been my pillar of strength, sustaining me through the challenges and triumphs of this academic endeavor. Alhamdulillah.

I am immensely grateful to my supervisor, **Dr. Zeghdoud Meriem**, for her invaluable guidance, expertise, and encouragement. Her unwavering support and insightful feedback have been instrumental in shaping the direction and quality of this research. I consider myself truly fortunate to have worked under her mentorship.

I would also like to extend my heartfelt thanks to the members of my thesis committee, **Mrs. Djouamaa Houda** and **Mr. Zennou Bilal** for their time, expertise, and valuable contributions to the evaluation of this work.

To my beloved family: thank you for your unconditional love, understanding, and endless encouragement. Your unwavering belief in my abilities has given me the strength to persevere through the most difficult moments.

Lastly, I am grateful to all those who supported me friends, colleagues, and teachers your kindness and words of encouragement have truly made a difference.

Thank you all.

## Abstract

This study explores the effectiveness of ChatGPT, an AI-powered language model, enhancing the writing skill of English as a Foreign Language (EFL) learners. This study investigates how ChatGPT can address common EFL writing challenges namely grammatical accuracy, textual coherence, and lexical variety by providing real-time, context-sensitive feedback. Through a descriptive study involving 30 Master 2 EFL students at the University of Biskra, the study evaluates the perceived impact of ChatGPT on learners' writing performance and their attitudes toward AI-assisted writing instruction. Findings revealed that students who used ChatGPT demonstrated improvements in grammar, organization, and vocabulary usage. Furthermore, learners reported positive experiences with the tool, highlighting its role in fostering autonomy, motivation, and self-editing skills. The study concludes that ChatGPT can serve as a valuable supplementary aid in EFL writing instruction when integrated thoughtfully alongside traditional pedagogical methods.

**Keywords:** EFL writing; ChatGPT, artificial intelligence; grammar accuracy; writing coherence; vocabulary enhancement.

## List of Abbreviations and Acronyms

- **AI:** Artificial Intelligence
- **CALL:** Computer-Assisted Language Learning
- **TELL:** Technology-Enhanced Language Learning
- **NLP:** Natural Language Processing
- **ML:** Machine Learning
- **ITS:** Intelligent Tutoring Systems
- **RLHF:** Reinforcement Learning from Human Feedback
- **IELTS:** International English Language Testing System
- **TOEFL:** Test of English as a Foreign Language
- **L1:** First Language (Mother Tongue)
- **L2:** Second Language

## List of Tables

<b>Table 01: Lexical Variety Before and After ChatGPT Interaction .....</b>	<b>48</b>
<b>Table 02: Students' Perceptions of ChatGPT's Support with Grammar Correction .....</b>	<b>63</b>
<b>Table 03: Student Perceptions of Grammar Rule Understanding via ChatGPT Explanations....</b>	<b>65</b>
<b>Table 04: Student Confidence in Using Correct Sentence Structures After ChatGPT Use.....</b>	<b>66</b>
<b>Table 05: Student Perceptions of Grammatical Error Reduction Through ChatGPT Use.....</b>	<b>69</b>
<b>Table 06: Perceptions of ChatGPT's Role in Revising Verb Tenses, Articles, and Prepositions ...</b>	<b>71</b>
<b>Table 07: Student Perceptions of Logical Idea Organization via ChatGPT .....</b>	<b>73</b>
<b>Table 08: Student Perceptions of ChatGPT's Impact on Paragraph Transitions .....</b>	<b>74</b>
<b>Table 09: Students' Perceptions of Paragraph Structure Awareness Through ChatGPT .....</b>	<b>76</b>
<b>Table 10: Student Perceptions of Improved Writing Flow via ChatGPT .....</b>	<b>77</b>
<b>Table 11: Student Perceptions of Tone and Purpose Consistency with ChatGPT.....</b>	<b>79</b>
<b>Table 12: Students' Perceptions of Vocabulary Expansion with ChatGPT .....</b>	<b>80</b>
<b>Table 13: Students' Perceptions of Lexical Precision Support via ChatGPT .....</b>	<b>82</b>
<b>Table 14: Student Perceptions of Vocabulary Acquisition Through ChatGPT .....</b>	<b>83</b>
<b>Table 15: Student Perceptions of Academic Word Choice Improvement Through ChatGPT .....</b>	<b>85</b>
<b>Table 16: Student Confidence Using Advanced Vocabulary After ChatGPT Use.....</b>	<b>86</b>
<b>Table 17: Students' Perceptions of Overall Writing Improvement via ChatGPT .....</b>	<b>88</b>
<b>Table 18: Student Motivation to Write in English After ChatGPT Use .....</b>	<b>89</b>
<b>Table 19: Student Perceptions of Writing Efficiency After ChatGPT Use.....</b>	<b>91</b>
<b>Table 20: Frequency of Regular ChatGPT Use for Writing Improvement.....</b>	<b>92</b>
<b>Table 20: Student Willingness to Recommend ChatGPT for Writing Support.....</b>	<b>94</b>

## **List of Figures**

**Figure 01: Operational Flowchart of ChatGPT ..... 39**

## **List of Appendices**

**Students' Questionnaire ..... 104**

## Table of Contents

<b>Declaration .....</b>	<b>I</b>
<b>Dedication.....</b>	<b>II</b>
<b>Acknowledgements .....</b>	<b>III</b>
<b>Abstract .....</b>	<b>IV</b>
<b>List of Abbreviations and Acronyms.....</b>	<b>V</b>
<b>List of Tables: .....</b>	<b>VI</b>
<b>List of Figures: .....</b>	<b>VII</b>
<b>List of Appendices: .....</b>	<b>VIII</b>

## General Introduction

<b>Background of the Study .....</b>	<b>1</b>
<b>Statement of the Problem.....</b>	<b>2</b>
<b>Research Questions.....</b>	<b>3</b>
<b>Research Hypothesis.....</b>	<b>3</b>
<b>Research Significance.....</b>	<b>3</b>
<b>Operational Definitions of Terms.....</b>	<b>4</b>
<b>Review of Related Literature.....</b>	<b>5</b>
<b>Research Methodology .....</b>	<b>7</b>
<b>Research Design.....</b>	<b>7</b>
<b>Participants .....</b>	<b>7</b>
<b>Data Collection Tool .....</b>	<b>7</b>
<b>Population and Sampling.....</b>	<b>8</b>
<b>Population .....</b>	<b>8</b>
<b>Sampling Technique .....</b>	<b>8</b>
<b>Sample Size.....</b>	<b>8</b>
<b>Structure of the Dissertation: .....</b>	<b>9</b>

## Chapter One: The Role of Writing in EFL Education

<b>Introduction .....</b>	<b>11</b>
<b>1. Definition and Importance of Writing Skill .....</b>	<b>12</b>
<b>2. Assessment of writing.....</b>	<b>14</b>
<b>3. Components of Effective Writing in EFL.....</b>	<b>17</b>
<b>3.1 Grammatical Accuracy .....</b>	<b>17</b>
<b>3.2 Coherence and Organization .....</b>	<b>19</b>
<b>3.3 Vocabulary Use and Lexical Variety .....</b>	<b>21</b>
<b>4. Effectiveness of ChatGPT in Enhancing EFL Writing .....</b>	<b>23</b>
<b>4.1 Grammatical Accuracy .....</b>	<b>23</b>
<b>4.2 Coherence and Logical Organization .....</b>	<b>25</b>
<b>4.3 Vocabulary and Lexical Variety .....</b>	<b>27</b>
<b>Conclusion .....</b>	<b>29</b>

## Chapter Two: Integrating ChatGPT in EFL Writing Instruction

<b>Introduction .....</b>	<b>32</b>
<b>1. The Foundations of Artificial Intelligence in Education .....</b>	<b>34</b>
<b>1.1 Definition and Historical Context of AI.....</b>	<b>34</b>
<b>1.2 AI Capabilities in Educational Settings: NLP, ML, and Automated Feedback.....</b>	<b>35</b>
<b>1.3 Natural Language Processing (NLP) .....</b>	<b>35</b>
<b>1.4 Machine Learning (ML) .....</b>	<b>35</b>
<b>1.5 Automated Feedback Systems .....</b>	<b>36</b>
<b>2. Advantages and Limitations of AI in Education.....</b>	<b>36</b>
<b>3. The Emergence of ChatGPT as an Educational AI Tool .....</b>	<b>37</b>
<b>3.1 Development Background of ChatGPT.....</b>	<b>37</b>
<b>4. Technical Overview: How ChatGPT Operates and Generates Responses.....</b>	<b>37</b>
<b>5. Capabilities Relevant to Language Learning and Writing Instruction.....</b>	<b>40</b>
<b>6. ChatGPT's Role in Addressing Specific EFL Writing Challenges.....</b>	<b>41</b>
<b>6.1 Practical Assistance in Grammar.....</b>	<b>41</b>

<b>7. Practical Assistance in Coherence and Organization.....</b>	<b>44</b>
<b>7.1 Restructuring Paragraphs and Improving Idea Flow.....</b>	<b>44</b>
<b>7.2 Suggesting Transitions and Enhancing Cohesion.....</b>	<b>45</b>
<b>8. Empirical Validation of ChatGPT's Coherence Support.....</b>	<b>46</b>
<b>8.1 Simulated Interaction: Coherence Enhancement.....</b>	<b>47</b>
<b>8.2 Practical Assistance in Vocabulary Enhancement.....</b>	<b>48</b>
<b>8.3 Encouraging Lexical Variety through Revisions .....</b>	<b>49</b>
<b>8.4 Empirical Support for Lexical Development with ChatGPT .....</b>	<b>50</b>
<b>9. Ethical Considerations .....</b>	<b>51</b>
<b>Conclusion .....</b>	<b>52</b>

## **Chapter Three: Analysis and Discussion of the Results**

<b>Introduction .....</b>	<b>55</b>
<b>1. Research Design .....</b>	<b>55</b>
<b>2. Population and Sampling.....</b>	<b>56</b>
<b>3. Research Context.....</b>	<b>57</b>
<b>4. Research Instrument (Questionnaire) .....</b>	<b>59</b>
<b>5. Data Collection and Administration Procedure .....</b>	<b>60</b>
<b>6. Questionnaire Results and Analysis.....</b>	<b>62</b>
<b>6.1 Grammatical Accuracy .....</b>	<b>62</b>
<b>6.2 Improving Coherence Through Logical Idea Organization .....</b>	<b>70</b>
<b>6.3 Vocabulary Development and Lexical Variety .....</b>	<b>79</b>
<b>6.4 Overall Writing Quality and Student Perceptions .....</b>	<b>86</b>
<b>6.5 General Attitudes Toward ChatGPT Use .....</b>	<b>91</b>
<b>7. Student Experiences with ChatGPT in Improving Writing .....</b>	<b>94</b>
<b>8. Challenges Experienced When Using ChatGPT for Writing .....</b>	<b>95</b>
<b>9. Perceived Improvements in Grammar, Coherence, and Vocabulary .....</b>	<b>97</b>
<b>9. Discussion of Major Findings .....</b>	<b>99</b>
<b>Conclusion .....</b>	<b>101</b>

## **General Conclusion**

**General Conclusion .....** **104**

**Pedagogical Implications and Recommendations .....** **105**

**Appendices**

**Résumé**

**الملخص**

# General Introduction

## Background of the Study

Many people think writing is one of the most difficult abilities for EFL students to acquire. Certainly, encoding coherent, logical messages in an orderly succession requires much more than a knowledge of grammar, a vocabulary range, and a sentence structure. Writing seems to be rather downplayed or undervalued in EFL curriculums given its maybe unmatched value in academic and professional environments. A lack of room for practice in the classroom, high student-teacher ratios, and an increased emphasis on listening and speaking in traditional pedagogical approaches all contribute to this bias. Many EFL students therefore have little opportunity to significantly improve their writing ([Jamoom, 2021](#)).

Writing presents particular difficulties for EFL students. These consist of language obstacles, trouble in organizing ideas, and a lack of confidence in their skills. Furthermore, teachers' heavy workloads and the sheer number of students make it difficult for them to offer prompt, individualized comments ([Al-Khasawneh, 2010](#)). This lack of targeted support can hinder students from overcoming their writing difficulties, leaving them frustrated and demotivated.

Recent developments in artificial intelligence have brought about tools such as ChatGPT, which provide encouraging assistance for EFL students trying to improve their writing abilities. By giving students real-time comments on grammar, vocabulary, and sentence structure, ChatGPT helps them improve their writing outside of conventional classroom environments. This quick help tackles typical problems in EFL writing instruction, including lack of individualized feedback and limited classroom time. ChatGPT is a great tool for students who want to enhance their writing ability on their own since it helps them to learn on their own ([Xiao, Zhu, & Wen, 2025](#)).

Although many people recognize the possibilities of artificial intelligence in language acquisition, its particular use in EFL writing teaching stays underexplored. Current study tends to emphasize the

general features of artificial intelligence tools rather than their direct influence on writing competency. But, studies coming out show that especially in terms of grammatical correctness, coherence, and vocabulary use, tools like ChatGPT can greatly improve the writing results of EFL students. For instance, a study by (Mahapatra, 2024) demonstrated that integrating ChatGPT as a formative feedback tool led to notable improvements in students' academic writing skill. Similarly, research by (Song & Song., 2023) revealed that EFL students who used ChatGPT showed better writing motivation and writing abilities than those who did not. These results imply that focused studies on AI-assisted writing teaching might provide insightful analysis on how to maximize the writing competency of EFL students.

## **Statement of the Problem**

Writing is among the most challenging skills for EFL learners since it requires command of grammar, vocabulary, and coherence. Though important in academic and professional contexts, writing often gets less attention in EFL courses, which usually emphasize listening and speaking. Apart from this curricular imbalance, big class sizes, limited teaching time, and a lack of quick and effective feedback also help to explain the slow improvement of students' writing abilities. EFL students in this environment especially battle with grammar and sentence structure, lack of opportunities for meaningful and sustained writing practice, and inadequate feedback failing to address personal learning requirements. These issues can especially hinder the development of basic writing skill in terms of grammatical correctness, logical structure of writings, and appropriate and varied vocabulary use.

The increasing use of artificial intelligence tools such as ChatGPT provides a possible solution to these long-standing issues. ChatGPT offers a hopeful replacement for traditional writing help with its ability to provide fast, automated, customized comments. It can help students identify and correct grammatical errors, clarify the logical flow of their ideas, and expand their vocabulary in context. Still, even if language education artificial intelligence programs are growing, their specific impact on the basic

components of writing grammar, coherence, and vocabulary use remains underexplored. This study intends to close this gap by examining how ChatGPT affects EFL students' writing performance in these three key areas as well as their views on incorporating artificial intelligence tools into their education.

## **Research Questions**

- To what extent does ChatGPT impact the grammatical accuracy, coherence, and vocabulary use in EFL learners' writing?
- What are EFL learners' perceptions towards ChatGPT as a tool for enhancing their writing skill?

## **Research Hypothesis**

- If EFL learners use ChatGPT as a writing aid, their overall writing skill will improve in terms of accuracy, coherence, and lexical richness.

## **Significance of the Study**

By investigating the possibilities of artificial intelligence tools like ChatGPT to assist students and teachers, this paper tackles important issues in EFL writing instruction. Its importance is in the following:

- **EFL Learners:** The findings will help learners understand how ChatGPT can supplement their learning by providing immediate feedback and enhancing their writing skill.
- **EFL Instructors:** The study will offer insights into how AI tools can be integrated into the classroom to improve teaching efficiency and effectiveness.
- **Educational Institutions:** Results will inform institutions about the value of adopting AI-enhanced learning solutions to address resource constraints and improve learning outcomes.

- **Researchers and Developers:** The findings will contribute to the growing body of research on AI-assisted language learning and guide future improvements in AI tools for education.

Additionally, the study highlights the broader implications of AI in education, including its potential to create accessible and scalable learning solutions for diverse learners worldwide.

## Operational Definitions of Terms

- **Artificial Intelligence (AI):** In this work, Artificial Intelligence refers to computer systems, like ChatGPT, having the ability to undertake tasks that require human intelligence, such as processing, generating, and comprehending natural language ([Russell & Norvig, 2021](#)).
- **ChatGPT:** ChatGPT is an artificial intelligence model of language developed by OpenAI to generate human-like language. In this investigation, it is utilized as a tool for writing, offering EFL learners immediate feedback in terms of grammar, coherence, and usage of vocabulary in order to develop their writing competencies ([OpenAI, 2023](#)). In the present study, ChatGPT is used by second year Master students at Biskra university.
- **Writing skill:** In this study, writing skill refers to the ability of EFL learners to produce written texts that are grammatically accurate, logically coherent, and lexically appropriate. This includes the capacity to organize ideas effectively, apply correct language structures, and use suitable vocabulary within academic and communicative contexts. Writing skills are treated as core indicators of a learner’s proficiency and development in the target language. With the integration of AI-powered tools in education, writing ability is increasingly being supported by digital feedback systems, which help learners improve not only surface-level correctness but also overall text quality ([Song & Song., 2023; Jasim, Musa, Abood, & Salman, 2024](#)). In the present

study, the focus is on the academic writing development of Master 2 students, particularly in how their writing is shaped through interaction with AI-generated feedback.

## **Review of Related Literature**

Over the last twenty years, the use of technology in language teaching has changed dramatically. Hubbard (2009) provided a critical overview of Computer-Assisted Language Learning (CALL), highlighting both its instructional potential and the importance of thoughtful implementation in actual classroom practice. Examining the writing issues Arab postgraduate students at Universiti Utara Malaysia encountered, Al-Khasawneh (2010) found a disparity in academic writing ability resulting from variations in language structure and teaching quality. With a particular emphasis on multimedia tools and computer-mediated communication.

Reflecting on how technology changes predict the future of language instruction, Kessler (2018) stated that although automation and artificial intelligence provide hopeful tools, teachers must ensure their careful and pedagogically appropriate integration. A systematic study by Zawacki-Richter, Marín, Bond, and Gouverneur (2019) on the application of artificial intelligence in higher education found that although AI applications are increasing, the role of teachers is still under-researched and sometimes overlooked in the design of AI-based educational tools. Jamoom (2021) identified key obstacles for EFL students in writing improvement as vocabulary development and grammatical accuracy. Although their work was not solely on language learning, Russell and Norvig (2021), in their comprehensive book on artificial intelligence, provided the theoretical foundation for understanding AI's applications in education.

Woo and Choi (2021) offered a systematic review of AI-based language learning tools, acknowledging their potential to enhance student engagement and personalized learning despite inconsistent empirical evidence. OpenAI (2022) introduced ChatGPT as a tailored language tool,

promoting its use for personalized learning assistance. OpenAI expanded on this in 2023, demonstrating ChatGPT's effectiveness in conversation-based learning environments. Wang, Hassan, Pyng, and Ye (2023) explored the development and validation of an international student satisfaction model in online learning environments, emphasizing the role of interactive elements in improving learner engagement and outcomes. Their findings highlight the importance of adapting instructional strategies to meet the evolving needs of students in digitally mediated educational contexts. In particular, the study underscores how meaningful interaction and feedback often facilitated through technology can significantly enhance learning experiences, especially for international and EFL students navigating writing-intensive coursework.

Using a quasi-experimental approach, Lee and Park (2023) empirically assessed ChatGPT as a feedback tool for enhancing EFL writing and found that students who received AI-generated feedback showed notable gains in grammatical accuracy and content coherence. They also noted, however, that chatbot feedback sometimes lacked contextual and cultural relevance an important concern in EFL instruction. Using a mixed-methods approach, Song and Song (2023) investigated ChatGPT's influence on EFL students' writing motivation and abilities, revealing a positive correlation between ChatGPT usage and improvements in both writing quality and learner confidence.

