

Exploring the Effect of Using Artificial Intelligence Writing Programs in Writing Essay

**PEOPLE'S DEMOCRATIC REPUBLIC OF ALGERIA  
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SECTION OF ENGLISH



**Exploring the Student s Perception on  
Use of Artificial Intelligence Writing  
Programs in Writing Essay: The Case  
of Third Year English foreign language  
students at Biskra University**

Research Proposal submitted in partial fulfilment of the requirements for  
**Master Degree in Sciences of Language**

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# Declaration

I, Laouni Rym, hereby declare that this work in this dissertation is my own work, conducted under the supervision and guidance of Dr. Bachar Ahmed . This dissertation was not previously presented for the award of any other degree. Also, the information extracted from the literature is provided a list of references. This study was conducted and completed for the academic year 2022/2023, at Mohammed Khider University of Biskra; Algeria

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# Dedication

To my parents, whose unwavering support and encouragement made this journey possible .In gratitude to my advisor, Dr. Ahmed Bachar for their invaluable guidance and mentorship throughout this research .To my cousin Hadil for believing in me even when I doubted myself .I also want to thank my brothers and my sweet sister Lina for always motivate me whenever I needed them .To my beloved friends and classmates Chaima, Wafa, Abir,hayat who assist me.I dedicate this work to the person who held my hand through every milestone: Brahim.

# Acknowledgement

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## **Abstract**

The current research explores the impact of employing Artificial Intelligence (AI) writing software to enhance the essay writing proficiency of third-year EFL students at Mohamed Kheider of Biskra University. Furthermore, it investigates the efficacy of AI tools on students' essay writing abilities. The primary objectives of this study are to present a foundation on Artificial Intelligence as an Automated Writing Evaluation instrument. The aim is to acquire students' interest in the subject by refining their skills through practice and empowering them to take charge of their learning. We hypothesize that if EFL students utilize AI writing programs during their essay writing process, they will outperform students who do not. To accomplish the objectives of our study, we have adopted a descriptive methodology involving a mixed method approach. The data collection tool is a questionnaire distributed to the students, focusing on Third Year EFL learners (N=31). The findings reveal that 83.7% of students had previous experience using AI writing tools ChatGPT was the most commonly used AI tool (70.97% of students). Besides, the study shows that 53.3% use AI tools to help generate new ideas and arguments. 50% had a neutral opinion on AI effectiveness, while 39.7% viewed it positively also 87.1% did not encounter difficulties using AI writing tools. The results demonstrate that both students acknowledge the potential benefits of integrating Artificial Intelligence into the educational curriculum, and the Automated Writing Evaluation tool has the capacity to transform students' essay writing skills and enhance them.

## **List of Abbreviation and Acronym**

**AI:** Artificial Intelligence.

**AIEd:** Artificial Intelligence in Education.

**AW:** Academic Writing.

**CALL:** Computer-Assisted Language Learning.

**EFL:** English as a Foreign Language.

**ICT:** Information, Communication, and Technology.

**TELL:** Technology-Enhanced Language learning.

**AWE:** Automated writing evaluation.

**AWCF:** Automatic written corrective feedback.

**Q&A:** Questions and Answers.

**E-Learning:** Electronic learning.

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# **General introduction**

## 1. **Background to the Study :**

Technology served human life in several sectors as well as education. It provides a recent methods, approaches, tools, materials, equipment, systems, and strategies for teaching and learning processes. Teaching English as foreign language or as second language also has influenced with the revolutionary transformation and become technology oriented. One of the technology is Artificial intelligence based programs that refers to system controlled robots. Among AI based programs ChatGPT, KAKU, Quillbot, Wordtune, and Grammarly are the most common used by students. Moreover, it seems necessary to define what's artificial intelligence. Purwanto et al. (2020) have stated that Artificial Intelligence (AI) is the study of the computation that makes it possible for machines to perceive, reason, and act. AI technologies are the models of human thinking and action. AI would behave as a language teacher (Salvagno et al., 2023). Artificial intelligence is a tool to facilitate research in scientific writing as a digital assistant such as a chatbot (Haristiani, 2019). It is capable to perform complex task including language tasks.

Writing skills are one of the four skills in English learning as foreign language besides reading, listening, and speaking skills. It is a significant tools of communication, sharing ideas, expressing thoughts, conveying meaning..., however, it is a complex productive task. mastering various aspects of writing such as grammar, vocabulary, word choice, punctuation (Dendup & Onthane, 2020; Suvin, 2020; Valizadeh, 2022). Moreover, it is a longlife capacity that requires frequently improvements therefore students tends to use AI writing programs to improve their essay writing

Numerous studies reveale that AI writing applications affect students writing skills. AI writing tools are intended to analyse written materials and provides comments on many parts of writing, such as grammar, vocabulary, syntax, content and structure

(Hosseini ,M.Rasmussen,L.M.&Rensik ,D.B.,2023).In other words, they supply EFL learners with insight and feedback helping them to improve their writing mechanics .

According to a Tambunan (2022) research, students' grammar and punctuation improved when they used Grammarly. The artificial intelligence (AI) of Grammarly scans the user's writing and offers suggestions in real time for improving grammar, spelling, punctuation, clarity, engagement, and delivery.This effectively transforms the act of writing into an educational experience. Another AI program that helps students prevent plagiarism while preserving the original meaning of their work is QuillBot, which is skilled at paraphrasing. Kurniati and Fithriani (2021) discovered that QuillBot helped students improve their paraphrasing abilities, a crucial academic writing skill. Conversely, WordTune concentrates on enhancing and perfecting the text's style and tone. According to a research by Lam and Moorhouse (2022), WordTune successfully assisted students in identifying their areas of difficulty in writing, which encouraged self-evaluation and learning.

Notwithstanding these benefits, some research has suggested possible disadvantages. For example, students using AI writing tools may unintentionally encourage over-reliance on these tools, depending too much on them to improve their work without fully realizing what they have done. This dependence may impede their ability to learn naturally and to self-edit. Iskender (2023) offered a critical viewpoint on this issue, contending that if students grow unduly reliant on AI writing tools, their capacity for critical thought may be compromised. They voiced concern that students would value fast solutions from AI programs more highly than carefully considering and learning from their errors, which would effectively undermine the process of writing learning, development, and growth. Concerns of over-reliance are not the only thing that affect AI authoring tools.

The primary focus of this research project will be to explore the effectiveness of utilizing AI writing programs to enhance the essay writing abilities of English as a Foreign Language (EFL) students. The main objective of this study is to enhance the writing skills of EFL students by incorporating technology into their learning process. Additionally, the research aims to gather valuable insights that can be beneficial for language educators in designing more effective teaching strategies. By investigating the impact of AI writing programs on EFL students, this study seeks to provide evidence-based recommendations for improving language instruction in the digital age.

## **2. Statement of the Problem :**

Writing is an essential proficiency that all EFL learners must master; nevertheless, it presents a challenged and continual task for students, particularly in the realm of essay composition. Numerous students encounter obstacles when attempting to craft their essays. They frequently face challenges when writing essay , including grammatical errors, syntax issues, vocabulary choices, and difficulties in organizing and expressing ideas. Consequently, they rely on various Automated Writing Evaluation (AWE) tools to enhance their essay and produce comprehensive draft. This research aims to investigate the effect of using technology and Artificial Intelligence tools on the writing skills of EFL students. The findings of this study will provide valuable insights into the potential benefits of utilization AI tools as writing assistance for EFL students.

## **3. Significance of the study:**

The current study is significant because it:

1. Offers valuable insights into the efficacy of utilizing an artificial intelligence tool to enhance students' writing proficiency.
2. Provides indication about the practicality of using AI-based writing for EFL learning..
3. Copes with the up-to-date trends of using AI in learning English writing skills.

4. Attempts to develop the teaching methods employed at the department of English.

#### **4. Aims of the study**

This study aims to demonstrate and represent the utilization of artificial intelligence writing techniques EFL learners essays. These are the main purpose of this investigation:

1. This study offers some insight to integrate the AI-based writing in the EFL learning.
2. Determine the effect of using AI-based writing on each of the essay and writing skills.
3. Identify the features of AI writing tools to provide accurate feedback essay writing skills

#### **5. Research Questions:**

The present study attempted to answer the following questions:

**RQ1:** How does the use of AI writing tools affect students' writing abilities?

**RQ2:** What are the perceptions of students towards the use of AI writing assistance in the essay writing?

#### **6. Research Hypothesis :**

We hypothesize the following based on the research questions:

**RH1:** If EFL students use AI writing programs to implement them while writing, they will perform better than students who does not .

**RH0:** The use of AI writing application does not effect the students essay writing abilities

#### **7. Research Methodology :**

A mixed-method approach appears to be the suitable methodology to fit and address the gaps in this investigation. This type of approach helps the researcher meet his needs throughout his research by gathering a variety of data collection methods to assemble more efficient information and multiple solutions to interpret the outcomes.



## **8. Data Collection Tool:**

The research utilizes a specific data collection tool known as a questionnaire to gather information on the utilization of AI writing applications by EFL learners in the process of essay writing. The questionnaire is designed to explore and understand the extent to which EFL learners rely on AI writing tools, their preferences, and the impact of these applications on their writing skills and overall academic performance. By analyzing the responses gathered through the questionnaire, the study aims to provide valuable insights into the use of AI technology in language learning and writing education.

## **9. Population Sampling:**

The population of the study will be the Third year students of English division at Mohamed Kheider University of Biskra. My decision of choosing this level was not random; it was under some perspectives, which are :

1. Third year students are more focused to develop and improve their writing abilities.
2. Third year students in this level start to write essays.
3. Students at this age are more likely to use AI writing tools than previous generations.

In order to continue this study, we have chosen responders from the same section to answer the questionnaire. One group was selected as a sample from the whole population of third-year students.

## **10. Structure of the Study:**

This research consists of two sections: theoretical and practical. The theoretical section is divided into two chapters, each of which focuses on a literature study of one variable.

The first chapter establishes a theoretical foundation for technology through education. This chapter covers AI's definition, types, influence, and importance. The second half of the theoretical

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section provides a review of writing skills, including definitions, types, relevance, and obstacles for EFL students.

The study concludes with Chapter three, which analyzes the questionnaire data.

# **Chapter one :**

# **Artificial Intelligence**

## **Introduction:**

Thanks to technological advancement, education field has witnessed a significant transformation for both students and educators. The integration of technology has created more interactive and engaging learning environments, fostering dynamic classrooms . Information and Communication Technologies (ICT) play a crucial role in education technology.. ICT in education involves incorporating computer-based communication with traditional classroom learning. This integration improves instructional quality, accessibility, and cost-effectiveness.

Additionally, AI-powered tools can analyze student data and provide various recommendations that help them focus on areas where they need improvement.AI also plays an essential role in enhancing the efficiency of administrative tasks within educational institutions. Streamlining these processes results in a more productive and effective educational system.AI chatbots assist students by providing real-time answers and explanations, promoting deeper understanding. More specifically, this chapter will discuss the concept and submit an overview of the application of AI writing assistance aside from its definition, as well as a highlight of its types, influence, and importance.

### **1.1. Theoretical Background of ICT in Education:**

ICT is regarded as one of the essential instruments for obtaining data and information at any time and location. The Competency Framework for Teachers, according to UNESCO (2023), is a framework for planning teacher preparation during pre-service and in-service phases on how to use digital technology in both official and informal educational situations. Therefore, the implementation of the ICT CFT requires a supportive and favorable environment in addition to the government's unwavering leadership, those in charge of in-service teachers' professional development and education, head teachers, and school administrators. It addresses how modern

technological developments in education and learning, such as artificial intelligence, mobile applications, the internet, and educational resources, affect these sectors in order to support the creation of inclusive knowledge societies.

Computers, the Internet, and electronic delivery systems are examples of information and communication technology (ICT), which is helpful for students in developing their academic skills. In this regard, research (Shan fu 2013 quoted in Kent and Fcaer 2004) demonstrates that while school is a key setting where children participate in a wide variety of computer activities, a student's home acts as a complementing region for frequent involvement in a smaller range of computer activities.

## **1.2. Technology- Enhanced Language Learning:**

In recent years, technology has become an important aspect of education, helping to enrich, develop, and facilitate language learning. As stated by (Rüschhoff & Ritter, 2010), language learning theory has seen a significant shift from a highly led to a more open learning system, with constructivism emerging as a new and mostly centered paradigm for learners. According to (Ghanizadeh, 2015), technology is an important area that allows teachers and students to improve the quality of input, provide meaningful feedback in a timely manner, and create true contact. The use of technology in class has a significant impact on language acquisition since it allows students to learn English by using various technical materials such as power point, the internet, games, and audio-visual gadgets. Teachers and students who use technology wisely and not just for fun eventually engage in some form of critical analysis. In addition, communication technologies provide language learners with an opportunity to become aware of and actively consider their own and others' communication practices, much as writing technology turned language into a subject of study (Chun, Smith, and Kern, 2016).