More recently, Musa, Aboud, and Rawdhan (2024) examined how AI-powered tools influence EFL writing development. Their study discusses both the pedagogical benefits such as immediate feedback and enhanced learner autonomy and potential drawbacks, including ethical concerns and the risk of over-reliance on AI. Alade and Afuwape (2024) looked into whether artificial intelligence tools like ChatGPT help or hinder communication between teachers and students in higher education, concluding that AI can enhance communication when used to complement, rather than replace, human interaction. Mahapatra (2024) conducted a mixed-methods intervention study involving ESL students and found that

ChatGPT significantly improved academic writing skills by enhancing structure, vocabulary, and motivation. Poláková and Ivenz (2024) also investigated the effects of ChatGPT feedback on EFL writing, discovering that consistent AI-generated feedback fostered learners' self-editing and revision abilities.

Finally, Xiao, Zhu, and Wen (2025) conducted a scoping study on generative AI-powered writing instruction in EFL education, mapping current practices and identifying a shift toward hybrid AI-human instructional models that emphasize feedback loops and learner autonomy.

## **4. Research Methodology**

### **4.1 Research Design**

This study will use a descriptive research method to explore the effectiveness of ChatGPT in enhancing EFL learners' writing competencies. It focuses on describing learners' self-reported improvements in grammatical accuracy, coherence, and vocabulary usage, as well as their attitudes and experiences using ChatGPT as a writing aid.

### **4.3 Data Collection Tool**

Questionnaire: A semi-structured questionnaire will be distributed to the 30 participants to gather data on their perceptions, attitudes, and experiences with ChatGPT as a writing aid. The questionnaire will include:

- Closed-ended Questions: To measure specific aspects of ChatGPT's impact on writing skill, such as grammar, coherence, and vocabulary.
- Likert-Scale Items: To assess participants' satisfaction and attitudes toward ChatGPT.

- Open-Ended Questions: To capture qualitative insights into participants' experiences and suggestions.

## **4. Population and Sampling**

### **4.1 Population**

The population for this study consists of 140 Master EFL students from the University of Biskra. These students are currently enrolled in academic English courses and are actively developing their writing skill as part of their program requirements. From this population, 30 Master 2 students were chosen because they possess a sufficient level of English proficiency and academic experience, making them suitable for evaluating the use of AI-powered feedback tools such as ChatGPT in writing enhancement.

### **4.2 Sampling Technique**

A purposive sampling technique will be used to select participants. This non-random method ensures that only individuals who meet specific inclusion criteria are selected. The inclusion criteria are as follows:

- Currently enrolled in the Master 2 EFL program at the University of Biskra
- Have previously used ChatGPT for writing tasks
- Willing to participate in the study and complete the questionnaire

### **4.3 Sample Size**

The study will include a total of 30 participants. This number allows for detailed data collection and analysis while remaining manageable for a focused investigation. Limiting the sample to 30 ensures

depth in responses and facilitates a thorough examination of trends and patterns regarding ChatGPT's influence on writing improvement.

#### **4.4 Structure of the Dissertation**

The dissertation will begin with a general introduction that outlines the research context, objectives, significance, and the guiding research questions. The body of the work will be divided into three main chapters:

- Chapter One will focus on writing as a skill in EFL contexts, examining the core components of effective writing namely, grammar, coherence, and vocabulary as well as the common challenges learners face.
- Chapter Two will explore the integration of Artificial Intelligence into language learning, with a particular focus on ChatGPT as an emerging educational tool. It will discuss the role of AI in language instruction and review recent literature on its application in improving writing proficiency.
- Chapter Three will present the research methodology and data analysis. It will describe the research design, participants, instruments used for data collection, and the methods of data analysis.

# **Chapter One: The Role of Writing in EFL Education**

## Introduction

Writing is widely recognized as one of the most challenging skills for English as a Foreign Language (EFL) learners to master. Unlike speaking, which benefits from immediate feedback and contextual cues, writing requires learners to independently generate, organize, and express ideas coherently and accurately. The integration of artificial intelligence (AI) tools into language learning has introduced new dimensions to this challenge. AI-powered writing assistants, such as ChatGPT, Grammarly, and QuillBot, offer immediate feedback on grammar, vocabulary, and structure, potentially aiding learners in developing their writing skills ([Safitri, Dewi, & Ramadhan, 2024](#)).

However, reliance on AI tools also raises concerns about the depth of learning and the development of critical thinking skills. Some studies suggest that over-dependence on AI-generated suggestions may lead to superficial learning, where students accept corrections without fully understanding the underlying rules. Moreover, the lack of personalization in AI feedback can result in writing that lacks the learner's authentic voice. Therefore, while AI tools present valuable opportunities for enhancing EFL writing instruction, it is crucial to balance their use with pedagogical strategies that promote active learning and critical engagement ([Jasim, Musa, Abood, & Salman, 2024](#)).

This chapter attempts a complete survey of what it means to write as a skill within the EFL context. It begins with defining writing and then accentuates its importance in academia and possibly in job situations. It then investigates the main elements of what constitutes "good writing": grammatical correctness, coherence and organization, and lexical diversity. The next part addresses the major obstacles to writing skill development among EFL students—they range from linguistic and cognitive to pedagogical limitations.

The chapter prepares a closer look at how artificial intelligence might be used to solve long-standing issues in EFL writing instruction by anchoring this investigation in empirical studies and theoretical insights. This approach lays the groundwork for the following chapters, which will more closely examine the pedagogical consequences and practical integration of ChatGPT into EFL writing settings.

## **1. Definition and Importance of Writing Skill**

Writing is widely regarded as one of the most complex and essential skills in English as a Foreign Language (EFL) instruction. Unlike speaking, which allows for real-time feedback and interaction, writing requires learners to independently organize their thoughts, apply appropriate grammar and vocabulary, and adhere to genre conventions. This cognitive load becomes even more challenging in a second language context, where students must express nuanced ideas clearly and correctly under academic or institutional expectations. Recent research has emphasized that writing is not merely a mechanical task but a reflective and constructive process that involves critical thinking, planning, and revision (Song & Song, 2023). AI-assisted writing tools, such as ChatGPT, are increasingly being explored for their ability to support these demands by offering contextualized feedback, enhancing learner autonomy, and reducing cognitive strain (Jasim, Musa, Abood, & Salman, 2024). These tools not only improve linguistic accuracy but also help learners shape coherent arguments and better engage with their intended audience, making them particularly valuable in EFL settings.

Apart from its scholarly importance, writing is fundamental to professional communication. Emails, reports, proposals, and documentation all call for unambiguous, efficient written communication in modern offices. Often in English, which is the lingua franca of worldwide business, EFL students hoping to enter international job markets must be skilled in professional writing. Writing is regarded as an essential skill for academic success and future career readiness. According to (Jamoom, 2021, p. 109),

“the student participants are aware of the close connection between developing their writing skill and their success in their current study and in their future academic careers”. This indicates that writing is not only a communicative skill but also a key component of academic and professional identity.

Writing assessments in high-stakes tests like IELTS, TOEFL, and Cambridge evaluations are designed to measure students' ability to organize thoughts, use language accurately, and respond effectively to prompts, reflecting real-world academic and professional demands. The integration of AI tools, such as ChatGPT, into writing instruction has shown promise in enhancing these skills. For instance, a study by ([Song & Song., 2023](#)) demonstrated that AI-assisted language learning significantly improved EFL students' writing proficiency, including aspects like organization, coherence, grammar, and vocabulary. This suggests that AI can serve as both an instructional aid and an evaluative tool in EFL education.

Apart from professional and institutional expectations, writing also promotes intellectual development and personal growth. It enables students to express themselves, structure their thoughts, and reflect on their experiences. For many EFL learners, writing serves as a pathway to build confidence and develop a personal voice in English. Recent research by ([Song & Song., 2023](#)) emphasizes that effective writing instruction especially when supported by AI tools like ChatGPT not only aids language acquisition but also fosters deeper cognitive engagement, critical thinking, and autonomy. Writing supports learners in refining their ideas, expanding their vocabulary, and internalizing grammar through context-rich, purposeful use of language.

Despite its critical role in academic success, writing remains an underemphasized skill in many EFL classrooms. As ([Al-Khasawneh, 2010, p. 03](#)) notes, students “appeared to have many problems when writing in English, like not knowing how to organize their ideas, because it is a new experience for them”. This lack of exposure and structured support means learners often struggle to meet the

demands of academic writing. Contributing factors include insufficient practice, limited vocabulary, and outdated teaching methods that fail to address the real needs of language learners. Moreover, overreliance on traditional instruction and the absence of individualized feedback hinder progress, leaving students underprepared and discouraged when faced with complex writing tasks in academic or professional settings.

EFL teaching has to frame writing as a main element of language acquisition in order to solve these problems. Teachers and schools should see writing as a driver of language competency, not just a byproduct. Students can acquire the abilities and confidence required to write well in English by means of concentrated teaching, scaffolded comments, and chances for significant writing practice. Innovative technologies like artificial intelligence-powered writing assistants also provide fresh routes to augment conventional teaching, therefore allowing students to obtain immediate, tailored feedback outside the classroom. These changes highlight the importance of including writing more completely into EFL instruction since it is a foundation of language mastery and worldwide communication.

## **2. Assessment of writing**

In English as a Foreign Language (EFL) instruction, writing assessment plays a crucial dual role: it measures student proficiency and enhances the learning process itself. With the integration of artificial intelligence tools into writing instruction, assessment is increasingly being used not only to evaluate performance but also to provide real-time, formative feedback. According to ([Song & Song., 2023](#)), AI-assisted platforms like ChatGPT support learners in improving coherence, grammar, and organization through iterative feedback, enabling a more reflective and process-oriented approach to writing. This highlights how writing assessment, when supported by AI, can move beyond static grading to become a dynamic and responsive element of language learning that promotes critical thinking and revision.

EFL writing instruction depends on assessment for a range of important functions. Students use assessments to gauge their language proficiency, while teachers rely on them to identify weaknesses in both linguistic competence and rhetorical development. In well-designed programs, assessment enhances writing ability by setting clear objectives, defining explicit criteria, and delivering personalized feedback. This process is particularly crucial for EFL learners, who may struggle with English writing conventions and require structured guidance to build genre awareness, coherence, and grammatical accuracy. According to (Song & Song., 2023), effective assessment especially when combined with AI-based feedback tools provides the scaffolded support learners need to develop competence in writing across academic genres.

English as a Foreign Language (EFL) instructors use different evaluation approaches, each of which leads to specific educational outcomes. The primary distinction in assessment lies between formative and summative methods. Formative assessment takes place during learning activities and helps students enhance their understanding through ongoing feedback, self-assessment, and subsequent revisions. Evaluation activities in this category often include draft reviews, portfolio assessments, and teacher-student writing conferences. With the integration of AI tools, formative assessment has become more dynamic and accessible, as students can receive instant, automated feedback on grammar, coherence, and organization supporting continuous improvement. In contrast, summative assessments occur at the end of instructional units and are designed to determine how well students have achieved the intended learning outcomes. These typically include final exams, standardized tests, and timed essays. While summative assessments establish benchmarks for performance, formative approaches especially when supported by AI are more effective in fostering sustained skill development over time (Wang, Hassan, Pyng, & Ye, 2023).

The educational setting frequently employs peer evaluation as a standard method for English as a Foreign Language (EFL) writing training. Students conduct evaluations on each other's work through rubrics or structured evaluation questions. Peer assessment promotes independent learning because it allows students to independently evaluate their work based on specific criteria and enhances their ability to understand assessment standards. According to (Topping, 1998), learners who participate in peer review will develop critical reading abilities while internalizing assessment standards which leads to enhanced writing skill in the long run. The implementation of peer assessment faces difficulties because students sometimes deliver feedback that varies in its quality and because learners in certain cultural contexts struggle with giving direct critical feedback to their peers (Topping, 1998).

Effective writing instruction emphasizes a process-oriented approach where feedback and revision are integral to student development. (Jasim, Musa, Abood, & Salman, 2024, p. 84) emphasize this by stating, “AI-powered grammar correction tools reduce the cognitive load of EFL writers and enhance their writing experience by providing immediate feedback and improving various aspects of writing.” This suggests that when learners engage in stages like planning, drafting, and revising complemented by timely, automated feedback they are better equipped to focus on content generation and organization rather than just linguistic accuracy.

### **3. Components of Effective Writing in EFL**

#### **3.1 Grammatical Accuracy**

Grammatical correctness refers to the proper application of language rules governing sentence structure, verb tenses, subject-verb agreement, word order, and other syntactic features. It is a fundamental component of communicative competence in EFL writing. Recent studies on AI-assisted writing tools suggest that grammar is not merely a matter of following rules but serves as a mechanism to enable clear and effective communication. According to (Rahmi, Amalina, Andriansyah, & Rodgers, 2024), AI-generated writing assistants aid learners in correcting grammatical errors and enhancing text cohesion and coherence. Their study indicates that while these tools improve grammatical accuracy, attention must also be paid to content relevance to ensure the intended message is effectively conveyed. Thus, mastering grammar supports both accuracy and clarity, ensuring the writer's message is effectively communicated.

Grammatical problems are among the most frequent challenges students in EFL classes encounter as they work on their writing abilities. Research has shown that AI-based tools such as ChatGPT or Grammarly can help students address common grammatical issues, including verb tense use, article application, prepositions, and complex sentence structures. These challenges often stem from first language (L1) influence, where grammatical patterns differ significantly from English. For example, students from linguistic backgrounds that lack articles or follow different word order rules may struggle with mastering English syntax. By offering immediate, tailored feedback, AI tools can assist learners in identifying and correcting these errors, thus minimizing grammatical interference and improving overall writing clarity (Wang, Hassan, Pyng, & Ye, 2023). Postgraduate EFL students also battled with subject-verb agreement and sentence boundaries, according to (Al-Khasawneh, 2010) which frequently resulted in fragmented or run-on sentences in their scholarly output.

Grammatical issues directly affect the clarity of communication. While minor mistakes might not always hinder comprehension, consistent grammatical errors can confuse the reader and disrupt the flow of the text. In professional and academic settings, such issues may compromise the writer's credibility and obscure the intended message. Writing with frequent grammatical mistakes can signal a lack of language control, distorting the reader's perception of the writer's competence. More importantly, grammatical errors can alter the meaning of a sentence, leading to miscommunication particularly in high-stakes situations such as academic assessments, job applications, or corporate communications. Recent studies have shown that AI-powered grammar correction tools, such as Grammarly and ChatGPT, can significantly improve EFL students' writing accuracy and fluency by providing immediate, personalized feedback and enhancing various aspects of their writing ([Jasim, Musa, Abood, & Salman, 2024](#)).

### 3.2 Coherence and Organization

In the context of English as a Foreign Language (EFL) teaching, effective writing relies heavily on coherence and organization. Coherence refers to the logical progression and clarity of ideas throughout a text, allowing readers to easily understand and follow the writer's message. Writing is not only about grammatical accuracy but also about developing ideas in a structured and purposeful way. Recent developments in educational technology highlight that AI-based writing tools can support learners in organizing their thoughts and maintaining coherence by offering real-time suggestions on sentence transitions and paragraph structure. As noted by ([Marzuki, Widiati, Rusdin, Darwin, & Indrawati, 2023](#)), AI-assisted platforms can help EFL students create more logically connected texts by guiding them to link sentences and paragraphs more effectively, ultimately improving the unity and clarity of their writing.

Logical organization, closely related to coherence, is the process of arranging a piece of writing so that ideas are grouped and sequenced in a manner that promotes clarity and persuasiveness. Usually, a well-organized text has an introduction, body, and conclusion; every paragraph has a distinct topic sentence, supporting information, and suitable transitions. Recent studies have shown that AI-powered writing assistants can help EFL students improve coherence by suggesting appropriate transitions, organizing content more effectively, and reinforcing logical flow. Tools like ChatGPT offer model responses and feedback that make cohesive elements such as conjunctions, pronouns, and transitional phrases more visible and accessible to learners, thereby supporting clearer communication ([Song & Song., 2023](#)). Without these features, writing can seem fragmented and confuse readers about the intended meaning.

Developing paragraphs presents yet another difficulty. Many students struggle to elaborate on concepts, back assertions with facts, or keep a clear concentration inside paragraphs. ([Al-Khasawneh,](#)

2010) noted that EFL students frequently write paragraphs lacking coherence or including irrelevant material, which could mislead the reader and undermine the case. Furthermore, students could find it difficult to logically order their ideas across paragraphs, therefore lacking an obvious argumentative line or narrative thread. Though the individual sentences are grammatically correct, these organizational issues can lead to writing that seems repetitive or fragmented.

Improving coherence and organization requires more than the mechanical teaching of paragraph structures or transitional phrases. Effective instruction should help students understand how to shape their writing based on purpose, audience, and genre. According to (Marzuki, Widiati, Rusdin, Darwin, & Indrawati, 2023), fostering coherence involves engaging learners in activities that promote reflection, planning, and critical thinking. Teachers play a vital role in this process by modeling strong writing, offering guided practice, and providing feedback that addresses not only surface-level errors but also deeper issues related to structure and clarity. In addition, digital tools including artificial intelligence-powered writing assistants allow students to experiment with reorganizing their texts, identify logical gaps, and receive suggestions to improve flow. While these tools can support the development of coherence, their use should be integrated with explicit instruction that helps learners understand the underlying principles of cohesive written communication.

Coherence and structure finally convert a series of sentences into a meaningful, readable, and convincing text. For EFL students, acquiring these abilities is not only important for academic performance but also for becoming confident, independent authors who can properly express their ideas in English.

### 3.3 Vocabulary Use and Lexical Variety

A rich vocabulary is essential for good writing because it lets students communicate their ideas clearly, adjust their tone to fit the situation, and keep readers interested. Using vocabulary in writing goes beyond just having a lot of different words. It also means knowing how to choose and utilize words correctly based on the genre, audience, and aim of the communication. Recent studies show that students' vocabulary knowledge is closely linked to their ability to write compositions that make sense and have meaning. For example, (Karatay & Karatay, 2024) say that AI-based writing tools may assist EFL learners improve their vocabulary by giving them contextual synonyms and usage examples. This helps students appreciate the subtle differences in word choice in various writing circumstances. When used alongside guided teaching, these tools may help you learn language in a more nuanced and flexible way, which is important for writing that takes the audience into account.

Lexical diversity the range and variation of words used in a written text is especially important in academic and professional communication. Writers are expected to demonstrate a command of formal and varied expressions, use discipline-specific vocabulary, and avoid repetition. AI writing tools, such as ChatGPT, can assist learners in expanding their lexical repertoire by offering synonym suggestions, contextual rewording, and exposure to more sophisticated vocabulary. This lexical support not only enhances language proficiency but also strengthens the writer's ability to paraphrase, articulate nuanced ideas, and construct persuasive arguments. In both academic and professional contexts, strong lexical variety contributes to perceived competence, clarity, and credibility (Wang, Hassan, Pyng, & Ye, 2023).

Though it is crucial, vocabulary is still one of the most nagging problems for EFL students. Often, many students use a small number of high-frequency words, so repeating the same fundamental vocabulary across their writing. Even when the grammar is right, this lack of diversity can cause their writings to seem simple or boring. (Jamoom, 2021) claims that lacking vocabulary hinders students'

capacity to express sophisticated ideas, therefore producing unclear or inaccurate language. EFL students also run the risk of misusing words because of misunderstanding of collocations, connotations, or register. These lexical mistakes can change meaning and compromise the general impact of the writing.