### **1.3. Computer-Assisted Language learning:**

In the 1960s, computers began to be utilized in educational systems after being invented in 1943. In addition to communication materials like emails and blogs, the term "computer-assisted languages learning" (CALL) refers to a variety of technological tools used for language learning, such as interactive CDROMs with multimedia and other language exercises, electronic reference and resources like online dictionaries, grammar checkers, and summarizing tools. Furthermore, CALL is described as “the use of computer technology to aid the language learning process” by Levy & Stockwell (2006), p. 1. For language learners, computers offer a number of benefits, including improved access to authentic language resources, personalized learning experiences, and feedback that is timely. Additionally, it gives students the chance to practice their language abilities in a variety of contexts.

### **1.4. E-Learning**

Computers and the Internet are the main tools used in e-learning, while instruction can also be provided in or outside of traditional classroom settings. In its current incarnation, e-learning has been around for roughly a decade, as noted by Downes (2005). Since then, it has developed into a generally acknowledged popular idea from a radical concept whose practicality was yet unknown. It is at the heart of many corporate initiatives, and most institutions and colleges provide it as a service. E-learning is thought to be one of the best methods for delivering education because of its many advantages, especially for higher education institutions (Perrin et al. 2015). Students can still benefit from software, documents, audio, and video stored on computers, even in settings when they do not have access to the internet. However, students can still use their communication abilities to share knowledge and experiences online and spread information. E-learning may also

use other learning modalities, like media and broadcasting, to maximize teaching and learning outcomes.

## **1.5. Artificial intelligence:**

Due to artificial intelligence, education has undergone a major transformation. It's now more effective, efficient, and accessible for students, making learning a smoother experience.

The progress of artificial intelligence (AI) in educational institutions has enabled the adaptation of new teaching and learning method , which have enhanced the learning process. These innovative tools consist of chatbots, personalized learning algorithms, and intelligent tutoring systems. By utilizing these resources, educators can provide their students with more interactive and captivating lessons that result in improved academic performance. Additional, AI-powered instructional tools have made education more affordable and accessible to students . To ensure equitable opportunities for all learners, these instruments offer customized learning experiences tailored to meet individual preferences and aptitudes. As a result of using such technologies, teachers' workload may be reduced so they can focus on other critical aspects of their profession.

### **1.5.1. Definition of artificial intelligence:**

According to Anjila (2021, p. 65), she refers to AI as a system that mimic various functions which human can do. To accomplish outstanding performance on the assigned tasks, AI makes use of external data, such as big data. In another word, Artificial Intelligence as a system that imitates a range of human abilities.

AI is common with its competence of enacting similarly to hummus in different tasks.According to Copeland (2023), AI defines as the ability of a digital computer or comparer-controlled robot to perform tasks commonly associated with intelligent beings.

Another definition by McCarthy (2004), he proposed a simple definition of AI which is the science and engineering of making intelligent machines, especially intelligent computer programs. The concept of artificial intelligence (AI) shares similarities with the process of utilizing computers to comprehend human intelligence. However, AI is not bound by techniques that are solely observable within biological contexts.

### **1.5.2. Types of Artificial intelligence:**

There are four main types of artificial intelligence: reactive AI, limited memory AI, theory of mind AI, and self-aware AI, which are largely unknown to the majority of people outside the technological world.

According to Marr (2021), the four types can be explained as follows:

#### **1.5.2.1. Purely (Reactive) Artificial Intelligence:**

Reactive AI produces consistent and predictable results based on available input. Reactive machines lack the ability to learn or imagine, resulting in predictable responses to similar situations. Examples include email spam filters, which prevent promotions and phishing efforts, and Netflix's recommendation engine.

Reactive AI, according to Marr (2021), is the most fundamental but also very beneficial type of artificial intelligence since it adapts to its surroundings. Deep Blue, an IBM supercomputer created in the 1980s that eventually played and defeated the current world chess champion Garry Kasparov, is a shining example of reactive AI. Reactive AI, according to Marr (2021), is the most fundamental but extremely beneficial type of artificial intelligence since it adapts to its surroundings. Deep Blue, an IBM supercomputer created in the 1980s that eventually played and defeated current world chess champion Garry Kasparov, is a shining example of reactive AI.



#### **1.5.2.2. Limited Memory AI:**

This kind of artificial intelligence is known for its ability to learn from experience and become more proficient, much as how neurons in the human brain link with one another. AI with limited memory is currently being used extensively and is always being improved. It anticipates using historical data and performs exceptionally well at complex categorization jobs. Self-driving cars use limited memory AI because their algorithms rely on the data they were taught and programmed with to understand how they work. They can also perceive their surroundings and make required adjustments by analyzing real-time data.

#### **1.5.2.3. Theory of Mind AI:**

Mental theory Artificial intelligence (AI) is the next stage of artificial intelligence, where machines are able to make decisions on par with people. Machines using this AI must be able to recognize emotions, store them in memory, and modify their behavior in social contexts. Kismet (released in 2000) and Sophia (released in 2016) have shown certain parts of this artificial intelligence, albeit not all of it. It is a difficulty for machines to quickly adapt their actions to emotions, exactly like people do. Nevertheless, if theory of mind AI is developed, it may allow robots to interact with people and help with daily chores.

#### **1.5.2.4. Self-aware AI:**

The pinnacle of artificial intelligence is self-aware AI, in which machines are able to comprehend not just the feelings and thoughts of other people but also their own. If this were to happen, machines would then possess awareness, intelligence, and feelings and wants that are identical to those of humans. To support this level of AI, however, the available hardware and algorithms are insufficient. Concerns have been raised about artificial super-intelligence (ASI) and its potential to lead to robots taking over the world once we do make the required strides. However, it might

also encourage cooperation between people and machines. It's possible that a fifth kind of AI will emerge in the future. For the time being, theory of mind AI research and limited memory AI development will be the focus of AI researchers.

#### **1.6.The use of artificial intelligence in education institutions:**

The sector of education knows the utilizing of AI mostly in the form of testing platforms and applications that support the development of skills. The objective is that as AI-based educational solutions advance, as noted by Marr (2021). In areas where computers would find it difficult, they would assist fill gaps in learning and teaching and free up schools and instructors to accomplish more than before. This will allow teachers the time and flexibility to teach comprehension and adaptability, which are distinctively human skills. Artificial intelligence (AI) can improve productivity, personalization, and administrative tasks.

An optimal use of artificial intelligence (AI) in education would involve teachers and robots working together to maximize student outcomes. Artificial intelligence can help pupils when combined with top-notch instruction and learning resources. As is the case with automated essay grading, instructors and students may not always notice the benefits of the tools right away. Rather, the state evaluates the exams in a more efficient and timely manner. In other circumstances, teachers gain immediately. Researchers are exploring with ways to include assessments based on natural language processing into writing programs so that teachers can get statistics about the caliber of their pupils' work. Scott Crossley of Georgia State University is one such researcher (Jimenez & Boser 2021, September 21).

#### **1.7.Applications of Artificial Intelligence in Education:**

Numerous techniques and approaches have been employed to develop intelligent systems that are becoming more and more helpful for training and education since artificial intelligence (AI) first

appeared in the mid-1950s. Technology company Nuance, with headquarters in Burlington, Massachusetts, has developed speech recognition software that teachers and children can use. With a transcribing speed of up to 160 words per minute, this program is especially useful for students who struggle with writing or have restricted mobility. The software also has tools to help with spelling and word recognition. Additionally, teachers can use this software to plan recurring tasks like emails, assign assignments, and send reminders (Owoc & Pondel, 2019, pp. 40–41).

### **Conclusion**

AI writing tools are software programs that use artificial intelligence to assist users in creating written content. Some advantages of AI writing tools for English as a foreign language (EFL) learners include Instating feedback on grammar and spelling error suggesting for improving vocabulary and sentence structure and assisting with generating ideas and organizing thoughts. Overall, AI writing tools can be valuable resources for EFL learners looking to enhance their writing skills and improve their overall proficiency in the English language.

# **Chapter two: Essay writing**

## **Introduction:**

The second chapter of this work provides an overview of the fundamental aspects of essay writing. It serves as a primer for the subsequent chapters, offering a holistic understanding of the key elements involved in crafting effective essays. The introduction delves into the purpose of essays, emphasizing their role in expressing thoughts and ideas coherently and persuasively. It also explores the importance of structure and organization in essay writing, highlighting the need for a clear introduction, well-developed body paragraphs, and a strong conclusion. Additionally, the section touches upon the significance of critical thinking and analysis, encouraging readers to approach essay writing as an opportunity for intellectual exploration and argumentation. By setting the stage for the rest of the work, this chapter aims to equip readers with the foundational knowledge and mindset necessary for mastering the art of essay writing.

### **2.1. What is essay?**

The essay, as a literary genre, has evolved significantly over time and holds great significance in the world of literature. This section will provide an overview of the origins and development of the essay, tracing its roots back to ancient civilizations such as the Greeks and Romans, where it first emerged as a form of personal reflection and exploration of ideas. From there, the essay evolved through the Renaissance and Enlightenment periods, taking on new forms and purposes as it became a vehicle for intellectual, political, and social commentary.

An essay is a written composition that delves into a specific topic. What sets essay writing apart from other forms of writing, such as articles in magazines and newspapers, is its formal nature and adherence to specific conventions. Essentially, an essay is a structured piece of academic writing that is used as a means of assessing a student's comprehension and progress. In essence, an essay is comprised of interconnected paragraphs that collectively address a central subject.

## **2.2.Characteristics of a Good Essay:**

The skill of writing effectively is not innate. In order to excel in writing, one must understand the key components that enhance the clarity and impact of a written piece. These components are classified into five fundamental categories that a writer must be well-versed in, as they serve as the foundation for evaluating any written work. The following section provides a concise overview of these five essential aspects, which are widely recognized by educators as crucial elements of successful writing.

### **• Content:**

The crux of an essay lies in its content, serving as the platform for complete expression of ideas. This content must exhibit a deep comprehension of the subject matter, encompassing the purpose, central theme, storyline, supporting evidence, elaboration, imagery, and all intricate details chosen to enhance comprehension and captivate the reader. Irrespective of the essay type or objective, a singular clear focus in the content is imperative, complemented by comprehensive, pertinent, and audience-specific supporting details.

### **• Form:**

The format or the arrangement of the content is another crucial element as it pertains to the architecture of the essay. It revolves around the framework employed by the student to articulate the message in a systematic and cohesive manner. It enables readers to discern the interconnection between sentences and paragraphs, and how they enhance the overarching composition of the essay.

### **• Grammar :**

Another crucial element of writing is grammar. In order to achieve a clear and coherent piece of writing, a writer, in contrast to a speaker, must undergo specialized training to guarantee that there is no ambiguity for the intended readers. To accomplish this, the written work must strictly follow a set of grammatical guidelines that regulate the construction of sentences, phrases, and words, effectively combining various parts of speech to create grammatically accurate sentences. Language proficiency.

• **Style:**

Style is a crucial factor that significantly impacts the overall quality of an essay. It encompasses the manner in which the text is written, encompassing the combined traits that shape the writing, the impact it creates, and the method of presenting information. Consequently, style should emerge from the harmonious integration of all facets of writing to effectively communicate meaning in a manner that captivates the reader's attention and curiosity, compelling them to align with the writer's perspective.

• **Mechanics:**

Mechanics, as a final element, encompass all the specific technical aspects of writing, including spelling, punctuation, and capitalization. These elements are commonly known as print conventions and are distinct from those found in oral communication. If a written piece lacks mechanical precision, readers may be deterred from engaging with it due to the difficulty of comprehension or the perception of poor quality. Addressing this aspect is most effectively accomplished towards the conclusion of the writing process.

**2.3.Parts of essay :**

### **2.3.1. Introductory paragraph:**

The first paragraph in an essay is called the introductory paragraph. It is the most essential paragraph in an essay because most of the time the piece of writing is judged from its beginning. Through this section, the students are expected to develop successfully introductory paragraphs.

#### **2.3.1.1. Features of a Good Introductory Paragraph**

Due to the significance of this paragraph, it is imperative that it encompasses the following elements:

1. It must commence by elucidating the subject matter to the reader.
  2. It should outline the approach that will be taken in addressing the topic, whether it involves analyzing causes, effects, reasons, examples, etc.
  3. It must incorporate the thesis statement.
  4. It should be engaging and captivating, in order to captivate the reader's interest.
- Components of an Introductory Paragraph.

#### **2.3.1.2. Parts of an Introductory Paragraph:**

##### **2.3.1.2.1. General statement:**

The opening paragraph is comprised of two essential components: initial remarks designed to captivate the reader's interest, and a thesis statement that outlines the specific aspects of the subject matter.

**Initial Remarks**The initial statements within an introduction offer the reader foundational knowledge pertaining to the essay's topic. These statements should guide the reader from a broad understanding of the subject to a more detailed one. The first general statement serves as an introduction to the topic, with subsequent sentences narrowing down the focus. The purpose of these statements is to broaden the reader's understanding of the essay's subject matter.