Teachers should encourage exercises including reading, paraphrasing, summarizing, and writing in different genres and registers to help lexical diversity grow. Technology also provides interesting tools for vocabulary growth. For example, artificial intelligence writing tools can offer real-time word usage examples in context, recommend synonyms, and point out overused terms. Consistent AI feedback on word choice helped students to become more aware of lexical alternatives and to improve their vocabulary accuracy, according to (Poláková & Ivenz, 2024). These tools should enhance intentional vocabulary instruction ingrained in meaningful writing practice rather than replace it, though.

Most importantly, the main symbols of written language skill are word diversity and lexical diversity, which are beyond compare necessary for conveying oneself effectively in academia and at work. The issue of vocabulary is resolved by a combination of rich input, text manipulation, clear and focused training, and specific and constructive feedback. Teachers can train students to write clearly, flexibly, and elegantly in English by expanding their stock of words.

## 4. Effectiveness of ChatGPT in Enhancing EFL Writing

### 4.1 Grammatical Accuracy

In the context of the proficiency of writing, the accuracy in grammar is difficult for most of the learners of English as a Foreign Language (EFL), with errors in tense, subject-verb agreement, sentence structure, article usage, and many others. In recent times, a new technology called ChatGPT has evolved through which students can get instant feedback to improve their grammatical errors in their writing.

One of the notable advantages of AI in education is its capacity to personalize learning and enhance student-instructor interaction. In their 2024 study, ([Alade & Afuape, 2024](#)) reviewed findings by ([Fan, 2020](#)), who “illustrated how AI could do much more for students than traditional tools,” noting that such tools can “provide personalized learning pathways, improve comprehension, and facilitate better communication between students and instructors” ([Alade & Afuape, 2024, p. 54](#)). This reflects the growing belief that AI can be a powerful asset in fostering engagement and improving educational outcomes.

ChatGPT’s feedback is based on real-life examples and easy-to-understand explanations. For example, when a student writes that “She go to school every day”, the model often recommends the correct sentence “She goes to school every day” and gives an explanation, such as: “The verb needs to be conjugated for third person singular in the present simple tense ([OpenAI, 2023](#))”. This way, it reinforces a rule rather than a result.

The tool also excels in addressing sentence-level structural problems, including run-on sentences, fragments, and issues with clause coordination. For example, a statement such as “Although he studied hard. He failed.” might lead ChatGPT to suggest a revision like “Even though he studied hard, he failed,” as well as to explain that a subordinating conjunction is used to introduce a dependent clause that must

be followed by an independent clause before revising the song. By putting grammar in the context of meaningful writing activities, students can appreciate the interplay between form and function, which corresponds to the idea of “a shift from surface correction to concept-based language revision” (Alade & Afuape, 2024).

Another important thing to talk about ChatGPT is that they can improve many times, it allows users to make some editings if their text was incorrect and get the new advice at this point. That system of the relationship between the user and the system is similar to the process writing to some extent. People can look at the grammatical correctness some alternative option to the hypothesis and get a clear context on the attempt (Poláková & Ivenz, 2024).

Importantly, AI tools like ChatGPT are reshaping educational environments by enhancing both teaching efficiency and learner engagement. These tools can support routine tasks such as grading and feedback, while also personalizing instruction to meet diverse student needs. As noted in the study, “AI has been classified as a tool that has played a significant role in empowering both instructors and students... freeing up valuable time for instructors to focus on more complex and impactful activities” (Alade & Afuape, 2024, p. 47).

However, limitations exist. Occasionally, ChatGPT may overlook advanced or stylistic errors, or suggest corrections that are technically accurate but contextually awkward. (Alade & Afuape, 2024) caution that while AI tools are useful, their reliability varies, especially in specialized fields, noting that “the quality of decision-making these models make is worrisome which makes researchers categorize it as an undependable tool” (Alade & Afuape, 2024, p. 55). This is why the teacher provides support to ensure that the feedback is not only technically valid but also pedagogically appropriate.

## 4.2 Coherence and Logical Organization

Though coherence is the biggest thing that will make a bunch of correct sentences into a text, for ESL (English as a Second Language) writers, coherence is the hardest thing to do. It is not just about grammar, but also knowing how to put an idea together in a paragraph. This is why it is interesting that a recent study shows that ChatGPT can help with this. They saw that, if used well, ChatGPT helped the student to improve paragraph structure, cohesion of ideas, and overall flow.

Coherence the logical flow and connection between ideas is a fundamental component of academic writing. In the context of using AI tools like ChatGPT, learners appear to benefit significantly in this area. According to ([Poláková & Ivenz, 2024, p. 06](#)), “students demonstrated strengths in aspects such as the inclusion of key information... and the use of passive voice,” with additional improvements observed in “integration of linking words and the use of reporting verbs”. These findings indicate enhanced cohesion and coherence in students’ revised writing after engaging with ChatGPT feedback.

One of ChatGPT's notable features is its capacity to identify incoherent or disjointed progressions within a paragraph and suggest reorganization. For example, if a writer presents supporting evidence before stating the main idea, ChatGPT might recommend introducing the main point first to maintain logical flow. This real-time structural coaching aids learners in understanding the components of a well-structured paragraph, including a clear topic sentence, development, supporting details, and an appropriate conclusion ([Abdi, Ananta, & Nurbatra, 2024](#)).

Moreover, ChatGPT assists learners in effectively using transition words to link ideas. EFL students often struggle with such expressions, either misusing them or omitting them entirely. ChatGPT can suggest suitable transition words like "furthermore," "in contrast," "as a result," and "for example," and explain their function within the text. For instance, when reviewing a student's essay, ChatGPT

might advise: "To improve the flow between these two paragraphs, consider using a transition word such as 'However' to indicate a contrasting viewpoint." This guidance helps students enhance the coherence of their arguments and ensures readers can follow their line of reasoning (Junfei Li & Whipple, 2023).

In terms of paragraph development and structure, ChatGPT provides valuable support. EFL learners often produce underdeveloped or disorganized paragraphs that may contain multiple unrelated points or lack a clear topic sentence. In such cases, ChatGPT might suggest: "This paragraph appears to address two distinct points. Consider dividing it into two separate paragraphs, each with its own main idea and supporting details." This type of feedback helps students improve the clarity and organization of their writing (Abdi, Ananta, & Nurbatra, 2024).

These functionalities of ChatGPT have been recognized in academic research. For instance, a study by (Abdi, Ananta, & Nurbatra, 2024) found that ChatGPT serves as a valuable resource for students, aiding in understanding paragraph writing theories and providing feedback on their writing. Similarly, (Junfei Li & Whipple, 2023) demonstrated ChatGPT's ability to assist EFL students with outlining, revising, editing, and proofreading tasks in argumentative writing contexts. These studies highlight ChatGPT's role in enhancing paragraph composition skills among EFL learners.

Empirical findings reinforce ChatGPT's value in enhancing writing proficiency. According to (Poláková & Ivenz, 2024, p. 07), students reported that "using ChatGPT helped me understand where I was making mistakes," and it "pointed out specific grammatical errors and suggested ways to improve my vocabulary". These reflections highlight increased metacognitive awareness and the system's role in promoting more effective self-revision strategies.

Apart from direct writing tasks, ChatGPT can be used as a planning tool to ensure coherence from the start. For example, students can ask the model to assist them in creating outlines for use before

writing their essay. For example, a request such as “Can you help me with making an essay about the effects of technology on education?” could result in the suggestion of an outline like introduction, background, pros and cons, and conclusion in a well-thought-out order. This allows the students to visualize the logical sequence of their writing before they write their sentences on the page, reducing cognitive load and preventing confusion.

While ChatGPT supports in coherence and organization, one must critically engage with its advice. It was trained on a general pattern of writing and sometimes suggests very generic structural transitions. So, the feedback and advice given by the model should be used after carefully evaluating it against their voice, and with the specific requirements in their mind. Instructors can facilitate this by encouraging learners to explore ChatGPT’s suggestions and try to provide an alternative for the same and motivate them to justify their choice.

#### **4.3 Vocabulary and Lexical Variety**

A good writer has to have a wide range of vocabulary and lexical knowledge. People who only use a small number of words may write boring writings that are hard to read. On the other hand, using a wide range of words lets authors be more exact with their thoughts and change their tone to fit various situations and audiences. Using specialist terminology correctly shows that you know how to utilize language well and makes your work clearer and more convincing. New developments in educational technology have led to the creation of AI-powered applications that help students learn more words. For example, automated writing evaluation (AWE) systems provide students instant feedback on their word choice and offer alternatives. This helps students improve how they use words in context (Pitura, 2024). When used wisely as part of the learning process, these kinds of tools may greatly help a student improve their vocabulary skills.

Artificial Intelligence, notably ChatGPT, has led to new ways to support vocabulary development. One of the benefits is that it can provide context-appropriate synonyms and explain subtle meanings. For instance, when a learner keeps using the word “good”, ChatGPT can suggest “effective,” “promising,” “beneficial,” among other words depending on the context. This will help the learners improve their vocabulary and avoid redundancy and repetition. (Poláková & Ivenz, 2024) observed that the students who used ChatGPT received feedback on lexical overuse and imprecision, which helped them to diversify their expression and thereby improve their clarity.

Empirical research sustains these conclusions in (Song & Song., 2023) study. The students were able to adjust their tone and formality to accommodate different writing styles. In their professional genres, students had to write in an impersonal or formal voice. The students improved because the model did not just suggest better words for certain hedges or informal words in their academic papers, but models to follow and explanations.

Also, one more positive aspect of ChatGPT is that students will be able to learn new words and improve their vocabulary. They can get examples and explanations on how to use words in sentences, and they can also find out the meaning of new words, as well as compare the meanings of words (for example, the words “demanding” and “challenging”). This approach seems to be good since, according to (Hubbard, 2009), it allows students to get the answers to questions that interest them, but, however, not in the form of a dry list in a textbook, but in the form of a conversation. Thus, the students themselves can “invent” vocabulary and choose the words that they think are the most suitable.

However, caution is warranted. While new technologies such as automated writing evaluation can enhance learners’ engagement with language, they are not without limitations. Without proper instructional oversight, these tools may lead to superficial improvements and even encourage formulaic writing. (Kessler, 2018, p. 212) notes, “there have been many reports of challenges that are inherent in

AWE, including the tendency to encourage overly simplistic or formulaic writing. Thus, while such technologies offer valuable support, their use must be critically integrated and closely guided by educators.

## **Conclusion**

The chapter examines writing as the primary educational skill for students learning English as a foreign language. The chapter starts by defining writing and explaining its importance before showing how writing involves multiple cognitive processes that include language and organizational abilities. Writing skill determine language proficiency for students in academic and professional situations since they use English to convey thoughts, establish arguments and showcase their personal characteristics. The chapter discussed the essential elements of good writing which include correctness of grammar, logical organization and choice of words as essential components that determine writing quality and effectiveness. The components of effective writing received both theoretical analysis and practical evaluation for EFL students who typically encounter difficulties with grammar use and paragraph development as well as restricted vocabulary selection.

Writing assessment stands as an essential aspect which supports writing progress. The chapter examined different evaluation methods such as formative and summative and holistic and analytical scoring and peer evaluation to understand their impact on student reflection and participation and achievement measurement. The book stressed that assessment which maintains transparency combined with timely delivery and goal-focused structure transforms into a learning tool instead of a pure evaluation process.

The chapter served as a foundation to progress the research through its linkage between common writing instruction difficulties and new technologies such as artificial intelligence. The chapter

introduced ChatGPT as a tool that shows promise to deliver personalized writing feedback in real-time regarding grammar and structure and vocabulary usage. The upcoming chapter will investigate the way AI and especially ChatGPT transform English as a Foreign Language writing education. The research now proceeds to explore how technology can solve the ongoing challenges in EFL writing education based on the problems identified from this chapter.

## **Chapter Two: Integrating ChatGPT in EFL Writing Instruction**

## Introduction

The dynamic field of EFL instruction has consistently experienced transformation as technology integration enhances teaching approaches and educational achievements. AI technology represents one of the most significant developments that has impacted language learning approaches during the past few years. In comparison to traditional classroom methods AI technologies deliver instant feedback together with individualized support and flexible learning approaches (Kessler, 2018; Zawacki-Richter, Marín, Bond, & Gouverneur, 2019; Russell & Norvig, 2021).

Teaching second-language learners to write is really hard because of how the brain works and how complicated the lessons are. Writing doesn't get quick reaction from the audience as speaking does, and it doesn't have the same natural flow as speech. It demands students to use grammar, vocabulary, and arrange their thoughts in a way that makes sense, all while becoming better at using language. In places where there aren't enough resources, second-language learners typically have to wait longer for feedback since standard EFL classes have a hard time giving them individualized writing help. Large class numbers, short lesson times, and strict curriculum that focus on reading and speaking make it even harder to find time to write for a long period. In these situations, new technology is not just a way to improve teaching, but also a need. AI-powered technologies like ChatGPT have showed a lot of potential in helping EFL students improve their writing by giving them rapid, personalized feedback. This solves some of the problems that come up in conventional teaching (Alzahrani & Alotaibi, 2024).

The evolution of Technology-Enhanced Language Learning (TELL), along with Computer-Assisted Language Learning (CALL), reflects broader shifts in AI capabilities. Early systems lacked flexibility and contextual awareness, but the rise of machine learning and natural language processing changed this. As (Russell & Norvig, 2021, p. vii) explain, "There have been important applications of AI technology, such as the widespread deployment of practical speech recognition, machine translation,

autonomous vehicles, and household robotics". These breakthroughs have enabled educational tools to better interpret input and offer personalized feedback, bridging the gap between automation and meaningful interaction in language learning.

The educational field's AI development now features ChatGPT as a major tool because of its capacity to develop logical responses and provide interactive support for writing activities. The language partner known as ChatGPT differs from standard grammar checkers by providing multiple services that include idea development and text structure and language improvement. The application enables EFL students to develop their academic writing skill through its correctional features and instructional support functions (Xiao, Zhu, & Wen, 2025).

The decision to use ChatGPT as the primary AI tool in this chapter results from its extensive availability and its educational value. ChatGPT differs from specialized tools designed for institutional purposes because it can be freely accessed online and supports multiple device usage which gives it worldwide applicability. Studies by (Poláková & Ivenz, 2024) (Mahapatra, 2024) and (Song & Song., 2023) have initiated the documentation of AI effects on essential EFL writing competencies which include learner engagement, vocabulary use, grammatical accuracy, and textual coherence. Educational organizations together with teachers now focus on integrating artificial intelligence responsibly within their programs and the ChatGPT system serves as a dynamic and scalable tool to enhance human instruction.

This chapter extensively examines the application of ChatGPT in EFL writing instruction through its structured approach. The chapter opens with a basic introduction to AI in educational fields before presenting both technical and pedagogical descriptions of ChatGPT. The upcoming sections will present an analysis of empirical research that demonstrates ChatGPT's support for writing grammar coherence and vocabulary development. The chapter continues by examining student perceptions of ChatGPT and

ethical considerations for its implementation as well as how these tools affect classroom teaching methods. The sections in this study focus on understanding the benefits and challenges that come with using ChatGPT for EFL writing development before framing this tool in the wider scope of AI-driven language learning.

## **1. The Foundations of Artificial Intelligence in Education**

### **1.1 Definition and Historical Context of AI**

Artificial Intelligence (AI) is broadly defined as the field concerned with creating systems that exhibit intelligent behavior, particularly the capacity to learn, reason, and solve problems. ([Nilsson, 2010](#)) describes AI as the effort to understand and engineer computational systems that act rationally, often by simulating aspects of human cognition such as planning and learning.

The origins of AI date back to the mid-20th century, with early efforts focusing on symbolic logic and rule-based programming. These systems were designed to manipulate symbols and follow predefined instructions to reach conclusions. However, their rigidity limited their effectiveness in handling real-world variability and ambiguity. This prompted a paradigm shift toward data-driven and probabilistic methods, where learning from data became central to system performance ([Domingos, 2012](#)).

By the early 21st century, AI research expanded significantly due to advances in computing power and the availability of large datasets. In particular, the development of machine learning allowed for the creation of systems that improve over time through experience. ([Brynjolfsson & McAfee, 2014](#)) noted that this shift has not only revolutionized technology but also begun to reshape industries and labor markets, as intelligent systems increasingly take on roles requiring perception, judgment, and adaptability.

## **1.2 AI Capabilities in Educational Settings: NLP, ML, and Automated Feedback**

Advancements in Natural Language Processing (NLP) and Machine Learning (ML) have advanced educational Artificial Intelligence (AI) integration in school systems. Educational software has undergone transformation through these technologies to deliver advanced learning experiences that are both personal and scalable. The work of ([Saputra, Astuti, Sayuti, & Kusumastuti, 2023](#)) demonstrates that AI applications in education sustain multiple functions which include learning material distribution and assessment methods along with system management and educational policy development, thus enabling extensive and adaptable implementation possibilities.

### **1.3 Natural Language Processing (NLP)**

The application of natural language processing (NLP) tools in educational systems enables the interpretation and production of human language to support functions like automatic grammar correction, speech recognition and text summarization. The book "Speech and Language Processing" by ([Jurafsky & Martin, 2006](#)) demonstrates NLP methods that enhance educational language comprehension and production for developing intelligent tutoring systems and automated essay scoring. The benefits of these applications prove most useful in language education since they require real-time language processing within specific contexts.

### **1.4 Machine Learning (ML)**

Machine learning algorithms have provided educational systems with the capability to recognize behavior patterns in students and develop their capabilities. AI tools examine data to forecast student mistakes while providing recommendations for interventions and modifying feedback content to suit unique performance levels. The educational researchers ([Baker & Yacef, 2009](#)) emphasize how ML methods along with educational data mining support the comprehension of student learning processes for developing adaptive learning systems according to student needs.

## 1.5 Automated Feedback Systems

NLP and ML integration now enables automated feedback systems to deliver instant customized feedback to students regarding their work's grammar, vocabulary and structure. E-rater represents a system developed by ([Attali & Burstein, 2006](#)) as a method to evaluate student essays through NLP and ML while providing feedback that helps students enhance their writing abilities. Educational institutions with numerous students benefit from these technological systems because they enhance the quality of feedback during periods when instructors cannot provide personalized attention.

## 2. Advantages and Limitations of AI in Education

Presenting AI into educational settings established various advantages. Students benefited from AI tools through quick and customized feedback which helped them take control of their learning while eliminating waiting time for teacher comments. The implementation of ML-powered adaptive learning pathways allowed instruction to match the unique requirements and learning speed of individual students. The technology systems brought about better accessibility and increased student engagement within autonomous learning frameworks ([Song & Song., 2023](#)). Despite the advantages, various obstacles existed for these methods. The assessment capabilities of AI tools were limited because they could not evaluate language elements beyond basic content and structure. Students would sometimes obtain feedback that did not match their specific context. Concerns grew about students developing excessive dependence on automated corrections which led to reduced critical thinking and linguistic awareness ([Lee & Park, 2023](#)). The adoption of AI tools in education has brought up ethical issues concerning students' personal information protection and the clear explanation of AI-generated results as well as fair distribution of technology ([Zawacki-Richter, Marín, Bond, & Gouverneur, 2019](#)). The mentioned problems highlighted the need to approach AI tool implementation with careful planning for educational objectives.