#### **2.3.1.2.2. Thesis Statement**

The thesis statement serves as a concise declaration of the main focus of the essay. Typically located at the conclusion of the introductory paragraph, it should address the following inquiries: what is the central theme of the essay? What stance does the author take on this topic? What is the author's objective in composing the essay?

##### **• Components of the Thesis Statement**

The thesis statement comprises two fundamental components: the topic and the controlling idea. The topic represents the overarching theme of the essay, while the controlling idea delves into the specific aspect discussed within the essay. A third component of the thesis statement is called predictors or sub-topics. These predictors tell the reader how many body paragraphs there will be in the essay, and what their content will be about.

##### **Types of Introductory Paragraphs**

Given that the introduction serves as the initial passage to be perused, it is typically the first segment that the student contemplates and thus may be perceived as the most challenging. There exist numerous methods to enhance this pivotal paragraph; the subsequent are four fundamental categories that illustrate how to enrich it: the funnel approach, the turnabout technique, the dramatic entrance method, and the incorporation of a pertinent quotation.

##### **The Funnel**

The "funnel approach" is commonly utilized in crafting introductions, characterized by a progression from the broad to the specific, akin to the shape of a funnel which widens at the top and narrows at the bottom. This method of introduction involves initiating with a general statement regarding the subject matter, then transitioning towards a more precise thesis statement.

**The Turnabout:**

This particular style of introduction commences with a brief synopsis of a perspective that starkly contrasts with the writer's own viewpoint. However, as the introduction progresses, the writer undergoes a complete reversal, ultimately presenting an idea that is diametrically opposed to the initial stance. The Dramatic Entrance: An Introduction in Contrast.

**The Dramatic Entrance:**

At the beginning of his essay, the writer captivates the reader with a dramatic entrance, often utilizing a narrative, an anecdote, or a vivid and compelling example to set the tone for the rest of the piece. This technique not only grabs the reader's attention but also helps to establish the central theme or message that will be explored in greater depth throughout the essay. By drawing the reader in with a powerful introduction, the writer is able to create a strong connection and engage them on a deeper level, ultimately making the essay more impactful and memorable.

**The Relevant Quotation:**

Essays often start with a quote from an expert to engage readers and establish credibility. This technique sets the tone and introduces the main theme, drawing on respected figures to support arguments and analysis. The introduction serves as an entry point into the broader discussion, capturing the reader's attention.

**Writing the Developmental Paragraphs:**

Development paragraphs are the core of the essay, serving as the locus where the writer elucidates, exemplifies, deliberates, or substantiates the thesis statement. The quantity of these paragraphs in the student's essay typically ranges from two to four, contingent upon the quantity of subtopics that partition the central concept in the thesis statement.

## **1. Features of a Good Developmental Paragraph**

The following characteristics about developmental paragraphs will help you plan, draft, and revise your D. Ps:

Each individual body paragraph delves into a specific facet of the primary subject matter. For instance, if tasked with composing an essay on the repercussions of smoking tobacco on an individual's well-being, each paragraph would center around a particular consequence.

2. The overarching theme within the body paragraph ought to mirror the central concept put forth in the thesis statement. For instance, if your thesis statement addressing the impacts of smoking cigarettes asserts, "Cigarette smoking is a detrimental practice," then the central idea in each paragraph should revolve around the harmful nature of these impacts.
3. The body paragraph must exhibit coherence and cohesion. The sequence of your paragraphs should not be arbitrary. Just as there are multiple ways to structure sentences within a paragraph, there are also numerous approaches to organizing your paragraphs.

### **Parts of a Developmental Paragraph:**

To craft a cohesive developmental paragraph, one must adhere to the following guidelines:

1. Select a singular focal point for your paragraph; each developmental paragraph should be treated as an independent entity of thought that elaborates on a single concept, rather than multiple.
2. Commence your paragraph with a topic sentence.
3. Elaborate on your topic sentence with sufficient supporting sentences that present unequivocal and compelling evidence.
4. Conclude the developmental paragraph with a closing sentence.

### **The Creation and Organization of the Developmental Paragraphs:**

After finalizing the thesis statement, it is essential to identify the distinct subtopics for the body paragraphs by systematically dissecting the thesis. One effective method is to transform the thesis statement into a question, as the response to this inquiry can serve as a guide for potential topics in the developmental paragraphs. Furthermore, this approach aids in establishing the organizational framework for the essay.

### **Writing the Concluding Paragraph:**

Undoubtedly, the final segment of your essay constitutes the concluding paragraph, playing a crucial role in the overall composition. As the ultimate passage to be perused, it is imperative to ensure that your reader is left with a lucid comprehension of the central thesis of your essay.

### **Features and Parts of a Good Concluding Paragraph:**

A well-crafted concluding paragraph should:

1. Concisely recapitulate the key points expounded upon. This recapitulation should be succinct, considering the thorough discussion that has already taken place.
2. Reiterate the thesis. To prevent redundancy, it is advisable to rephrase the thesis in a fresh manner. The restatement of the thesis essentially reaffirms its significance or credibility.
3. Convey a concluding remark or a key message that underscores a specific action you wish the reader to undertake.
4. Refrain from introducing a novel subject matter.

### **The Assessment of an Essay:**

In the realm of education, assessment serves as a crucial link between the act of teaching and the process of learning. It is a valuable tool through which educators collect data on student progress.

Assessment can be utilized for formative aims, such as refining or enhancing a curriculum, or for summative purposes, to make an informed evaluation of the quality of students' work upon the completion of a learning phase. Specifically within the domain of writing, assessment presents a comprehensive set of criteria for both instructing and appraising writing skills.

It may take the form of a product assessment, where the final evaluation of students' papers occurs at the end of a writing assignment, or a process evaluation, which involves ongoing assessments at various stages during the writing process, encompassing a variety of assessment methods. In order to assess students' essays effectively, educators must develop a clear set of written standards for distinguishing between essays of varying levels of quality. These written standards that explicitly outline the expected performance levels for a given piece of writing are commonly referred to as rubrics.

Once educators establish the different levels within the rubrics, one crucial decision to be made is the type of scoring rubric to be employed: should a single score be assigned to the entire written piece, or should individual aspects of writing be evaluated separately? To address this question, three distinct scales are available for rating students' writing: holistic scales, analytic scales, and primary trait scales.

### **Writing an Essay in a Group Work:**

A quartet of students will be assembled to compose an essay on the impact of science on our everyday existence. The students will be tasked with crafting an initial outline and collaboratively refining it.

### **Writing an Essay in a Pair Work:**

As a subsequent writing assignment, the students will be tasked with collaboratively composing an essay discussing the challenges associated with pursuing education in a foreign country.