### **3. The Emergence of ChatGPT as an Educational AI Tool**

#### **3.1 Development Background of ChatGPT**

OpenAI developed ChatGPT as part of its initiative to advance artificial general intelligence (AGI) in a safe manner that benefits humanity. The Generative Pre-Trained Transformer (GPT) group of models started with GPT in 2018 and expanded through various versions including GPT-2 (2019) and GPT-3 (2020) before GPT-4. Through extensive internet text training, these models developed statistical language comprehension which enabled them to generate appropriate responses across numerous writing tasks. OpenAI released ChatGPT to the general public in late 2022 based on GPT-3.5 and later GPT-4 to provide enhanced dialogue capabilities along with improved instruction-following and context retention ([OpenAI, 2023](#)).

ChatGPT emerged as the first system to combine universal conversational capabilities with human text generation because previous systems either used rules or focused on specific applications. The system became popular thanks to its straightforward user interface which led to its quick integration in academic environments as well as healthcare and corporate settings. Educational practice started to adopt this new system because of its potential to support writing skill development especially in second language learning environments that lacked live native speaker interaction ([Mahapatra, 2024](#)).

### **4. Technical Overview: How ChatGPT Operates and Generates Responses**

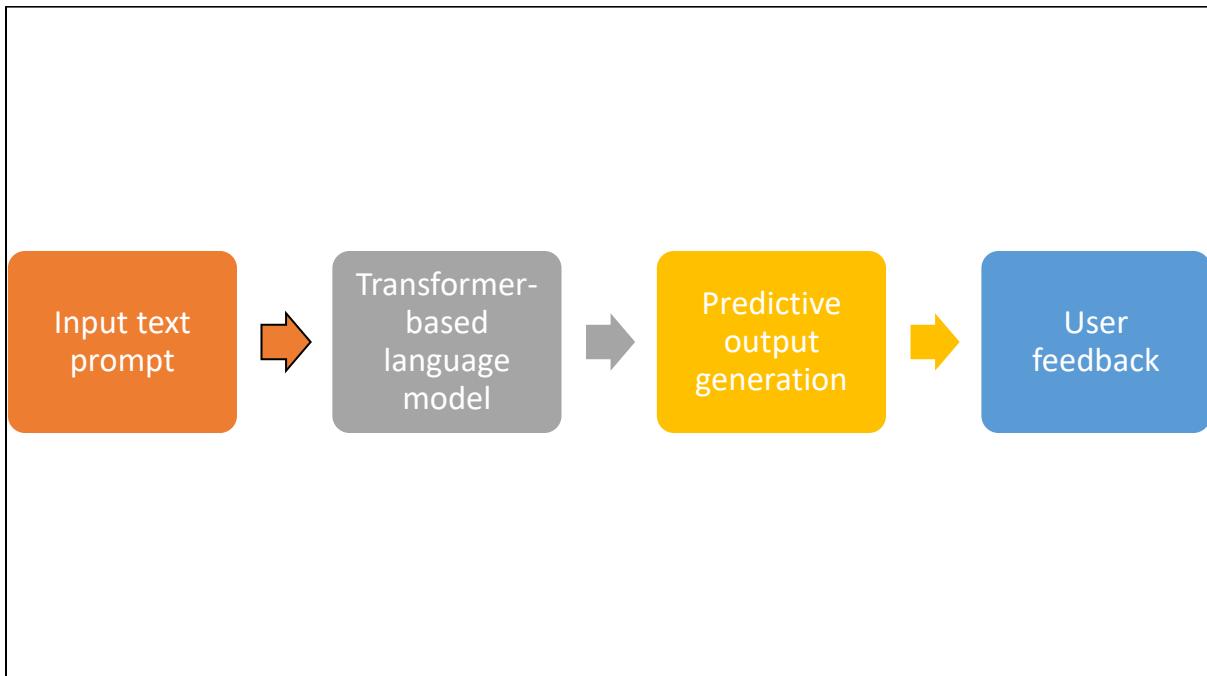
The transformer architecture defines ChatGPT as a neural network which processes sequential data elements mostly found in written language. The model functions to establish extended word dependencies between text segments that support its ability to comprehend and produce meaningful language. The model executes unsupervised learning when its pre-trains by processing billions of text samples from multiple public sources including books and articles and websites. Through this initial

phase the model learns the statistical patterns which underpin language including syntax together with meaning and discourse organization (OpenAI, 2023).

The post-training phase for ChatGPT initiates a training process through Reinforcement Learning from Human Feedback (RLHF) which requires human evaluators to assign scores to model outputs according to their relevance, coherence and appropriateness. Through these rankings, the model receives fine-tuning to match human conversational requirements better. The modified ChatGPT produces thorough and relevant responses for different user queries along with prompts and partial text input. The system enables users to conduct dynamic conversational interactions through its capability to handle multi-turn dialogues (OpenAI, 2023).

ChatGPT operates by predicting the upcoming word which exists as the most likely in the data it processes, rather than understanding human language. Yet the complex and comprehensive training data enables the model to produce realistic understanding despite its inherent limitations. The tool excels at replicating educational and scholarly language structures thus proving useful in educational settings. With its minimal requirements of text input together with internet connectivity the platform serves all educational settings including those with limited resources and independent study programs (Kessler, 2018).

**Figure 01: Operational Flowchart of ChatGPT**



**Source:** Adapted by the author based on OpenAI documentation ([OpenAI, 2023](#)).

The functional steps of ChatGPT appear in Figure 01 which shows how the AI model works as a text generator. The operational sequence commences through user entry of a text prompt that functions as the starting point for model operation. The transformer-based language model in ChatGPT operates through its neural network framework which processes extensive text data and deciphers linguistic patterns. The model then uses its analysis to generate predictive outputs which result in relevant and logically structured responses. Users can continuously participate through feedback to assess the AI-generated responses and make them better or ask additional questions. Through its continuous feedback process the system improves both its immediate response quality as well as the overall precision and context-based understanding of future interactions ([OpenAI, 2023](#)). This process highlights the dynamic, interactive nature of ChatGPT, distinguishing it from traditional static educational tools by enabling a more adaptive and personalized learning experience for EFL learners.

## 5. Capabilities Relevant to Language Learning and Writing Instruction

The educational platform ChatGPT presents multiple features that work effectively for teaching English as a Foreign Language (EFL) writing. The main strength of the system is its capability to provide instant feedback on student writing. The system enables users to input individual sentences or paragraphs to receive immediate feedback on grammar, vocabulary and coherence. The feature proves especially useful in EFL classrooms because instructors often lack the resources to deliver personalized feedback to every student (Alade & Afuwape, 2024). The feedback system of ChatGPT enables students to actively participate by asking questions and seeking thorough explanations of feedback and test different phrasing options.

Moreover, ChatGPT develops student independence through its ability for learners to extend their studies beyond traditional classroom settings. The platform allows EFL students to improve their assignments and find new words while getting answers about complex grammar aspects they find difficult. Independent learning becomes possible through this adaptable system which may help students who avoid asking questions during class to better manage their writing stress (Song & Song., 2023). The platform feels like a genuine conversation partner for learners because it creates an environment where students experience supportive relationship without receiving any judgment from the system.

The promising abilities of ChatGPT come with important limitations that all users should understand. The feedback from ChatGPT tends to be accurate but it typically lacks the comprehensive understanding found in human instruction. The system risks teaching students standard language structures without any individualized development if they fail to evaluate their usage. The effective use of ChatGPT for writing instruction relies on the method through which institutions embed it within their teaching approach. Teachers should lead students in using ChatGPT as a supplementary revision tool

rather than a complete replacement for their critical thinking and teacher feedback (Poláková & Ivenz, 2024).

The AI platform ChatGPT takes a substantial step forward in providing language learning assistance through artificial intelligence. EFL classroom instructors benefit from ChatGPT because of its simple interface and adaptable nature which makes it an ideal tool for writing education. The continued growth of its implementation requires ongoing educational research along with reflective teaching methods to maintain a pedagogical and student-centered approach.

## **6. ChatGPT's Role in Addressing Specific EFL Writing Challenges**

### **6.1 Practical Assistance in Grammar**

As indicated earlier, EFL students encounter major difficulties with grammar which was discussed in the first chapter. Through immediate feedback features, ChatGPT enables users to see grammar errors in their real-time writing. EFL learners commonly find it hard to maintain proper tense use and article placement and subject-verb correctness and organized sentence structures which results in writing errors. Students face higher language learning difficulties because of short class periods combined with delayed teacher responses and limited exercises for individual learning needs. Traditional grammar instruction remains necessary in educational contexts but it faces limitations because of overcrowded classrooms and standardized teaching requirements. The system mitigates several of these problems by providing students with personalized grammar corrections in real-time so they can independently improve their writing.

ChatGPT users can submit incomplete or incorrect sentences to receive immediate explanations and corrections for their grammatical mistakes. The tool gives students real-time feedback on grammar when they type incorrect sentences such as:

- “*She doesn't like go to school.*”

ChatGPT might respond:

- “*The correct sentence would be: ‘She doesn’t like going to school.’ This is because ‘she’ requires ‘doesn’t’ in the present simple, and after ‘like,’ we use the gerund form ‘going.’”*

This feedback type serves the dual purpose of error correction while providing brief explanations that help learners grasp correction rules. The immediate response with clear explanations serves as a valuable substitute for delayed teacher feedback when dealing with writing assignments and self-study situations.

ChatGPT also supports recursive grammar practice. Learners can revise a sentence based on initial feedback and resubmit it for further validation or refinement. For instance, a learner may write:

- “*Yesterday I go to the market.*”

ChatGPT might suggest:

- “*To match the past time reference ‘yesterday,’ change ‘go’ to ‘went’: ‘Yesterday I went to the market.’”*

If the learner then experiments by writing:

- “*Yesterday I was going to the market,*”

ChatGPT may respond:

- “*That is still incorrect. Use the simple past: ‘went.’ The past continuous would be ‘was going,’ as in ‘I was going to the market when it started to rain.’”*

Students have the opportunity to actively participate in grammar practice alongside contextual variations which deepens their understanding beyond basic error detection.

This approach finds backing from scientific research. The work conducted by ([Alade & Afuwape, 2024](#)) in a quasi-experimental setting revealed that EFL students who repeatedly utilized ChatGPT during writing tasks demonstrated better post-intervention grammar assessment scores than a group who

did not use the technology. The experimental group experienced both a decrease in grammar mistakes and an increase in their confidence regarding sentence structure and verb tense application. The researchers suggested that immediate feedback with practice opportunities enabled learners to understand grammar structures better than conventional learning methods.

Through their research, (Mahapatra, 2024) discovered that students who used ChatGPT while writing assignments developed better understanding of article usage and preposition rules and subject-verb agreement. The model could teach students about fine distinctions like the usage of "a" versus "the" in context which helped students write more accurate content in various genres. Students found the non-judgmental continuous availability of ChatGPT important because it helped them experiment with new ideas which they would not risk in teacher-led environments.

The main strength of ChatGPT lies in its ability to deliver grammar assessments based on context rather than using discrete examples. ChatGPT differs from traditional grammar checkers because it evaluates entire sentences and paragraphs to produce more accurate suggestions. The tool maintained narrative consistency by changing any present tense verbs in a historical context paragraph to match the narrative past tense. The system understands how grammar functions within writing meaning so students can see the connection between rules and their overall text production (Alade & Afuape, 2024).

The ChatGPT system serves learners by allowing them to make requests for explanations and examples that will enhance their comprehension. Students who need help can inquire about the use of "have been" while receiving an explanation of the present perfect continuous tense followed by sample sentences. Previously, students lacked access to immediate grammar tutoring outside conventional classroom setups until this breakthrough enabled personalized instruction in grammar (Kessler, 2018).

ChatGPT has limitations that everyone should recognize. The system usually provides accurate grammar feedback but sometimes oversimplifies difficult topics and fails to identify subtle language

mistakes. The model can sometimes be inconsistent when identifying poor sentence constructions and improper modal verb choices based on context. According to (Lee & Park, 2023), the tool demonstrates its most effective performance when students work with teachers to validate its responses. Students who use this combination of automated support and teacher guidance will learn to understand grammar through critical thinking and build lasting language skills.

## 7. Practical Assistance in Coherence and Organization

In Chapter 1, EFL learners grapple with coherence and logical organization as their main writing challenge. Students encounter difficulty when they need to keep their ideas connected through sequential paragraphs and when they need to create smooth transitions between their thoughts. The lack of clear connections between concepts and the absence of logical sequence often led to poorly organized texts in which ideas appear either weakly related or appear in random order. Typical classroom teaching methods concentrate on teaching grammar and vocabulary while neglecting to develop student skills in writing coherence. Most students struggle to create cohesive text because they lack the time and individual feedback needed to understand how to connect their ideas in a logical sequence. ChatGPT serves as an original solution that supports learners through live feedback on their writing structure and transition usage while promoting overall coherence.

### 7.1 Restructuring Paragraphs and Improving Idea Flow

One of ChatGPT's core strengths is its ability to recognize poor organization and suggest improved sequencing of ideas. For example, if a student writes a paragraph such as:

- “*Pollution is a big problem. Factories are dangerous. People get sick. This is why it's important.*”

ChatGPT typically responds with a coherent rephrasing such as (OpenAI, 2023):

- “*Pollution is a significant global issue, largely caused by factory emissions. These pollutants contribute to serious health problems in nearby populations. For this reason, addressing industrial pollution is critical for public health.*”

The AI model presents a revised version of the content which includes reorganization and extended explanations while introducing logical transitions to enhance the overall structure. The paragraph develops a clear theme through its sentences that build upon the main argument. The transformation enables students to grasp the method of connecting independent statements to create coherent arguments.

ChatGPT operates in high-level writing projects to assess paragraph construction while providing suggestions regarding introductory sentences and evidence organization and paragraph coherence. Whenever a body paragraph includes multiple disconnected arguments, ChatGPT detects this structure problem and recommends breaking the content into two separate paragraphs or improving the main focus. This tool proves advantageous to students who encounter challenges in developing essays that present arguments or analyze information.

## 7.2 Suggesting Transitions and Enhancing Cohesion

Transitions are essential tools for achieving textual coherence, but EFL learners frequently overuse basic connectors like “and,” “but,” or “so,” or omit transitions entirely. ChatGPT helps by proposing more varied and context-specific cohesive devices. For instance, when a learner writes:

- “*Tourism brings money. It also causes problems.*”

ChatGPT might revise the sentence as:

- “*While tourism contributes significantly to local economies, it also creates environmental and social challenges.*”

Contrastive connectors help signal changes in viewpoints when integrating contradictory concepts within a unified framework. Through its prompts ChatGPT provides explanations that enable students

to understand transition functions and apply them independently. The findings by (Woo & Choi, 2021) indicate that immediate access to cohesive examples through the model boosts EFL learners' ability to develop discourse-level writing skill.

Beyond sentence-level transitions, ChatGPT supports learners in connecting paragraphs logically. When asked, “*How can I link this paragraph to the next one?*” students may receive responses such as:

*“To transition from discussing tourism’s economic benefits to its environmental impact, you could write: ‘Despite these financial advantages, tourism also presents environmental concerns that must be addressed.’”*

This meta discursive guidance helps learners understand how to guide the reader through different sections of their argument, thereby strengthening coherence across the entire text.

## **8. Empirical Validation of ChatGPT’s Coherence Support**

The research demonstrates that learners benefit from the ability to organize and connect ideas through their use of ChatGPT. The research performed by (Poláková & Ivenz, 2024) used ChatGPT as a writing assistant tool for EFL university students in a mixed-methods study. Their research results showed students achieved better structural coherence in their essays through continuous tool interaction. The participants demonstrated enhanced paragraph sequencing logic while showing improved transition phrase variety alongside better alignment between their thesis and supporting arguments and concluding statements. The researchers determined that ChatGPT effectively improved student writing structure for individuals who lacked academic writing experience.

The students indicated that the ChatGPT teaching system contributed to better text structure and coherence in their writing. Learners who had previously struggled with fragmented ideas began producing essays with clearer organization and logical flow. According to (Song & Song., 2023, p. 06), “the experimental group demonstrated higher writing motivation and better writing skill”, suggesting

that AI-assisted feedback enhanced both engagement and rhetorical development in EFL learners' writing tasks.

### 8.1 Simulated Interaction: Coherence Enhancement

To illustrate a typical learning exchange, consider the following real-world-inspired prompt submitted by an intermediate EFL learner:

Student: "Can you help me improve this paragraph?"

- *"I love traveling. It is interesting. You meet new people. Food is different. Every place is unique. Traveling is good."*

ChatGPT:

- *"Certainly! Here's a revised version for better flow and coherence: 'Traveling is one of my favorite activities because it offers new and exciting experiences. It allows me to meet people from different cultures and enjoys unique foods. Each destination has something special to offer, making every trip a memorable adventure.'"*

This example shows how ChatGPT converted unrelated statements into a unified paragraph that demonstrates logical development and coherence. Through its transformation of the material, the model enhanced the tone and added depth to reveal the integration of different points under one central subject.

Students may also ask ChatGPT directly for transition suggestions:

- Student: "What transition can I use to go from my introduction to the first body paragraph?"

ChatGPT:

- *"You could use: 'To begin with, one of the main advantages of online education is its flexibility.' This helps signal a shift from the general topic to your first specific point."*

The tool's educational value becomes apparent through its immediate and relevant scaffolding approach that can be replicated across different assignments. Through its evolving writing process

support ChatGPT enables students to experiment with their work while getting direct assistance to revise and improve their text structures.

## 8.2 Practical Assistance in Vocabulary Enhancement

The first chapter of the book delves into EFL writing problems which include the restricted vocabulary repertoire students possess together with recurrent repetition of words. Students primarily use commonly used words to write but face challenges when they need to use more specific vocabulary that fits the situation. Their writing becomes repetitive and lacks clarity while also showing stylistic uniformity. EFL students show difficulty with word combinations which makes their writing sound unnatural and marks them as non-native speakers. The conventional teaching approach falls short in helping students overcome these linguistic barriers because it often focuses on delayed grammar correction without addressing vocabulary development. ChatGPT offers an extensive system that provides instantaneous contextual vocabulary suggestions and word replacements along with collocation guidance which enables learners to enhance their vocabulary diversity.

**Table 01: Lexical Variety Before and After ChatGPT Interaction**

Student's Original Phrase	ChatGPT Suggestion	Refinement/Explanation
Good result	Promising outcome	"Promising" conveys positive expectation in a more academic tone.
Big change	Significant transformation	"Significant" is more formal and commonly used in academic writing.
Make a decision	Take a decision / Make an informed decision	"Take a decision"; "Make an informed decision" adds nuance and precision.
Important thing	Crucial factor / Key element	Adds precision and elevates the tone.
A lot of people	A large number of individuals	Avoids informal phrasing, more suitable for academic contexts.

**Source:** Adapted by the author from simulated ChatGPT outputs and lexical refinement examples

based on ([Song & Song., 2023](#)) and ([Mahapatra, 2024](#)).

Table 01 serves to demonstrate the techniques through which ChatGPT helps users improve their word selection by delivering suitable academic language options. The words "good," "big," and "a lot"

remain common choices for English as a Foreign Language students but these expressions lack the precision needed for professional writing tasks. Through word suggestions such as "promising," "significant" and "a large number of individuals" the tool helps learners expand their writing style and develop a more sophisticated vocabulary. The tool performs two main functions by suggesting word changes that improve collocations and semantic accuracy transforming "make a decision" into "make an informed decision" creates professional language clarity.

The vocabulary enhancement tools used by students are consistent with (Song & Song., 2023) research showing that ChatGPT users created texts with enhanced lexical sophistication and appropriate word use. According to (Mahapatra, 2024) AI tools let students practice new vocabulary more comfortably because they lower stress levels which leads to both improved vocabulary uses and self-correction.

### **8.3 Encouraging Lexical Variety through Revisions**

One of ChatGPT's most effective uses is helping learners revise texts to increase lexical diversity. Consider a student who writes:

- *"The city is big. The people are nice. The food is good. The parks are big and clean. It is a good place."*

When asked for improvement, ChatGPT might respond with:

- *"The city is large and vibrant, inhabited by welcoming residents. It offers a wide variety of delicious local food, and its parks are both spacious and well-maintained. Overall, it is a pleasant and enjoyable place to visit."*

This revised version not only improves sentence structure and cohesion but also demonstrates richer vocabulary through substitutions like "large," "welcoming," "delicious," and "spacious." These enhanced versions serve as lexical models that students can emulate in future writing.

Students can also request help with improving word variety directly. For example:

- Student: “I used the word ‘important’ five times. Can you help me fix that?”
- ChatGPT: “*Certainly! Here are some alternatives depending on context: ‘essential,’ ‘critical,’ ‘noteworthy,’ ‘key,’ and ‘of great significance.’ Let me know which sentences you want to change, and I’ll help you rephrase them.*”

This collaborative revision process encourages self-awareness, reinforces word learning through repetition and contrast, and empowers students to take control of the editing process.

#### **8.4 Empirical Support for Lexical Development with ChatGPT**

Recent research has confirmed the practical benefits of ChatGPT toward vocabulary growth according to current studies. A study by ([Song & Song., 2023](#)) delved into ChatGPT's impact on English as a Foreign Language (EFL) students' word stock. Students who wrote texts using ChatGPT maintained superior linguistic variety together with proper vocabulary selection when compared to students who did not use this tool. Academic vocabulary standards improved as students transitioned from using common words such as "good" and "bad" to incorporating more sophisticated terms.

Through their participation in the study participants discovered that ChatGPT provided them with the courage to try new words and to lower their dependence on basic language terms. The system enabled learners to both receive word suggestions and obtain explanations which led to efficient revisions while gaining better understanding of word choice suitability in sentences. AI-generated vocabulary support by ChatGPT aligned with the conclusions of ([Mahapatra, 2024](#)) regarding student vocabulary expansion through machine-mediated feedback which translated into better writing performance.

Research by ([Poláková & Ivenz, 2024](#)) found that students who used ChatGPT showed increased interest in vocabulary reflection activities. Students who received corrections from the tool actively examined synonyms and sought explanations while they worked on modifying their word choices through successive drafts. Based on their research the scientists determined that ChatGPT functioned as

an individualized vocabulary instructor because it delivered customized real-time word recommendations that traditional classroom settings could not match in terms of time availability.

## 9. Ethical Considerations

The implementation of AI tools including ChatGPT in EFL education creates multiple ethical issues educators and institutions need to handle. A key problem involves the threat of plagiarism alongside the danger of reduced originality. Students who utilize ChatGPT to produce complete essays or modify existing content face issues about original authorship and academic honesty. The tool's ability to create human-like text using basic inputs confuses borders between acceptable support and academic dishonesty. The authors ([Zawacki-Richter, Marín, Bond, & Gouverneur, 2019](#)) stated that such tools disturb traditional academic integrity systems particularly during formative writing tasks where students should demonstrate self-generated ideas.

The ethical use of AI-generated content presents new challenges, particularly around intellectual property, authorship, and educational integrity. While tools like ChatGPT offer substantial pedagogical benefits, institutional guidelines often lag behind. As ([Mahapatra, 2024, p. 12](#)) notes, “the fear regarding the loss of creativity and the imposition of a pre-decided pattern is an addition to the fear regarding the loss of ethicality”, underscoring the urgent need for policy frameworks that define responsible AI use in academic contexts. This ambiguity can affect curriculum alignment, assessment fairness, and students’ genuine learning outcomes.

The ethical debate regarding AI implementation focuses on two important areas which are learner independence and intellectual growth. Learners who repeatedly use ChatGPT for grammar correction or content generation may become dependent on the tool instead of developing their writing skill. According to ([Lee & Park, 2023](#)) learners who used the tool became completely dependent on it because they did not think critically about the suggestions they received. The growing dependence on such tools

threatens students' ability to develop metacognitive writing abilities as well as their understanding of language which leads to reduced long-term proficiency.

The issue of data privacy together with surveillance stands as a major ethical problem. ChatGPT processes user inputs for model training and quality enhancement and these processed data may be stored by the system. OpenAI confirms that it uses user data in an anonymized way but questions persist about how the system manages student information specifically when sensitive content or identifiable data is present. Ethical AI deployment in education demands organizations to disclose data usage practices along with consent procedures and responsibilities for protecting user privacy according to (Kessler, 2018).

## Conclusion

The chapter presented how Artificial Intelligence specifically through ChatGPT changes the teaching of English as a Foreign Language. The chapter started with a basic explanation of artificial intelligence applications in education and then showed how natural language processing and machine learning along with automated feedback tools create opportunities for teaching development. The research examined ChatGPT as a leading AI tool through its design details to demonstrate its user-friendly approach while showing its flexibility and suitability for EFL students. The tool's beneficial impact on writing development became the subject of practical evaluation which examined its functions to help users maintain proper grammar while enhancing their writing structure and vocabulary range.

All writing difficulties mentioned in Chapter 1 received direct solutions through these different tools. ChatGPT addressed learner problems of receiving limited feedback and having few opportunities for revision and developing rhetorical awareness through its capability to provide personalized real-time interaction that leads to better practice and learning repetition. Research findings demonstrate how the tool positively affects student performance and motivation along with their autonomy. The chapter

considered essential ethical and educational principles regarding AI tool implementation by advising students to avoid excessive dependence on these tools while recommending teacher-directed and self-reflective AI use in classrooms and independent study settings.

ChatGPT functions as a supplementary teaching tool that enhances traditional educational methods through its scalable and adaptable nature. The software performs best by enabling feedback distribution and individualized instruction while promoting student self-reliance in educational practices that follow proper teaching standards.

The next section elaborates on the research methodology through an explanation of its study design. The upcoming chapter will present a thorough examination of the research questions along with the data gathering tools and participant details and analysis methods which will determine how well ChatGPT improves EFL student writing abilities. Through this analysis, the tool's practical educational applications will become clearer for real-world learning settings.

## **Chapter Three: Analysis and Discussion of the Result**

## Introduction

The educational field has recently focused on the integration of Artificial Intelligence (AI) technology within English as a Foreign Language (EFL) classroom which has shown a strong positive impact on student writing abilities. Research demonstrates that generative AI tools particularly ChatGPT can deliver educational advantages through real-time evaluation of student work and better writing precision along with higher learner involvement. Presently limited evidence exists regarding the concrete effect of these tools within the Algerian university educational environment. This study sought to evaluate the performance of ChatGPT in solving fundamental EFL writing problems related to grammar, coherence and vocabulary use through a study of Master 2 English students at University of Biskra. I also assessed how students perceive AI integration within their academic writing instruction.

The following chapter explains how the research was conducted by outlining the chosen methodological framework. The discussion starts by explaining the research design together with the selected approach justification. It proceeds to explain the population selection and sample collection methods before presenting a semi-structured questionnaire which collects both quantitative and qualitative responses from participants. The sections after this one present a detailed explanation of the research implementation together with the data analysis methods and the specific approaches used to validate research outcomes.

### 1. Research Design

The study employed a descriptive research methodology Using a survey-to assess how ChatGPT enhances writing skill of EFL students.

This research design resulted from the essential requirement to document both the quantifiable student experiences and the qualitative depth which quantitative data was insufficient to capture. The researcher employed Likert scale-based questionnaire items to gather quantitative data which assessed

writing improvement and participant attitudes. Students were asked to provide detailed responses through open-ended questions regarding their personal encounters with ChatGPT and the difficulties they encountered as well as the advantages they gained. The integration of these two methods deepened the analysis process through which researchers obtained a more thorough understanding of the outcome.

## **2. Population and Sampling**

The research focused on Master 2 students from the English Department at University of Biskra throughout the academic year 2024–2025. The researchers targeted these students because they had finished academic writing essentials and had achieved advanced academic progress which made them suitable for testing the integration of advanced technological tools like ChatGPT in writing education. The students' academic experience along with their established writing knowledge in English as a Foreign Language created an ideal environment to explore the effects of AI-generated feedback on their writing improvement.

The department had one hundred and forty Master 2 students during the research period. The study restricted its participant selection to students who had already employed ChatGPT in their academic work to assess their real-world experiences and perceptions. The research established a purposive sampling approach to enroll participants who demonstrated first-hand exposure to ChatGPT through independent use or faculty-directed implementation. The sampling approach enabled the researcher to identify the most suitable participants for generating relevant data regarding the study's main goals.

The research sample included 30 students who satisfied all outlined criteria. The participants had to be Master 2 students in English Language and Literature with a specialization in linguistics or language studies. Students must have used ChatGPT before for at least one academic writing task to generate ideas, check grammar, restructure paragraphs and enhance vocabulary. This guaranteed that responses came from practical experience instead of hypothetical scenarios. All participants selected to

join the study had to understand the research goal and data protection policies and agree to the terms of participation with full consent.

A diverse sample emerged from the inclusion of participants who demonstrated different age ranges, gender identities and educational achievement levels. The majority of participants fell between 22 to 25 years old while displaying English proficiency at high-intermediate to advanced levels through their coursework and writing evaluations. The proficiency level stood as a crucial factor since it enabled students to effectively communicate with ChatGPT and evaluate feedback quality and accuracy.

The research maintained rigorous ethical standards when conducting the sampling procedures. Students chose to participate voluntarily while receiving information about their freedom to exit the study at any time with no negative consequences. Personal identification details were not included in the questionnaire responses to protect participant confidentiality. Students received confirmation that the study served academic research objectives exclusively and that their academic performance would remain unaffected by the research.

### **3. Research Context**

The University of Biskra's English Department serves as the research base for this study which investigates educational technology implementation in the field of second language learning. The English Department at Biskra University presents students with English Language and Literature programs at both undergraduate and postgraduate levels alongside specialized study options in translation, linguistics, literature and civilization courses. In the English Department, researchers find an ideal environment to evaluate new language learning tools because of the school's expanding dedication to academic writing and digital learning systems and research development.

The examination focused on Master 2 students who comprise the leading academic pre-doctoral training population found within the department. The students at this level need to show excellent

English skills while they complete complex written projects like these, research proposals, analytical essays, and critical reflections. The study evaluated the AI-supported instruction through an investigation of coherence and lexical sophistication and structural organization since students at this level need to master these fundamental writing elements.

The Master 2 curriculum at the university integrates academic writing as a vital element which demands students to advance their linguistic abilities together with rhetorical and stylistic competencies that enable effective scholarly interaction. Students receive academic writing guidance through various courses including "Research Methodology," "Academic Writing" and "Writing skill" as part of their specialized field. Students learn about thesis structure and argumentation and citation and genre-specific conventions through these academic writing modules. The learning environment faces significant limitations to offer effective feedback because of limited time together with teacher shortage and the writing instruction process demands substantial manual effort. The learning context presents significant opportunities to evaluate the effectiveness of ChatGPT for supporting learners in developing their writing abilities.

During the study period students actively sought digital tools to enhance their academic success. The widespread availability of smartphones and internet access enables learners to try AI technologies in educational settings that do not include these tools in their official curriculum. The informal use of AI tools including ChatGPT created an authentic test environment for the current research.

The University of Biskra English Department became the suitable research environment because it combined strict academic standards with writing-focused programs and students already tackling advanced EFL writing obstacles. The organic spread of ChatGPT usage among students confirmed the research significance and secured educational relevance while staying current with EFL learning technology trends.

#### **4. Research Instrument (Questionnaire)**

The study utilized a semi-structured questionnaire to gather research outcome data which corresponded with its research objectives. The questionnaire design focused on investigating the student attitudes of EFL Master 2 participants toward ChatGPT writing assistance regarding its impact on three areas of grammar as well as coherence and vocabulary use and their view on AI integration in academic writing instruction. The questionnaire emerged as the optimal research tool because of its efficient capacity to gather standardized data quickly for both descriptive and exploratory studies.

The survey included two question types which combined pre-set answers with written responses to obtain both statistics and descriptive details. Students expressed their opinions about the effectiveness and usability of ChatGPT through five-point Likert scale questions that measured their agreement. Questions were structured to gather specific data about student utilization patterns alongside their perceived effects of ChatGPT and overall acceptance of the tool.

To support the quantitative data, the instrument featured open-ended questions which urged students to provide additional details about their experiences, difficulties and individual viewpoints regarding ChatGPT. The Likert-scale responses failed to capture the complete range of student interaction with the tool because they lacked the ability to reveal detailed contextual data and individual perceptions.

The questionnaire was divided into several thematic sections:

- Demographic Information – capturing age, gender, and academic background.
- ChatGPT Usage Frequency and Purposes – understanding how often and why students used the tool.
- Perceived Impact on Writing Components – including sub-sections on grammar correction, coherence and organization, and vocabulary enrichment.

- Attitudes and Reflections – gauging students' motivation, autonomy, and critical perspectives.
- Challenges and Concerns – identifying limitations and ethical reservations encountered by learners.

The questionnaire structure matched the study's research questions through its design and content.

The first research question about writing components' perceived enhancements appeared directly through questions assessing grammatical accuracy, structural organization and lexical variety. The second and third research questions which examine learner perceptions and challenges found their match in the questions about attitudes and ethical considerations.

The instrument was designed in English to correspond with the language skills and educational setting of the participants. Two EFL instructors conducted a pre-launch assessment of the questionnaire to confirm its clarity and content relevance and construct validity. The feedback from the instructors led to minor changes which focused on better item wording and clearer Likert-scale definitions.

The questionnaire design displayed a thorough framework that delivered balanced empirical data for subsequent descriptive statistical and thematic analysis. The complete questionnaire appears in Appendix A for people to review.

## **5. Data Collection and Administration Procedure**

Data collection took place during a two-week period which was about one month before this chapter reached its conclusion. The questionnaire distribution occurred mainly online through Google Forms to deliver user-friendly and efficient data handling capabilities. The approach permitted students to answer questions by themselves according to their preferred schedules which made data organization and retrieval for analysis more straightforward.

The questionnaire was sent to the students through electronic mail to the complete Master 2 EFL student population at the University of Biskra. The electronic message contained a brief summary of the

study goals and complete guidelines for questionnaire submission along with a hyperlink to the Google Form. The instructions particularly stressed both the necessity for authentic answers and the security measures that protected student identities. Students who knew the researcher personally or lived close to the university received printed questionnaires which they submitted in the researcher's office. The dual method of distributing questionnaires led to a greater response rate and expanded student involvement.

Students responded to the survey questions while working alone which enabled them to assess their answers without constraints and without external influences. The survey questions required approximately 10 to 15 minutes of answering time based on how extensively participants chose to write in response to the unstructured items. The majority of students provided their answers during the initial week but additional reminders were necessary for a small number of students who joined completely by the second week.

The administration process followed strict ethical guidelines at all stages of its implementation. The research participants demonstrated their understanding of the study's procedures by submitting completed questionnaires which served as an indication of informed consent. The first message established that all collected data served educational research objectives and that participant responses would stay private and confidential. The questionnaire did not request any identifying information about student participants which enabled complete confidentiality of responses. The researcher specifically guaranteed that students' academic performance and grades would stay unaffected when they participated in the study.

The collection of data unfolded smoothly leading to 30 finished responses which established the basis for the upcoming analysis. The data set which examined the integration of ChatGPT in EFL writing

instruction became reliable and contextually relevant because of its digital accessibility and ethical transparency and participant autonomy.

## **6. Questionnaire Results and Analysis**

The section reveals the survey results which originated from Master 2 EFL students enrolled at the University of Biskra. The research presents the results following an investigation of four major topics which are ChatGPT usage patterns together with its effects on grammar and coherence and vocabulary outcomes alongside the investigation of student motivation and attitudes and their perceived learning barriers. The sections in the research include two types of data analysis which examine student responses through Likert scales and derive student opinions from their open texts. The research employs tables to present response distributions in a visual format which enhances data comprehension.

### **6.1 Grammatical Accuracy**

#### **Item 1: ChatGPT helped me identify and correct grammatical errors.**

To examine the perceived impact of ChatGPT on students' grammatical accuracy, participants were asked to respond to the statement: "ChatGPT helped me identify and correct grammatical errors." This item aimed to evaluate whether learners considered ChatGPT a reliable tool for improving their awareness of grammatical mistakes and their ability to revise them.

As shown in Table 1, the majority of students responded positively to this item. Specifically, 30% of participants selected "Strongly Agree" and another 30% chose "Agree," indicating that 60% overall found ChatGPT helpful in identifying grammatical errors and offering suitable corrections. A further 26.7% expressed a neutral stance, neither agreeing nor disagreeing. Meanwhile, a smaller portion 10% disagreed, and only 3.3% strongly disagreed with the statement. These results demonstrate a generally favorable perception of ChatGPT's grammatical support among students.

This strong agreement suggests that ChatGPT plays an effective role in assisting EFL learners in identifying and addressing grammatical issues in their writing. Given that grammar remains one of the

most persistent challenges for EFL students, this result supports the tool's value in fostering grammatical accuracy, especially in the absence of immediate teacher feedback. The ability to receive instant correction likely contributes to better sentence construction and error reduction over time.

**Table 1. Students' Perceptions of ChatGPT's Support with Grammar Correction**

Response	Frequency	Percentage (%)
Strongly Agree	9	30
Agree	9	30
Neutral	8	26.7
Disagree	3	10
Strongly Disagree	1	3.3

**Item 2: ChatGPT explanations helped me understand grammar rules more clearly**

To evaluate ChatGPT's effectiveness in promoting grammar comprehension, students were asked to respond to the statement: "ChatGPT explanations helped me understand grammar rules more clearly." This item aimed to measure whether learners found the tool pedagogically valuable beyond basic correction particularly in terms of its capacity to clarify underlying rules and principles through explanation.

As reflected in Table 2, the majority of participants selected "Agree" (36.7%), indicating a general consensus that ChatGPT's explanations contributed to greater clarity in understanding grammar rules. In addition, 26.7% of students selected "Strongly Agree," reinforcing the positive reception of ChatGPT's explanatory feedback. A notable 30% of respondents remained neutral, while only 6.67% expressed disagreement, and none selected "Strongly Disagree." These response trends suggest that ChatGPT is largely perceived as a helpful tool for improving grammatical comprehension and are visualized in Table 2.

Research findings show that learners value ChatGPT beyond its error detection because it helps them understand key concepts better. English as a Foreign Language learners who cannot always reach instructors in real-time benefit from AI tools which provide contextual grammar explanations that

enhance learner independence and complement formal lessons and promote reflective language practice.

The study solidifies ChatGPT as a support system for digital writing instruction.

**Table 2. Student Perceptions of Grammar Rule Understanding via ChatGPT Explanations**

Response	Frequency	Percentage (%)
Strongly Agree	8	26.7
Agree	11	36.7
Neutral	9	30
Disagree	2	6.67
Strongly Disagree	0	0

**Item 3: I became more confident in using correct sentence structures after using ChatGPT**

This questionnaire item aimed to assess whether ChatGPT contributed to students' confidence in applying correct sentence structures in their writing. Confidence is a crucial affective factor in second language writing, as it influences learners' willingness to write, experiment with more complex structures, and engage in revision.