**Writing Essays Individually:**

Once again, during the upcoming session, the students will independently compose an essay on a topic of their choosing that will be collectively determined within the classroom setting.

**Types of Essays:**

**Expository essay:**

In contrast to narrative writing, expository writing possesses a greater level of structural intricacy and content density. This heightened complexity stems from various patterns, referred to as top-level structures, methods of development, or rhetorical modes. These elements serve as the focal points in an expository writing outline, frequently utilized by writers for the purpose of organizing their content. Recently, the prevailing patterns of exposition include list, sequence, comparison/contrast, cause/effect, and problem/solution. The initial form of expository text organization is list, characterized by a compilation of related ideas or examples. This structure, also known as listing, enumeration, example, or illustration, involves presenting a series of details or examples to elucidate or define concepts underlying the main idea. Another fundamental form of exposition is sequence, where the author arranges information to illustrate the chronological order of events.

**Narrative Essay:**

A narrative essay achieves a certain purpose through telling a story, which makes it interesting to the reader and also results in getting some point across. For example, you might write a story about meeting someone special to you. The purpose may be to tell how meeting this person affected your decision to attend college or to entertain the reader with a funny story about that person. The purposes of writing narratives include the following: to create a sense of shared history, to provide entertainment, to offer instruction, and to provide insight. Some examples of narrative

essay topics include a special person, event, or place. After choosing a topic, you should determine the main point you want to make about that topic and then concentrate on that throughout the rest of the paper.

### **Descriptive Essay**

A descriptive essay talks about a certain topic or story, using details to appeal to the five senses. It gives readers the ability to vividly imagine the situation or scene and feel as if they are experiencing it firsthand. To write a descriptive essay, you could choose a person, place, event, object, or experience and describe it thoroughly using many sensory details.

### **Comparison and/or Contrast Essay**

A comparison and/or contrast essay tells about two or more main subjects by pointing out similarities and/or differences. One way to write this type of essay would be to choose two or more objects, people, places, events, experiences, or ideas and compare and/or contrast them according to a few specific points.

### **Cause and Effect Essay (also called causal analysis)**

A cause-and-effect essay analyzes what causes certain things to happen or why things are a certain way, the results brought about by certain events, or both. For example, you may want to write an essay about an event that happened and then tell how it affected your life. This would tell the cause (the event) and the effect (how it affected your life). To begin writing a cause-and-effect essay, you may want to first decide on a topic, such as an event or a person, and then decide what you will tell about that topic, such as what happened to make that specific event take place or what made the person have a certain attitude or personality. You could also tell about a specific topic and what effects it had on future events.

### **Argumentative Essay:**

An argumentative essay makes a claim and then gives examples and evidence to prove that point. You can begin writing an argumentative essay by deciding on a certain topic, such as something about a belief, idea, or controversial issue. Then, do research to obtain detailed information. The information can be statistics, stories, examples, observances, and other facts. Use the information throughout the essay to argue your point and convince the reader.

**Conclusion:**

Writing skills are essential for effective communication in various aspects of life. They allow individuals to express thoughts clearly, succeed academically, thrive professionally, and engage with others through the written word. Essay writing is a type of academic writing that requires the author to present and support their ideas and arguments on a particular topic. It involves organizing thoughts, conducting research, structuring the content, and effectively communicating the ideas in a clear and concise manner.

Overall, essay writing requires practice, patience, and attention to detail to overcome these difficulties and create a well-written and compelling piece of writing. If you need any further assistance or guidance, feel free to ask.



# **Chapter Three (Field Work): Analysis and Discussion of the Results**

## **Introduction:**

The current research aims to explore the effect of utilizing the artificial intelligence program on writing essay of EFL learners. More details, this chapter will conduct the results and discussing the methods that has been used to this study. Additionally, it will present the research strategy, data collection besides the of the sample methodologies. To finalize, the study's findings will be succinctly reported, and conclusions and suggestions will be made in light of the data analysis and interpretation. In the end, this research aims to offer insightful information about the possible advantages of integrating AI technology into language learning and teaching.

### **3.1. Research Design:**

The research questions dictate the study's design which is descriptive design. The principal aim of the study was to investigate the potential impact of utilizing AI writing tools on the enhancement of writing proficiency among EFL learners. Therefore, the current study employed a mixed-method strategy to gather data.

Mixed methods research denote an academic research approach involves the integration of qualitative and quantitative methods to obtain a holistic comprehensive understanding of a research question or phenomenon. As Alan Bryman highlights, "The main strength of mixed methods lies in its capacity to address research questions that cannot be adequately answered by quantitative or qualitative methods alone" (Bryman, 2016). Through the utilization of mixed methods, researchers are able to benefit from the strengths of both qualitative and quantitative approaches.

### **3.2. Context and Participants:**

The sample population in this study consisted of third-year students enrolled at the University of Mohamed Kheider in Biskra. The selection was purposeful, as students at this academic stage can

easily grasp the artificial intelligence concepts, enabling them to comprehend the functionality of AI writing applications. Furthermore, third-year students are anticipated to produce more detailed essays.

To collect the data from the students, we start by utilizing Online questionnaires , this method or technique allows to discover the students' perceptions about the topic and their attitude toward the significance of AI writing tools. the current sample is made up of thirty-one (31) students who have been selected randomly (27 female students, 4 male students). Additionallythe participants ages range from 21 to 38, and their primary language is Arabic due to the Algerian context.Also , the majority of the participants have been studying the English language; thus, their average language proficiency span from low intermediate to advanced level.

### **3.3.Data collection:**

an Online Questionnaire (Google Forms) used as data collection tools to answer research questions.This kind of questionnaire named Google Forms is a tool within Google Drive for creating online survey forms was administered to 31 third year EFL students . The object of the questionnaire was to togetherize information about the students' attitudes towards writing essay, their experiences with the AI writing application, and their perceptions of its impact on their writing skills.

### **3.4.Students' Questionnaire:**

#### **3.4.1.Description of the Questionnaire:**

Among the population third year EFL students at the University of Mohamed Kheider Biskra, the study encompasses with a sample size of 31students. This questionnaire aims to discover students' attitudes towards writing essay, shed the light on some of the challenges that faced students with this subject, and check students' perceptions of the concept of the AI writing Application.

Additionally, the students' questionnaire consists of fifteen (15) questions containing mixed questions, open-ended, closed-ended, and multiple-choice questions that are distributed among males and females of various age.