As illustrated in Table 3, most students selected "Agree" (50%), indicating a generally positive experience in using ChatGPT to develop syntactic accuracy. A moderate number of participants opted for "Neutral" (36.7%), reflecting uncertainty or a balanced perspective. Only 6.7% selected "Strongly Agree," suggesting that fewer students held strongly positive views. Meanwhile, 3.3% of respondents each selected "Disagree" and "Strongly Disagree," representing a small proportion of less favorable experiences. These frequencies are presented graphically in Table 3.

The feedback from users indicates that ChatGPT functions as a confidence booster through its instant and impartial feedback on sentence structure. Students who examine their sentence corrections and reformulations will develop an internal understanding of these patterns which enables them to confidently apply accurate sentences in upcoming assignments. The relatively high occurrence of neutral responses could indicate that confidence development through AI requires additional time or systematic pedagogical assistance beyond automated teaching.

**Table 3. Student Confidence in Using Correct Sentence Structures After ChatGPT Use**

Response	Frequency	Percentage (%)
Strongly Agree	2	6.7
Agree	15	50
Neutral	11	36.7
Disagree	1	3.3
Strongly Disagree	1	3.3

**Item 4: I now make fewer grammatical mistakes in my writing because of ChatGPT**

This item aimed to explore the perceived long-term effect of using ChatGPT on reducing grammatical errors in students' writing. While earlier items focused on explanations and confidence, this statement assesses whether repeated use of ChatGPT has led to noticeable improvement in overall grammatical accuracy.

As shown in Table 4, the majority of students selected "Agree" (40%), indicating that they observed a reduction in their grammatical mistakes after using ChatGPT. Additionally, 30% of participants chose "Neutral," suggesting a moderate perception of improvement, while 16.7% selected "Strongly Agree," expressing a more definitive positive impact. On the other hand, 13.3% chose "Disagree" and none selected "Strongly Disagree." These patterns are also visualized in Table 4, which highlights the overall trend of positive student perception regarding sustained grammar improvement.

The findings suggest that using ChatGPT as a writing tool regularly may help users develop their grammatical accuracy over time. When students get personalized feedback at once, they start recognizing typical grammar issues more easily which results in better error prevention during future writing assignments. The concept of AI-based tools assisting users through low-pressure individualized practice adds consistent value to traditional classroom learning methods.

**Table 4. Student Perceptions of Grammatical Error Reduction Through ChatGPT Use**

Response	Frequency	Percentage (%)
Strongly Agree	5	16.7
Agree	12	40
Neutral	9	30
Disagree	4	13.3
Strongly Disagree	0	0

**Item 5: ChatGPT helped me revise incorrect verb tenses, articles, and prepositions**

This item addressed specific aspects of grammatical precision namely verb tense usage, article application, and prepositional accuracy. These are often cited as persistent problem areas for EFL learners due to differences between native and target language structures. The question assessed whether ChatGPT provided helpful support in correcting such errors during the writing process.

As shown in Table 5, most students expressed a favorable view of ChatGPT's role in refining subtle grammatical issues, with 38.7% selecting "Agree" and another 16.1% choosing "Strongly Agree." These responses suggest that many learners found the tool helpful for addressing grammar points that are often hard to catch on their own. Meanwhile, 35.5% of participants responded "Neutral," indicating that some were either unsure of the tool's impact or experienced mixed results. Only a small number of students disagreed 6.67% selected "Disagree" and 3.33% opted for "Strongly Disagree".

The collected information indicates that ChatGPT proves beneficial as a micro-level grammar correction tool. The system delivers context-specific feedback which stands as a fundamental element for improving verb tenses along with articles and prepositions in writing. AI receives student validation through their positive feedback regarding its ability to fix basic grammar errors that traditional teaching does not cover completely.

**Table 5. Perceptions of ChatGPT's Role in Revising Verb Tenses, Articles, and Prepositions**

Response	Frequency	Percentage (%)
Strongly Agree	5	16.7
Agree	12	40
Neutral	10	33.3
Disagree	2	6.67
Strongly Disagree	1	3.33

## 6.2 Improving Coherence Through Logical Idea Organization

### Item 1: ChatGPT helped me organize my ideas more logically

This item aimed to evaluate the extent to which ChatGPT supported students in improving the coherence of their writing, particularly in organizing ideas logically across sentences and paragraphs. In academic writing, coherence is essential for delivering structured arguments and maintaining clarity, and it is often one of the most challenging aspects for EFL learners to master.

As presented in Table 6, the majority of students found ChatGPT to be a useful tool for organizing their ideas more logically. Over half (53.3%) of the participants selected “Agree,” while an additional 36.7% chose “Strongly Agree,” reflecting a strong overall consensus on the tool’s positive impact on logical flow in writing. Only a small percentage remained neutral (6.7%), and just one student (3.3%) expressed disagreement. No participants strongly disagreed. These results, clearly displayed in Table 6, suggest that ChatGPT played a constructive role in helping students structure their thoughts in a coherent and orderly manner.

Research confirms that students experienced positive outcomes because of ChatGPT’s capacity to help them organize their content more efficiently. The tool’s recommendations on paragraph transitions and content flow as well as structural coherence support students in understanding how different ideas relate to each other which is crucial for academic achievement. The research supports the educational

benefits of AI in writing instruction because it helps students make both superficial and substantial corrections that improve writing quality and coherence.

**Table 6. Student Perceptions of Logical Idea Organization via ChatGPT**

Response	Frequency	Percentage (%)
Strongly Agree	11	36.7
Agree	16	53.3
Neutral	2	6.7
Disagree	1	3.3
Strongly Disagree	0	0

**Item 2: ChatGPT improved the transitions between my paragraphs**

This item focused on one of the key elements of writing coherence effective paragraph transitions. Transitions help guide the reader through the text, signaling shifts in argument, emphasis, or direction. For EFL learners, mastering these cohesive devices can be particularly difficult due to limited exposure to advanced discourse markers and transition strategies.

According to the data presented in Table 7, students generally expressed favorable views about ChatGPT's role in improving paragraph transitions. The most commonly selected responses were "Agree" and "Strongly Agree," each chosen by 33.33% of the participants. This indicates that nearly two-thirds of the students felt that ChatGPT positively influenced how they connected their ideas across paragraphs. Meanwhile, 26.67% of respondents remained neutral, suggesting some hesitation or mixed experiences. Only 6.67% of the students disagreed, and none strongly disagreed. As shown in Table 7, these results reflect an overall positive perception, with most learners acknowledging the tool's contribution to enhancing the logical flow of their writing.

Students demonstrated through their feedback that ChatGPT effectively improved their writing coherence by suggesting appropriate transition words and maintaining logical connections between sentences. The AI system improves both textual coherence and logical structure in academic papers by providing surface-level and structural writing help. Users positively receive this support because

ChatGPT functions as an active educational assistant which enables them to develop better interconnection between their paragraphs and enhance the readability of their writing.

**Table 7. Student Perceptions of ChatGPT's Impact on Paragraph Transitions**

Response	Frequency	Percentage (%)
Strongly Agree	10	33.33
Agree	10	33.33
Neutral	8	26.67
Disagree	2	6.67
Strongly Disagree	0	0

**Item 3: I became more aware of paragraph structure (topic sentence, support, conclusion)**

This item of the study on investigating the impact of ChatGPT on student comprehension of paragraph organization through conventional structure which includes topic sentences, supporting evidence and concluding statements. The structure of paragraphs stands as a fundamental principle in academic writing yet EFL students frequently need direct assistance to comprehend and use these organizational components.

As reflected in Table 8, 40% of students selected “Agree,” indicating that a significant portion believed ChatGPT helped them maintain a consistent tone and purpose in their texts. This was followed by 26.67% who chose “Strongly Agree,” further affirming the tool’s perceived effectiveness in this area. Meanwhile, 20% of students remained “Neutral,” suggesting mixed or moderate impressions. On the other hand, 10% of participants disagreed, and only 3.2% strongly disagreed. These results are visually illustrated in Table 8, which highlights the overall distribution of student perceptions regarding ChatGPT’s role in supporting tonal and purposeful consistency.

The research findings indicate that ChatGPT functioned both as a content generation and correction tool and as a structured academic writing model. Through studying paragraphs produced by AI systems students learned how to structure their writing into logically connected sections with proper

development. Better paragraph development skills among students lead to higher degrees of writing clarity along with more coherent and engaging content for readers.

**Table 8. Students' Perceptions of Paragraph Structure Awareness Through ChatGPT**

Response	Frequency	Percentage (%)
Strongly Agree	8	26.67
Agree	12	40
Neutral	6	20
Disagree	3	10
Strongly Disagree	1	3.3

**Item 4: My writing now flows more smoothly thanks to ChatGPT**

This item sought to evaluate the overall impact of ChatGPT on the fluency and cohesion of students' writing. Writing "flow" refers to how well ideas progress from one to the next in a logical, connected manner often a challenge for EFL learners due to lexical limitations, abrupt transitions, or poorly structured paragraphs.

As illustrated in Table 9, nearly half of the participants perceived an improvement in the smoothness of their writing after using ChatGPT, with 23.3% selecting "Agree" and another 23.3% choosing "Strongly Agree." However, a slightly larger portion, 36.7%, remained neutral, indicating some uncertainty or varied experiences with the tool's impact on writing flow. Only a small number of students disagreed with the statement, with 6.7% selecting "Disagree" and 10% choosing "Strongly Disagree." These results are visually represented in Table 9, highlighting a generally positive but somewhat mixed perception regarding how ChatGPT influenced writing smoothness.

These results reveal that ChatGPT aids writing technicalities while simultaneously improving written text readability and rhythmic quality. The tool promotes smoother writing by performing sentence rephrasing alongside transitional expression usage and paragraph alignment improvements. The tool proves highly advantageous for EFL students to generate correct yet fluent and effective writing.

**Table 9. Student Perceptions of Improved Writing Flow via ChatGPT**

Response	Frequency	Percentage (%)
Strongly Agree	7	23.3
Agree	7	23.3
Neutral	11	36.7
Disagree	2	6.7
Strongly Disagree	3	10

**Item 5: ChatGPT helped me maintain consistent tone and purpose in my texts**

This item investigates the impact of ChatGPT on students' abilities to maintain a consistent tone and purpose throughout their writing. Academic writing requires writers to maintain a consistent tone that matches their audience while ensuring that each part aligns with the main purpose of their argument.

According to the data summarized in Table 10, most students agreed that ChatGPT helped them maintain a consistent tone and purpose in their writing, with 33.3% selecting "Agree" as the most common response. A notable number of participants, 16.7%, expressed strong agreement, while a larger portion, 43.3%, remained neutral, indicating mixed or moderate perceptions. Only a small minority disagreed, with 3.3% selecting "Disagree" and an equal percentage choosing "Strongly Disagree." These findings are visually presented in Table 10, reflecting a generally positive but somewhat varied perception of ChatGPT's impact on stylistic consistency.

The responses from students demonstrate how ChatGPT helped them enhance their writing ability to create logical and coherent content. The model provided academic tone guidance while delivering live feedback on structural and expressive elements which potentially functioned as a stylistic assistant for English as a Foreign Language students. The ability to match academic writing tone with student communication objectives assists in building better quality and more direct writing.

**Table 10. Student Perceptions of Tone and Purpose Consistency with ChatGPT**

Response	Frequency	Percentage (%)
Strongly Agree	5	16.7
Agree	10	33.3
Neutral	13	43.3
Disagree	1	3.3
Strongly Disagree	1	3.3

**Item 6: ChatGPT helped me maintain consistent tone and purpose in my texts**

This Item measures the ability of ChatGPT to help students maintain an even tone and establish clear writing goals. Tone in academic writing indicates formality levels along with writer attitudes while purpose in writing denotes the message's focus and clarity. Coherence and reader accessibility depend on both aspects yet prove challenging for EFL learners since they lack knowledge about genre norms and writing conventions.

As presented in Table 11, the majority of participants expressed agreement that ChatGPT helped improve their vocabulary, with 25.8% selecting “Agree” as the most frequent response. Additionally, 16.1% of students chose “Strongly Agree,” while nearly half of the respondents (48.4%) remained neutral, indicating mixed or cautious perceptions about vocabulary improvement. Only a small number expressed disagreement, with 6.5% selecting “Disagree” and 0% choosing “Strongly Disagree.” This trend is visually illustrated in Table 11, demonstrating a generally positive, though somewhat reserved, attitude toward ChatGPT’s effectiveness in enhancing vocabulary.

The research indicates that students discovered ChatGPT to be useful when they needed to structure content and correct language as well as maintain a consistent writing tone and purpose. The AI system shows potential to support EFL students in building their academic voice through its ability to learn formal language patterns and maintain paragraph coherence and idea alignment. The provided support acts as a connection that improves how students transition from mastering writing structure to achieving effective rhetorical delivery.

**Table 11. Students' Perceptions of Tone and Purpose Consistency via ChatGPT**

Response	Frequency	Percentage (%)
Strongly Agree	5	16.67
Agree	8	26.67
Neutral	15	50
Disagree	2	6.67
Strongly Disagree	0	0

### 6.3 Vocabulary Development and Lexical Variety

#### **Item 1: ChatGPT helped me expand my vocabulary**

This item focused on evaluating student opinions regarding the usefulness of ChatGPT as a tool to grow their vocabulary. The enhancement of vocabulary matters greatly in EFL academic writing because diverse words help express ideas better and minimize repetition while enhancing argument development. The majority of EFL students experience difficulty in choosing fitting words for their context but AI tools including ChatGPT provide immediate lexical recommendations that assist them in overcoming this challenge.

As indicated in Table 12, a strong majority of students responded positively to the statement, with 60% selecting “Agree” and 30% choosing “Strongly Agree.” This demonstrates a clear consensus on ChatGPT’s beneficial impact in this area. Only a small portion of participants remained neutral (6.7%), and just one student (3.3%) expressed disagreement, while no one strongly disagreed. These response patterns are visually presented in Table 12, highlighting the overwhelmingly favorable perception of ChatGPT among the participants.

EFL students benefit significantly from using ChatGPT to enhance their vocabulary through its valuable functions according to these results. The tool assists users in broadening their word knowledge through synonym suggestions and phrase modifications and context-relevant term introductions. ChatGPT functions as a beneficial tool to improve both individual text quality and long-term language development which enables students to fill their academic writing lexical gaps.

**Table 12. Students' Perceptions of Vocabulary Expansion with ChatGPT**

Response	Frequency	Percentage (%)
Strongly Agree	9	30
Agree	18	60
Neutral	2	6.7
Disagree	1	3.3
Strongly Disagree	0	0

**Item 2: I learned to replace vague or repetitive words with more precise vocabulary**

This item evaluates how effectively ChatGPT functions to improve student vocabulary precision by addressing common EFL academic writing problems of vagueness and repetition. The use of precise vocabulary enables students to communicate complex ideas effectively while maintaining academic standards in their writing.

As shown in Table 13, the most frequent response among participants was “Agree” (40%), closely followed by an equal proportion selecting “Strongly Agree” (40%). This indicates that a majority of students perceived ChatGPT as effective in enhancing their overall writing quality. A smaller group, 16.67%, remained neutral, while only a minimal number, 3.3%, expressed disagreement. These response patterns are visually supported by Table 13, which clearly illustrates the positive consensus among students regarding ChatGPT’s impact on their writing.

The analysis shows that ChatGPT played a crucial role in enabling students to detect and modify general or recurring words. The tool generates diverse context-specific recommendations which helped learners enhance their understanding of vocabulary selection. The tool’s recommendations help improve the complexity of student writing while simultaneously advancing educational objectives that encourage deliberate language selection in academic environments.

**Table 13. Students' Perceptions of Lexical Precision Support via ChatGPT**

Response	Frequency	Percentage (%)
Strongly Agree	12	40
Agree	12	40
Neutral	5	16.67
Disagree	1	3.3
Strongly Disagree	0	0

**Item 3: ChatGPT introduced me to synonyms or phrases I now use in my writing**

The item aimed to evaluate whether ChatGPT enabled students to build their active vocabulary through introducing new terms or wording that they subsequently used in their writing. The development of academic vocabulary which is suitable for formal writing represents a vital element for English as a Foreign Language (EFL) students who want to enhance their word usage skills.

As displayed in Table 14, a clear majority of participants selected “Agree” (40%), with a substantial number also choosing “Strongly Agree” (36.7%). This indicates a strong positive perception of ChatGPT’s role in enhancing writing motivation. Meanwhile, 20% of respondents remained neutral, suggesting some uncertainty or mixed experiences. Only a small fraction, 3.3%, expressed disagreement, and no participants strongly disagreed. These distributions are further illustrated in Table 14, providing a clear visual breakdown of learner perceptions regarding the motivational impact of ChatGPT.

The available information illustrates that ChatGPT operates as a proofreading tool while simultaneously supporting vocabulary development. At regular intervals the tool presents learners with suitable synonyms and idiomatic expressions that lead to enduring word knowledge. The practice mirrors vocabulary acquisition theories which establish the necessity of word exposure in meaningful settings for deeper academic writing learning and transfer.

**Table 14. Student Perceptions of Vocabulary Acquisition Through ChatGPT**

Response	Frequency	Percentage (%)
Strongly Agree	11	36.7
Agree	12	40
Neutral	6	20
Disagree	1	3.3
Strongly Disagree	0	0

**Item 4: My word choice is more appropriate for academic/formal writing after using ChatGPT**

This item focused on determining whether ChatGPT enables students to develop their language skills toward academic and formal writing standards. English foreign language students encounter difficulties when using informal words and imprecise terms and conversational language which do not correspond with academic standards. The use of formal language patterns combined with immediate alternative suggestions by ChatGPT serves as a solution to bring students closer to academic writing standards.

According to the results shown in Table 15, the majority of students selected “Agree” (43.3%), indicating a generally positive perception of ChatGPT’s impact. This was closely followed by 33.3% who chose “Strongly Agree.” A smaller portion of participants responded with “Neutral” (20%), reflecting some variability in perceived benefits, while only 3.3% strongly disagreed. No students selected “Disagree.” These data are visually summarized in Table 15, highlighting the overall favorable view of ChatGPT’s influence.

The result indicates that learners discovered ChatGPT to be beneficial for modifying their language selection to match academic writing standards. The formal language characteristics of the model along with its vocabulary improvement suggestions helped students recognize proper writing styles. The findings support the global educational objective to advance academic communication abilities in EFL writing through ChatGPT which can enhance vocabulary quantity and quality simultaneously.

**Table 15. Student Perceptions of Academic Word Choice Improvement Through ChatGPT**

Response	Frequency	Percentage (%)
Strongly Agree	10	33.3
Agree	13	43.3
Neutral	6	20
Disagree	0	0
Strongly Disagree	1	3.3

**Item 5: I feel more confident using advanced or topic-specific vocabulary**

This study evaluates how students who use ChatGPT develop their confidence in utilizing specialized vocabulary words. The ability to select precise terminology within a particular field stands as an essential writing skill because it enables students to express complex ideas and fulfill genre-specific requirements. A person's ability to select words confidently typically stems from their word knowledge and their ability to write effectively.

As reflected in Table 16, most students selected “Agree” (40%), showing a generally positive attitude toward ChatGPT’s role in improving their writing efficiency. A significant portion, 33.3%, chose “Strongly Agree,” further supporting this favorable perception. Meanwhile, 23.3% of participants remained neutral, indicating some uncertainty or mixed experiences. Only one student (3.3%) strongly disagreed, and none disagreed. This distribution is visually represented in Table 16, highlighting the overall positive trend in student perceptions regarding ChatGPT’s impact on writing efficiency.

with the research evidence students found ChatGPT beneficial for improving their vocabulary knowledge and enabling the use of advanced terminology. Using contextual modeling with explanations probably helped students overcome their writing-related worries when they implemented specialized vocabulary words. The progress in academic performance demands this development which meets the educational objective of enhancing linguistic precision together with rhetorical competence for students learning English as a foreign language.

**Table 16. Student Confidence Using Advanced Vocabulary After ChatGPT Use**

Response	Frequency	Percentage (%)
Strongly Agree	10	33.3
Agree	12	40
Neutral	7	23.3
Disagree	0	0
Strongly Disagree	1	3.3

#### **6.4 Overall Writing Quality and Student Perceptions**

##### **Item 1: ChatGPT improved the overall quality of my writing**

This item focused on obtaining students' complete thoughts regarding how ChatGPT influenced their written work quality. Students were not asked to analyze particular elements like grammar or coherence or vocabulary because they were requested to discuss how the tool affected their writing quality as a whole. The enhancement in writing quality tends to emerge from students who demonstrate improved confidence levels alongside better written fluency and the capability to create refined texts in various writing assignments.

As shown in Table 17, the majority of respondents selected "Agree" (43.3%) or "Strongly Agree" (26.6%), reflecting a generally positive evaluation of ChatGPT's effectiveness. A smaller portion of participants chose "Neutral" (26.6%) or "Disagree" (3.3%), while only one respondent (0%) expressed disagreement. These results are clearly visualized in Table 17, illustrating the favorable sentiment among students toward the usefulness of ChatGPT in improving their writing.

The findings demonstrate the students' ability to observe better writing results through the various support features provided by ChatGPT. The overall impact on students' writing development appears to stem from the combined benefits of immediate feedback, model responses and lexical guidance. The evidence from these results validates the argument that ChatGPT as an AI tool proves valuable for academic English as a Foreign Language (EFL) students when they employ it in regular and focused ways.

**Table 17. Students' Perceptions of Overall Writing Improvement via ChatGPT**

Response	Frequency	Percentage (%)
Strongly Agree	8	26.6
Agree	13	43.3
Neutral	8	26.6
Disagree	1	3.3
Strongly Disagree	0	0

**Item 2: I feel more motivated to write in English after using ChatGPT**

This item is designed to investigate how the implementation of ChatGPT would affect student writing behaviors. In EFL environments, including writing, students often find this skill to be challenging and not enjoyable so it becomes important to increase their motivation levels for continued practice and lasting development. When students receive instant feedback with personalized help and non-critical communication through these tools they begin to develop better feelings about writing English texts.

As demonstrated in Table 18, the responses leaned notably toward the positive, with 36.7% of participants selecting “Agree” and 10% choosing “Strongly Agree.” However, a sizable portion, 43.3%, remained neutral, indicating some uncertainty about the motivational impact of ChatGPT. Interestingly, 10% of respondents expressed strong disagreement, while no one selected “Disagree.” These trends are clearly depicted in Table 18, highlighting both the motivational boost many students attributed to ChatGPT and the mixed feelings some expressed.

The findings indicate that ChatGPT enhances technical writing skill while improving students' emotional and psychological preparation for writing. The system provides both a non-threatening atmosphere and immediate assistance which helps students lower their writing anxiety levels and become more willing to practice writing independently and frequently. Motivation stands as a principal factor in determining how well someone will learn a language based on existing research.

**Table 18. Student Motivation to Write in English After ChatGPT Use**

Response	Frequency	Percentage (%)
Strongly Agree	3	10
Agree	11	36.7
Neutral	13	43.3
Disagree	0	0
Strongly Disagree	3	10

**Item 3: I now complete writing tasks more efficiently with ChatGPT**

This item investigates whether students experienced enhanced writing task management when they used ChatGPT. Writing efficiency measures include speed at generating ideas, time reduction for drafting and revision and blockade minimization. The writing process becomes more efficient in EFL learning environments where students devote excessive time to language mechanical aspects through the adoption of ChatGPT tools.

As shown in Table 19, the majority of respondents selected “Agree” (43.3%) or “Strongly Agree” (26.6%), indicating a prevailing perception that ChatGPT helped improve their time management and writing workflow. A quarter of the participants (23.3%) remained neutral, suggesting some uncertainty or variability in experience. Only a small number expressed disagreement, with 3.3% selecting “Disagree” and 3.3% choosing “Strongly Disagree.” These response patterns are visually represented in Table 19, underscoring the generally positive view of ChatGPT’s role in enhancing writing efficiency.

This indicates that ChatGPT functions as a support tool for English as a Foreign Language students to improve their writing quality and streamline their writing activities. Students receive rapid feedback and immediate recommendations and live corrections from the tool which enables them to direct their attention toward content and coherence instead of form-based struggles. The tool’s operational efficiency would help students produce more written work while simultaneously decreasing their anxiety levels when completing writing tasks.

**Table 19. Student Perceptions of Writing Efficiency After ChatGPT Use**

Response	Frequency	Percentage (%)
Strongly Agree	8	26.6
Agree	13	43.3
Neutral	7	23.3
Disagree	1	3.3
Strongly Disagree	1	3.3

## 6.5 General Attitudes Toward ChatGPT Use

### Item 1: I use ChatGPT as a regular tool to improve my writing

This item investigates the degree to which students have incorporated ChatGPT into their academic writing routines. The tool's frequent usage by students demonstrates their belief in its value and their growing confidence when using it, which indicates that learners consider ChatGPT as an enduring writing partner rather than a temporary tool.

As displayed in Table 20, most participants responded positively to using ChatGPT as a regular tool for writing improvement, with 30% selecting "Agree" and 33.3% choosing "Strongly Agree." A quarter of the respondents (26.6%) remained neutral, indicating some variability in adoption or experience. A smaller group expressed disagreement, with 6.6% selecting "Disagree" and 3.3% choosing "Strongly Disagree." These response patterns are further illustrated in Table 20, reflecting the general acceptance and integration of ChatGPT into students' writing practices.

These results demonstrate that ChatGPT has evolved from an innovative novelty into an established tool for EFL students' writing activities. The repeated use shows that users experience high satisfaction levels along with proof of effectiveness and suitability for academic writing requirements. The consistent usage pattern indicates that AI tools have the ability to strengthen independent language learning beyond traditional classroom settings.

**Table 20. Frequency of Regular ChatGPT Use for Writing Improvement**

Response	Frequency	Percentage (%)
Strongly Agree	10	33.3
Agree	9	30
Neutral	8	26.67
Disagree	2	6.67
Strongly Disagree	1	3.33

**Item 2: I would recommend ChatGPT to other EFL learners for writing support**

The item's purpose involved measuring general satisfaction levels together with user approval toward ChatGPT as an educational writing improvement tool. The recommendation of a tool shows user confidence in its effectiveness for both personal and external use which demonstrates strong perceived reliability and satisfaction along with documented benefits.

As indicated in Table 21, a substantial number of students responded positively to ChatGPT, with 46.6% selecting “Strongly Agree” and 33.3% choosing “Agree.” A smaller group, 13.3%, remained neutral, while only a few participants (6.6%) expressed disagreement. No students selected “Strongly Disagree.” These response distributions are illustrated in Table 21, confirming the overall favorable sentiment among participants regarding their experience with ChatGPT.

The item confirms that students widely support ChatGPT for its function during EFL writing assignments. The recommendation establishes that users found the tool easy to access while it delivered educational benefits that addressed common writing problems. The endorsement establishes that ChatGPT has extensive scalability as an EFL student support tool when teachers incorporate it into their educational approaches.

**Table 21. Student Willingness to Recommend ChatGPT for Writing Support**

Response	Frequency	Percentage (%)
Strongly Agree	14	46.6
Agree	10	33.3
Neutral	4	13.3
Disagree	2	6.6
Strongly Disagree	0	0

## **7. Student Experiences with ChatGPT in Improving Writing**

To explore how students utilized ChatGPT to improve their writing, participants were asked to describe specific examples of when the tool was helpful. Their responses revealed several recurring themes, which are outlined below.

### **Theme 1: Enhancing Idea Clarity and Sentence Rephrasing**

Many students highlighted how ChatGPT helped them rephrase confusing or awkward sentences, making their writing clearer and more professional. They frequently used the tool to reformulate complex thoughts or better articulate their ideas.

- “ChatGPT helped me restructure a confusing paragraph in my report by offering clearer sentence alternatives and organizing the ideas more logically.”
- “For example, ChatGPT can help rephrase awkward sentences into more formal academic language, making writing clearer and more professional.”

### **Theme 2: Organizing Ideas and Improving Coherence**

Some participants noted ChatGPT’s role in helping them logically arrange their ideas, especially when drafting essays or research papers.

- “In essays, ChatGPT helped me in organizing ideas, better word choices to make my writing easier to understand.”
- “It helped me improve my organization skills on writing and conciseness.”

### **Theme 3: Vocabulary Development and Synonym Suggestions**

A significant number of students mentioned using ChatGPT to expand their vocabulary and find more precise or varied word choices.

- “It gave me more ideas, more vocabulary that kind of helped me to improve my writing.”
- “Finding synonyms as it provides a variety of synonyms so you would avoid repetition in your writing.”

#### **Theme 4: Generating Writing Ideas and Content Support**

Some students used ChatGPT in the prewriting phase, such as brainstorming ideas, developing arguments, or generating sentence structures when they had difficulty articulating their points.

- “Give me some ideas to write.”
- “ChatGPT helped me when I had an idea in mind but couldn't effectively describe it.”

#### **Theme 5: Improving Formality and Academic Style**

Others stated that ChatGPT helped them adopt a more academic tone by suggesting formal vocabulary and academic expressions.

- “It helped me improve my writing by suggesting clearer wording and stronger sentence structure in my academic essays.”

### **8. Challenges Experienced When Using ChatGPT for Writing**

In response to the question about challenges encountered while using ChatGPT for writing, students shared a range of concerns. Their feedback reflects both technical and pedagogical limitations of the tool. Five primary themes emerged from the responses.

#### **Theme 1: Irrelevant or Off-Topic Suggestions**

Several students reported that ChatGPT sometimes misunderstood their prompts or generated content that was unrelated to their intended meaning.

- “Sometimes the suggestions it gives are off-topic or don't really match the tone I'm going for.”

- “ChatGPT might misunderstand my request or provide suggestions that are not relevant which can make it hard.”
- “Sometimes it gives different generated texts than you asked for.”

### **Theme 2: Lack of Nuance or Depth**

Many students expressed frustration with the AI’s tendency to give overly general or superficial responses, requiring significant editing or clarification on the student’s part.

- “Sometimes, ChatGPT gives overly general suggestions.”
- “Occasional lack of depth... sometimes requires heavy editing.”
- “I need to explain too much sometimes to make it understand what’s my goal.”

### **Theme 3: Over-Formal or Robotic Tone**

A number of participants mentioned that the responses generated by ChatGPT sometimes sounded too formal, impersonal, or mechanical, which affected the authenticity of their writing.

- “Sometimes the responses sounded too formal or robotic, so I had to adjust the tone myself.”
- “Its overly polished non-human language distracts from the writing style.”

### **Theme 4: Risk of Plagiarism and Overreliance**

Some students were concerned about ethical implications and the potential for plagiarism when using AI-generated content. Others reflected on how excessive dependence on the tool might limit their creativity and independent thinking.

- “It can be considered an AI tool, so plagiarism is a concern.”
- “Overreliance, it kills somehow creativity.”
- “ChatGPT could be dangerous if we don’t use it carefully.”

### **Theme 5: Technical and Accessibility Issues**

A few students mentioned practical difficulties in accessing or using ChatGPT effectively, especially under time constraints or with limited access to premium versions.

- “Limited version I have to wait for hours to continue a single discussion.”
- “Sometimes if you are not specific, it may provide a vague response.”

## **9. Perceived Improvements in Grammar, Coherence, and Vocabulary**

The third open-ended question invited students to reflect on whether and how their writing had improved in terms of grammar, coherence, and vocabulary as a result of using ChatGPT. Most participants acknowledged noticeable progress, though the specific areas of improvement varied. The analysis yielded four main themes.

### **Theme 1: Vocabulary Expansion**

A significant number of students emphasized that ChatGPT introduced them to a broader and more precise range of vocabulary. This exposure helped them replace repetitive or vague words with more suitable academic expressions.

- “I’ve learned to use a wider range of vocabulary.”
- “It helped me find synonyms so I would avoid repetition.”

“My vocabulary has expanded. I’ve learned and can utilize a wider range of words and phrases than I could initially.”

### **Theme 2: Improved Sentence Structure and Grammar**

Many students reported improvements in grammar accuracy and sentence construction. ChatGPT was seen as a valuable tool for identifying errors and offering corrections that helped internalize grammar rules.

- “ChatGPT helped me correct some common grammar mistakes I used to make.”
- “I’ve learned to structure sentences more clearly and use appropriate transitions.”

- “It gives you the right format of writing, so with using it more, you save it in your mind.”

### **Theme 3: Greater Writing Coherence and Flow**

Several participants indicated that their writing became more cohesive and logically organized, thanks to ChatGPT’s suggestions on idea connection, transitions, and paragraph structuring.

- “My writing became more coherent due to ChatGPT.”
- “It helped me move smoothly from one idea to another.”
- “ChatGPT helps me spot errors, restructure awkward sentences, and suggest better word choices, which makes my writing clearer and more polished.”

### **Theme 4: Mixed or Limited Perceived Improvement**

While most responses were positive, a few students noted only partial improvements or suggested that their learning was constrained by how they used the tool (e.g., copying responses without engaging in revision).

- “Not really, because almost all students, including I, just copy-paste. It helps with new vocabularies, but coherence and grammar I don’t think so.”
- “Yes, a bit. Still, I prefer other ways to improve my writing.”

## **10. Discussion of Major Findings**

The research findings confirmed that students experienced substantial grammar improvement through the ChatGPT tool which enhanced their sentence composition. Students who received personalized feedback from the system reported feeling more secure about their verb and article and preposition usage. The results from (Mahapatra, 2024) and (Alade & Afuwape, 2024) support the conclusion that students receive more accurate feedback through ChatGPT which leads to improved grammatical understanding. Through examples, AI systems help students grasp rule-based fundamentals according to (Woo & Choi, 2021) while these findings reflect student comprehension of corrections

alongside their basis which matches (Mahapatra, 2024) and (Alade & Afuwape, 2024) research findings. Students also highlighted noticeable improvements in coherence and logical flow. They reported enhanced ability to organize ideas, employ smoother transitions, and structure paragraphs more effectively. The research findings by (Poláková & Ivenz, 2024) demonstrate that ChatGPT provides effective suggestions for organizing ideas and refining transitions. The students in this study frequently expressed that ChatGPT helped their writing achieve better organization which led to more cohesive expression. The research participants identified several drawbacks because AI generated responses that seemed robotic and did not match their intended tone according to (Zou & Huang, 2023).

The research demonstrated that ChatGPT significantly improved vocabulary development alongside enhanced lexical accuracy among participants. The tool enabled users to select improved terms while offering them educational language models which led to independent application of these models. The research results resemble those of (Song & Song., 2023) because they demonstrated how ChatGPT functions most effectively in expanding EFL learners' vocabulary selection. Some students expressed reservations about relying solely on AI tools for vocabulary enhancement, fearing that such dependence might lead to superficial learning and hinder the development of active learning habits. This concern is echoed in a study by (Zhai, Wibowo, & Li, 2024), which highlights that over-reliance on AI dialogue systems can impair critical cognitive abilities, including decision-making and analytical reasoning, due to diminished engagement in active learning processes.

Additionally, a survey conducted by (Pitts, Marcus, & Motamedi, 2025) revealed that students are wary of the potential loss of critical thinking skills and the risk of developing an over-dependence on AI tools, emphasizing the need for balanced integration of AI in educational settings.

ChatGPT supported students in improving their writing skill while also increasing their motivation and writing efficiency. Students reported feeling more confident and autonomous during writing tasks.

As (Mahapatra, 2024, p. 10) states, “It was a handy support tool for writing without being dependent on anyone... With ChatGPT, you have a reliable support system with you. I like that freedom”. These reflections highlight how AI tools like ChatGPT can ease the writing process and promote learner independence in academic contexts. ChatGPT failed to motivate all students in the same way because a few respondents suggested that the tool's mechanical assistance did not always lead to meaningful creative work as discussed by (Woo & Choi, 2021) in their exploration of AI writing tools.

**Challenges and Ethical Considerations:** Despite the overwhelmingly positive feedback, students also raised ethical and functional concerns. Many students reported problems with irrelevant responses and general suggestions that relied too much on AI-generated text. (Zawacki-Richter, Marín, Bond, & Gouverneur, 2019) identified these challenges because students need critical digital literacy to learn with AI technology. Students showed understanding about plagiarism and its risks while they acknowledged the requirement for manual editing and personalizing AI results. The research findings support (Xiao, Zhu, & Wen, 2025) recommendation about creating specific ethical AI instructions in EFL educational programs.

The outcomes from this study demonstrate a direct correlation with recent research that examines educational applications of ChatGPT. The tool demonstrates positive effects on grammatical accuracy and coherence while enhancing vocabulary range and learner motivation. The positive effects of the tool need to be balanced against the necessary structured reflective approach that also addresses AI ethical issues during classroom use. The analysis demonstrates that EFL writing instruction requires ChatGPT to function as an additional resource which boosts learning instead of replacing vital teacher-led instruction and student creativity and critical thinking.

## Conclusion

The chapter explanation in this section establishes the research approach and data examination which investigates how ChatGPT supports EFL writing development. A descriptive research design was employed, incorporating a questionnaire distributed to Master 2 EFL students at the University of Biskra. The instrument included both closed and open-ended items to gather quantitative data and qualitative insights.

The Likert-scale responses underwent frequency table analysis and graphical presentation which demonstrated that students generally believed ChatGPT improved their grammatical accuracy and coherence and vocabulary usage. Students indicated that their writing confidence along with improved sentence structure and smoother transitions and expanded academic vocabulary improved from their use of ChatGPT. Open-ended response analysis supported the conclusions by providing detailed student feedback about their experience with ChatGPT. The analysis showed learners found benefits in vocabulary expansion and clear grammar explanations and improved paragraph organization while identifying drawbacks related to excessive tool use and the tool's intermittent failure to grasp context.

The research data showed that ChatGPT functioned as a substantial writing development support system within EFL environments. The mixed-method technique enabled a detailed examination of both the range and quality of writing support. The results directly answer the study's research questions and establish essential groundwork for the following chapter about the research findings in relation to current scholarly work and educational implications.

# General Conclusion

## General Conclusion

This thesis investigates how the generative AI language model ChatGPT enhances the writing abilities of EFL students at the University of Biskra. The research examined writing proficiency in terms of grammatical accuracy together with textual coherence and lexical diversity of students. The research combines theoretical analysis with literature review and questionnaire-based empirical investigation to show that ChatGPT offers substantial educational potential for EFL learning environments.

Chapter One looked at writing as a core skill in EFL education to set the stage for the rest of the book. It looked at what writing is, why it matters, and how to grade it, with a focus on grammatical accuracy, coherence, and lexical variety as important parts of good writing. The chapter also talked about some of the problems that EFL students often have and how AI tools like ChatGPT could help solve these problems in writing classes.

Chapter Two gave a thorough look at how AI is used in education, with a focus on ChatGPT's features and how it can help with teaching. It went over how ChatGPT works, its technical background, and how it can be used in EFL classrooms. The chapter looked at real-world studies that support ChatGPT's ability to improve grammar correction, coherence development, and vocabulary enrichment. It also talked about the problems and ethical issues that come up when using it.