Section One involves personal information (Q1–Q2) that aimed to provide background information about the participants, such as gender and age. Section two includes question on the writing level and competencies of students (Q3-Q5) for the purpose of gathering information on the challenges in writing essays. Finally, section three (Q6-Q15) is about understanding the students experience with AI writing tools ,time spent using it, why they chose to utilize this tools , the common AI writing application they use , how they can benefit from it in writing essay and to find out whether the EFL learners think that AI writing application affects their writing skills in either a positive or a negative way .

#### **3.4.2. Administration of the Questionnaire:**

The ultimate questionnaire was crafted utilizing Google Forms, and on the 18th of May, 2024, it was distributed via e-mail to the target population . This method proved to be the most efficient in terms of allowing students the enough time to respond to the questionnaire and to gather more precise data. Consequently, all third-year students were easily accessible during the second semester.

#### **3.5.Data Analysis:**

The data collected from The Questionnaires is hereby presented using qualitative and quantitative analysis.

##### **3.5.1. Analysis of Students' Questionnaire:**

The questionnaire contained five (10) multiple-choice questions, three of which was measured on a five-point Likert scale for frequency. Additionally three (03) open-ended questions included to

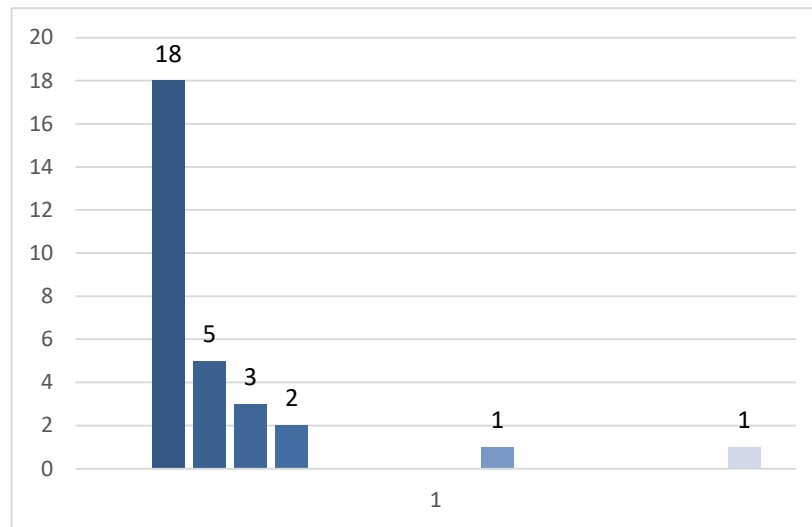
prompt participants to offer a concise explanation for their replies in order to detect common responses. After validating and piloting the questionnaire, it was sent out to the desired sample of (31) third year students through email.

### 3.6. The Online Questionnaire results:

#### 3.6.1. Section One: Background Information – Profile

##### Question 1: age?

I asked participants directly about their ages because the age distribution of the sample is crucial



to our study. It makes it possible for us to determine, based on the pupils' ages, how accustomed they are to social media.

**Figure 3.1**

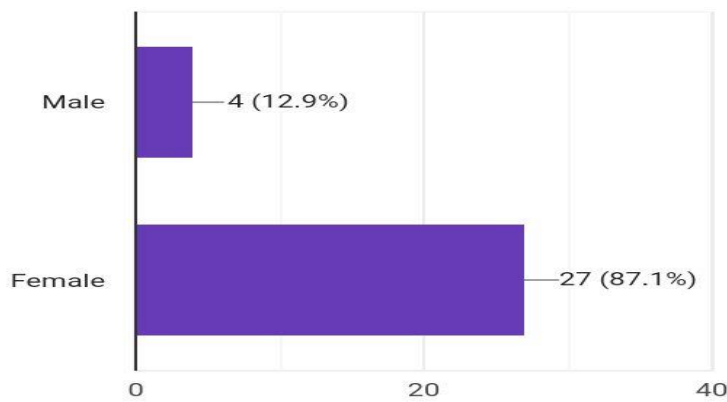
The age of participants

**Question 2: What's your gender?**

We may ascertain whether both sexes are familiar with using the AI writing program and whether their goals are the same by knowing the gender of our sample. In this study, thirty-one (31) students took part. We can see from the histogram below that there were four males and 27 females.

**Figure 3.2**

Gender of participants



**3.6.2. Section two: Student's perception towards Writing Essay**

**Question 3: How do you describe your writing level?**

**Figure 3.3**

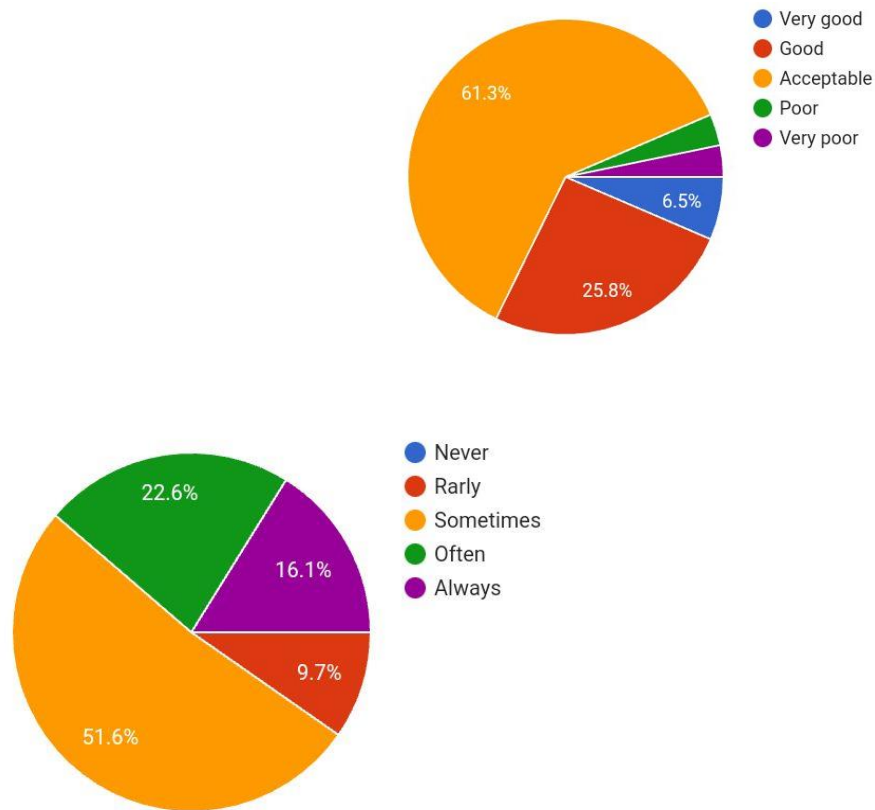
Students level of proficiency

Based on the data presented in this Figure , it is evident that 61.3% of the students classify their language proficiency as acceptable, while 25% rate it as good. Additionally, a mere 6.5% of the students consider their proficiency level to be very good. Conversely, a small percentage of individuals admit to having poor or very poor language proficiency. These findings suggest that students may not have achieved mastery in writing, as composing essays remains a challenging endeavor for them.