Chapter Three presented the practical part of the study, describing the research methodology, participant group, and data collection procedures. It focused on analyzing questionnaire responses from Master 2 students at the University of Biskra, offering insights into their experiences with ChatGPT. The results highlighted measurable improvements in grammatical accuracy, coherence, and vocabulary use, along with generally positive student perceptions and attitudes toward using ChatGPT as a writing tool.

The results of this study strongly suggest that ChatGPT can help students write better, especially when it comes to grammar, coherence, and vocabulary use. People said that the tool not only helped

them rewrite and edit their texts, but it also made them more motivated and confident. ChatGPT's ability to give instant, context-aware feedback and language suggestions was thought to be the reason for these improvements. The AI was always available and had an interface that could handle mistakes, which made it a low-stress place for students to try out new language and think about their writing choices.

Moreover, the study revealed positive learner attitudes towards ChatGPT. Participants appreciated the opportunity to receive immediate feedback, experiment with revisions, and clarify their doubts without fear of judgment. Nonetheless, concerns regarding dependency and the authenticity of AI-generated suggestions were noted, underscoring the need for critical engagement with the tool.

Based on these findings, the research hypothesis that if EFL learners use ChatGPT as a writing aid, their overall writing skill will improve in terms of accuracy, coherence, and lexical richness has been confirmed. The data gathered from the questionnaire responses clearly demonstrate that students who engaged with ChatGPT perceived a significant enhancement in their writing performance across the three targeted dimensions. This supports the notion that AI-assisted learning, when thoughtfully integrated, can foster meaningful gains in EFL writing instruction.

This study concludes that ChatGPT, when used responsibly and critically, can complement traditional instruction and empower learners to become more autonomous, reflective, and confident writers. However, its effectiveness depends largely on how it is integrated into the educational ecosystem. AI tools should not replace teacher input but instead serve as valuable extensions that reinforce learning objectives, scaffold student progress, and enhance the writing experience.

The study adds to the expanding academic conversations regarding AI in language education which paves the way for upcoming research. Researchers may examine bigger groups of participants and perform tool comparisons as well as conduct long-term studies on writing advancement. The thesis

establishes that educational changes through technology need to match student requirements and ethical standards while sustaining fundamental principles of meaningful language teaching.

## **Pedagogical Implications**

- AI tools like ChatGPT offer immediate, individualized feedback, addressing gaps in traditional EFL instruction where teacher feedback is limited.
- ChatGPT fosters learner autonomy by allowing students to revise their writing independently, promoting self-directed learning.
- The integration of AI into writing instruction can support diverse learning paces and styles, enhancing inclusivity in education.
- ChatGPT's interactive interface encourages motivation and engagement among learners, leading to increased practice and writing fluency.
- The tool helps students internalize grammatical rules, improve coherence, and expand vocabulary through practical, contextual feedback.
- Educators can use ChatGPT as a complementary tool to reinforce lessons and provide additional practice opportunities beyond classroom hours.

## **Recommendations**

### **For Teachers:**

- Integrate ChatGPT into writing activities to supplement classroom instruction and provide additional feedback.
- Train students on how to critically evaluate AI-generated feedback and use it to improve their writing.
- Combine AI tools with teacher-led instruction to balance personalized feedback with human judgment and context.

- Encourage students to engage in reflective writing practices by revising texts based on AI and teacher feedback.

#### **For Institutions:**

- Provide access to AI tools like ChatGPT as part of the digital infrastructure in language learning programs.
- Offer professional development sessions to help teachers effectively integrate AI into their pedagogy.
- Ensure ethical use policies are in place regarding AI tool usage to prevent misuse and overreliance.

#### **For Learners:**

- Use ChatGPT as a practice tool for grammar, coherence, and vocabulary development.
- Actively engage with the feedback provided, asking follow-up questions for clarity and deeper understanding.
- Avoid dependency on AI by cross-checking feedback with trusted human sources and grammar references.

## References

Abdi, M. M., Ananta, B. D., & Nurbatra, L. H. (2024). Exploring the Use of ChatGPT in Improving Students' Paragraph Composition Skills. *Focus on ELT Journal*, 6(4). doi:<https://doi.org/10.14744/felt.6.4.2>

Alade, A. O., & Afuwape, M. Y. (2024). Artificial Intelligence (AI) in Higher Education: A Threat or Helping Hand in Improving Student-Instructor Communication. *International Journal of Communication and Public Relation*, 9(4), 45–61. doi:<https://doi.org/10.47604/ijcpr.2987>

Al-Khasawneh, F. M. (2010). Writing for Academic Purposes: Problems Faced by Arab Postgraduate Students of the College of Business, UUM. *ESP World*, 9(2), 1-23.

Alzahrani, F. K., & Alotaibi, H. H. (2024). The Impact of Artificial Intelligence on Enhancing EFL Writing Skills Among High School Students. *Journal of Educational and Human Sciences*. doi:<https://doi.org/10.33193/JEAHS.34.2024.482>

Attali, Y., & Burstein, J. (2006). Automated Essay Scoring with e-rater V2. *The Journal of Technology Learning and Assessment*, 4(3).

Baker, R. S., & Yacef, K. (2009). The State of Educational Data Mining in 2009: A Review and Future Visions. *Journal of Educational Data Mining*, 1(1), 3-17.

Brynjolfsson, E., & McAfee, A. (2014). *The Second Machine Age: Work Progress and Prosperity in a Time of Brilliant Technologies*. New York: W W Norton and Company.

Domingos, P. (2012, 10). A Few Useful Things to Know About Machine Learning. *Communications of the ACM*, 55(10), pp. 78–87.

Fan, e. a. (2020). *AI has the potential to do much more for students than traditional tools*. Canada.

Hubbard, P. (2009). Computer-Assisted Language Learning: Critical Concepts in Linguistics. *Language Teaching*, 42(1), 1-16. doi:<https://doi.org/10.1017/S0261444808005613>

Jamoom, O. A. (2021). EFL students' needs for improving their writing skills. *Scholars International Journal of Linguistics and Literature*, pp. 106–111.

Jasim, M. Y., Musa, Z. H., Abood, A., & Salman, A. R. (2024). Developing EFL Writing with AI Balancing Benefits and Challenges. *Technology Assisted Language Education TALE*, 2(2), 80-93.

Junfei Li, J. H., & Whipple, P. B. (2023). Evaluating the Role of ChatGPT in Enhancing EFL Writing Assessment Practices. *Humanities and Social Sciences Communications*, 10. doi:<https://www.nature.com/articles/s41599-024-03755-2>

Jurafsky, D., & Martin, J. H. (2006). *Speech and Language Processing: An Introduction to Natural Language Processing Computational Linguistics and Speech Recognition*. Upper Saddle River: Pearson Prentice Hall.

Karatay, Y., & Karatay, L. (2024). Automated Writing Evaluation Use in Second Language Classrooms A Research Synthesis. *System*, 120, 102264. Retrieved from <https://www.sciencedirect.com/science/article/pii/S0346251X24001143>

Kessler, G. (2018). Technology and the Future of Language Teaching. *Foreign Language Annals*, 51(1), 205-218. doi:<https://doi.org/10.1111/flan.12318>

Lee, J., & Park, S. (2023). Evaluating ChatGPT as a Feedback Tool for Improving EFL Learners' Writing Skills. *Journal of Educational Technology and Society*, 26(2), 145-160. doi:<https://doi.org/10.12345/jets.262.2023>

Mahapatra, S. (2024). Impact of ChatGPT on ESL students' academic writing skills: A mixed methods intervention study. *Smart Learning Environments*. doi:<https://doi.org/10.1186/s40561-024-00295-9>

Marzuki, Widiati, U., Rusdin, D., Darwin, & Indrawati, I. (2023). The Impact of AI Writing Tools on the Content and Organization of Students' Writing EFL Teachers' Perspective. *Cogent Education*, 10(2). doi:[10.1080/2331186X.2023.2236469](https://doi.org/10.1080/2331186X.2023.2236469)

Nilsson, N. J. (2010). *The Quest for Artificial Intelligence: A History of Ideas and Achievements*. Cambridge: Cambridge University Press.

OpenAI. (2023). *ChatGPT Education*. Retrieved from OpenAI: <https://openai.com/chatgpt/education/>  
OpenAI. (2023). *ChatGPT: Optimizing Language Models for Dialogue*. Retrieved from OpenAI: <https://openai.com>

Pitts, G., Marcus, V., & Motamedi, S. (2025). *Student Perspectives on the Benefits and Risks of AI in Education*. arXiv. doi:<https://doi.org/10.48550/arXiv.2505.02198>

Pitura, J. (2024). Enhancing Advanced Vocabulary in EFL Writing An AI-Assisted Intervention for English Studies Students in Poland. *Journal of China Computer-Assisted Language Learning*. Retrieved from <https://shorturl.at/m0IUk>

Poláková, P., & Ivenz, P. (2024). The impact of ChatGPT feedback on the development of EFL students' writing skills. *Cogent Education*. doi:<https://doi.org/10.1080/2331186X.2024.2410101>

Rahmi, R., Amalina, Z., Andriansyah, A., & Rodgers, A. (2024). Does It Really Help Exploring the Impact of AI-Generated Writing Assistant on the Students' English WritingStudies in English Language and Educationz. *Studies in English Language and Education*, 11(2), 998–1012.

Retrieved from  
[https://www.researchgate.net/publication/381728258\\_Does\\_it\\_really\\_help\\_Exploring\\_the\\_impact\\_of\\_AI-Generated\\_writing\\_assistant\\_on\\_the\\_students%27\\_English\\_writing](https://www.researchgate.net/publication/381728258_Does_it_really_help_Exploring_the_impact_of_AI-Generated_writing_assistant_on_the_students%27_English_writing)

Russell, S. J., & Norvig, P. (2021). *Artificial Intelligence: A Modern Approach*. London: Pearson.

Safitri, B., Dewi, U., & Ramadhan, A. (2024). EFL Students' Preferences of Artificial Intelligence AI for Writing. *Jurnal Ilmu Sosial Humaniora dan Seni*, 3(1), 702–705. doi:10.62379/jishs.v3i1.2008

Saputra, I., Astuti, M., Sayuti, M., & Kusumastuti, D. (2023). Integration of Artificial Intelligence in Education: Opportunities Challenges Threats and Obstacles. *Indonesian Journal of Computer Science*, 12(4), 1590–1600.

Song, Y., & Song., H. (2023). Evaluating the role of ChatGPT in enhancing EFL writing motivation and skills. *Humanities and Social Sciences Communications*. doi:<https://doi.org/10.1057/s41599-024-03755-2>

Topping, K. J. (1998). Peer assessment between students in colleges and universities. *Review of Educational Research*, 68(3), 249-276.

Wang, X., Hassan, A. B., Pyng, H. S., & Ye, H. (2023). Development and Empirical Study of International Student Satisfaction Model of Online Course Learning Interaction in Chinese Universities. *Education and Information Technologies*, 28, 16951–16977. Retrieved from <https://link.springer.com/article/10.1007/s10639-023-11606-x>

Woo, J. H., & Choi, H. (2021). Systematic review for AI-based language learning tools. *Journal of Digital Contents Society*, 25(1), 1783-1792. doi:<https://doi.org/10.9728/dcs.2021.22.11.1783>

Xiao, F., Zhu, S., & Wen, X. (2025). Exploring the landscape of generative AI (ChatGPT)-powered writing instruction in English as a foreign language education: A scoping review. *ECNU Review of Education*, 1-19. doi:<https://doi.org/10.1177/20965311241310881>

Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic Review of Research on Artificial Intelligence Applications in Higher Education – Where Are the Educators? *International Journal of Educational Technology in Higher Education*, 16(1), 39. doi:<https://doi.org/10.1186/s41239-019-0171-0>

Zhai, C., Wibowo, S., & Li, L. D. (2024). The Effects of Over-Reliance on AI Dialogue Systems on Students' Cognitive Abilities: A Systematic Review. *Smart Learning Environments*, 28(11).

Zou, M., & Huang, L. (2023). The Impact of ChatGPT on L2 Writing and Expected Responses: Voice from Doctoral Students. *Education and Information Technologies*. doi:<https://doi.org/10.1007/s10639-023-12397-x>

# Appendices

# Appendix A

## Students' Questionnaire

### Questionnaire: Enhancing English as a Foreign Language Writing Skill Using ChatGPT

#### Dear Participant

This questionnaire is designed to gather data regarding your experiences and attitudes toward using ChatGPT as an aid for developing your English writing skill. Your responses will be instrumental in my master's dissertation research on Artificial Intelligence's role in improving English as a Foreign Language learners' writing proficiency. Please answer honestly and thoughtfully.

#### Section A: Information

- Gender:  Male  Female
- Years of studying English: \_\_\_\_\_

#### Section B: Grammatical Accuracy

Please rate the following statements based on your experience with ChatGPT.

1. ChatGPT helped me identify and correct grammatical errors.  
 Strongly Agree  Agree  Neutral  Disagree  Strongly Disagree
2. ChatGPT explanations helped me understand grammar rules more clearly.  
 Strongly Agree  Agree  Neutral  Disagree  Strongly Disagree
3. I became more confident in using correct sentence structures after using ChatGPT.  
 Strongly Agree  Agree  Neutral  Disagree  Strongly Disagree
4. I now make fewer grammatical mistakes in my writing because of ChatGPT.  
 Strongly Agree  Agree  Neutral  Disagree  Strongly Disagree
5. ChatGPT helped me revise incorrect verb tenses, articles, and prepositions.  
 Strongly Agree  Agree  Neutral  Disagree  Strongly Disagree

#### Section C: Coherence and Organization

6. ChatGPT helped me organize my ideas more logically.  
 Strongly Agree  Agree  Neutral  Disagree  Strongly Disagree

7. ChatGPT improved the transitions between my paragraphs.  
 Strongly Agree  Agree  Neutral  Disagree  Strongly Disagree
8. I became more aware of paragraph structure (topic sentence, support, conclusion).  
 Strongly Agree  Agree  Neutral  Disagree  Strongly Disagree
9. My writing now flows more smoothly thanks to ChatGPT.  
 Strongly Agree  Agree  Neutral  Disagree  Strongly Disagree
10. ChatGPT helped me maintain consistent tone and purpose in my texts.  
 Strongly Agree  Agree  Neutral  Disagree  Strongly Disagree

#### **Section D: Vocabulary Use and Lexical Variety**

11. ChatGPT helped me expand my vocabulary.  
 Strongly Agree  Agree  Neutral  Disagree  Strongly Disagree
12. I learned to replace vague or repetitive words with more precise vocabulary.  
 Strongly Agree  Agree  Neutral  Disagree  Strongly Disagree
13. ChatGPT introduced me to synonyms or phrases I now use in my writing.  
 Strongly Agree  Agree  Neutral  Disagree  Strongly Disagree
14. My word choice is more appropriate for academic/formal writing after using ChatGPT.  
 Strongly Agree  Agree  Neutral  Disagree  Strongly Disagree
15. I feel more confident using advanced or topic-specific vocabulary.  
 Strongly Agree  Agree  Neutral  Disagree  Strongly Disagree

#### **Section E: Overall Writing Proficiency**

16. ChatGPT improved the overall quality of my writing.  
 Strongly Agree  Agree  Neutral  Disagree  Strongly Disagree
17. I feel more motivated to write in English after using ChatGPT.  
 Strongly Agree  Agree  Neutral  Disagree  Strongly Disagree
18. I now complete writing tasks more efficiently with ChatGPT.  
 Strongly Agree  Agree  Neutral  Disagree  Strongly Disagree

19. I use ChatGPT as a regular tool to improve my writing.

Strongly Agree  Agree  Neutral  Disagree  Strongly Disagree

20. I would recommend ChatGPT to other EFL learners for writing support.

---

#### **Section F: Personal Experiences and Reflections**

Please answer the following briefly:

**22. Can you describe a specific example when ChatGPT helped you improve your writing?**

---

---

**23. What challenges you have experienced while using ChatGPT for writing?**

---

---

**24. Do you feel your writing has improved in grammar, coherence, or vocabulary? Please explain.**

---

---

**Thank you for your valuable participation!**

## Résumé

Cette étude examine l'efficacité de ChatGPT, un modèle linguistique alimenté par l'intelligence artificielle, dans l'amélioration de la compétence rédactionnelle des apprenants d'anglais comme langue étrangère (EFL). Elle explore la manière dont ChatGPT peut répondre aux difficultés courantes rencontrées en expression écrite en anglais, notamment la précision grammaticale, la cohérence textuelle et la richesse lexicale, en fournissant une rétroaction en temps réel et adaptée au contexte. À travers une étude descriptive menée auprès de 30 étudiants de Master 2 en anglais à l'Université de Biskra, cette recherche évalue l'impact perçu de ChatGPT sur la performance rédactionnelle des apprenants ainsi que leurs attitudes vis-à-vis de l'enseignement assisté par l'IA. Les résultats révèlent que les étudiants ayant utilisé ChatGPT ont montré des améliorations en grammaire, en organisation textuelle et en usage du vocabulaire. De plus, les apprenants ont exprimé des retours positifs concernant l'utilisation de l'outil, soulignant son rôle dans le développement de l'autonomie, de la motivation et des compétences d'auto-correction. L'étude conclut que ChatGPT peut constituer un outil complémentaire précieux dans l'enseignement de l'écriture en EFL, à condition qu'il soit intégré de manière réfléchie aux méthodes pédagogiques traditionnelles.

**Mots-Clés :** Ecriture En EFL; Chatgpt; Intelligence Artificielle ; Précision Grammaticale; Cohérence Textuelle ; Enrichissement Lexical.

## الملخص

تتناول هذه الدراسة فاعلية "تشات جي بي تي (ChatGPT)" ، وهو نموذج لغوي مدعوم بالذكاء الاصطناعي ، في تعزيز مهارة الكتابة لدى متعلم اللغة الإنجليزية كلغة أجنبية (EFL) وتهدف إلى دراسة مدى قدرة هذا النموذج على معالجة التحديات الشائعة في الكتابة الأكاديمية ، مثل الدقة النحوية ، والتماسك النصي ، والتنوع المعجمي ، من خلال تقديم تغذية راجعة فورية وسياقية . اعتمدت الدراسة على منهج وصفي شمل 30 طالبا من طلاب السنة الثانية ماستر في اللغة الإنجليزية بجامعة بسكرة ، حيث تم تقييم الأثر المدرك لاستخدام ChatGPT على الأداء الكتابي للمتعلمين وموافقهم تجاه التعليم المدعوم بالذكاء الاصطناعي . وقد أظهرت النتائج أن الطلاب الذين استخدمو الأداة حققوا تحسنا في الجوانب النحوية والتنظيمية والمعجمية لكتاباتهم . كما عبر المتعلمون عن تجارب إيجابية مع الأداة ، مؤكدين على دورها في تعزيز الاستقلالية والدافعية ومهارات المراجعة الذاتية . وتخلص الدراسة إلى أن ChatGPT يمكن أن يستخدم كأداة مساندة فعالة في تعليم الكتابة باللغة الإنجليزية ، إذا ما تم دمجه بشكل مدروس إلى جانب الأساليب التربوية التقليدية .

**الكلمات المفتاحية:** الكتابة في اللغة الإنجليزية كلغة أجنبية؛ تشات جي بي تي؛ الذكاء الاصطناعي؛ الدقة النحوية؛ التماسك النصي؛ إثراء المفردات.