**Question 4: How do you often write essay ?**

**Figure 3.4**

Practice of writing essay



This question aimed to find out the frequency in which EFL learners' are usually practicing the writing essay, the data reveal 51.6% of the participants who are engaged with this task by choosing "Sometimes," which makes up the majority of the percentage. On the other hand, 22.6% reported that they often practice the concept of writing; whereas 16.1% pointed out that they always practice this skill in the classroom or elsewhere . The minimum percentages indicate as 9.7% of participants claimed that they rarely practiced writing.

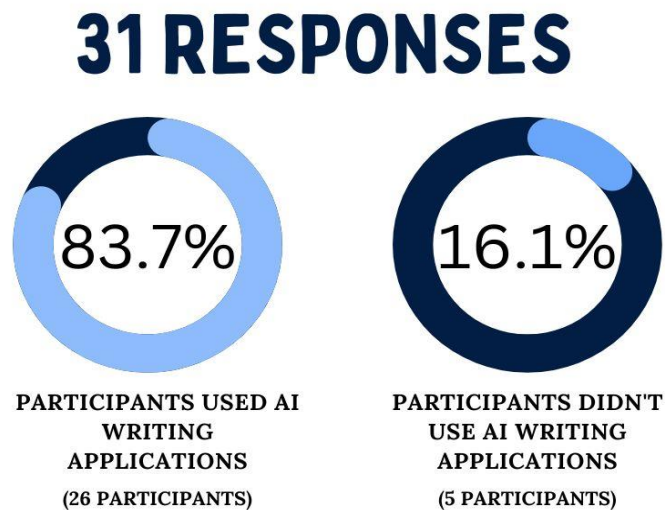
**Question 5: Do you find any difficulty in writing essay?**

**Figure 3.5**

### Students' difficulties in writing essay

In examining the challenges that encounter EFL learners in their writing proficiency, the findings indicate that 38.7% of the participants were not facing or struggling with any type of difficulty in their writing abilities. In fact, the majority, comprising 61.3%, claimed that writing skills were a difficulty subject, and they are facing a few issues that impeded their abilities to write and produce a meaningful essay.

### 3.6.3. Section Three: AI Writing Applications



**Question 6: Have you ever used Artificial intelligence writing tools?**

**Figure 3.6**

Students use of AI writing applications



This question seeks to assess student's level of familiarity with AI writing Application. Results showed that a vast majority of participants 83.7% (26 Students) had a previous experience with the AI writing Application , however, only five participants didn't use The AI writing application before which represents 16.1 % of the total sample.

**Question 7: if yes how often?**

**Table 3.1**

*Using if AI Writing Application during Writing Essay*

<b>Frequency</b>	<b>Number</b>	<b>Percentage</b>
<b>Always</b>	<b>2</b>	<b>6.45 %</b>
<b>Often</b>	<b>4</b>	<b>12.9 %</b>
<b>Sometimes</b>	<b>19</b>	<b>61.29 %</b>
<b>Rarely</b>	<b>6</b>	<b>19.35 %</b>

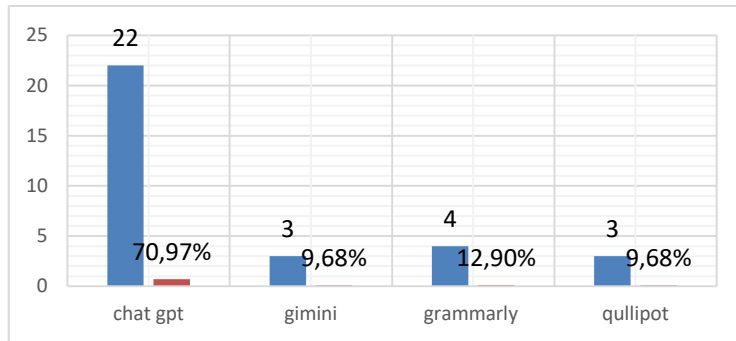
Findings indicated that 61.29 % of participants sometimes employ AI writing Application to enhance their writing skills , and 19.35 % of students rarely used it. Interestingly, the percentages of students who used to utilize the AI writing Application always and often usage seem to be quiet similar to each other at 2 and 4 participants. Nevertheless ,based on the data shown above, it can be inferred that nearly 81% of students typically rely on AI writing tools in supporting their works . Furthermore ,the data indicated a favorable attitudes towards integrating AI in writing essay process.

**Question 8: Which specific AI writing tools have you used?**

**Figure 3.7**

Type of AI writing application used by students

## Exploring the Effect of Using Artificial Intelligence Writing Programs in Writing Essay

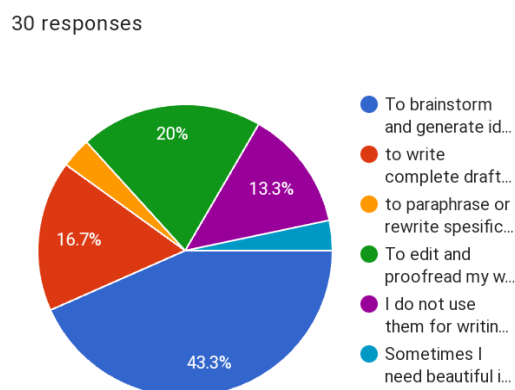


The purpose of the study is to gather firsthand insights from students who have experience using various AI writing applications. The data indicates that Chat GPT is the most commonly used AI writing application among the majority of EFL students, with 70.97% of students expressing a preference for utilizing Chat GPT in their essay composition. This finding suggests that Chat GPT is considered a suitable writing tool that meets the needs of students. Additionally, a significant percentage of students, 12.90%, opt to use the Grammarly application, indicating that Grammarly enhances students' essays by addressing a variety of errors and mistakes. Moreover, an equal percentage of students, 9.68%, reported using both the Gemini and Quillipot applications, highlighting the diversity in application usage among students.

### Question 9: How do you typically use AI writing tools in your writing work ?

**Figure 3.8**

Students usage of AI writing application in writing



Based on the findings illustrated in the figure, it is evident that students use AI writing tools to facilitate the brainstorming and idea generation process for their essays. A notable 43.3% of participants highlighted that AI writing assistance enables them to acquire relevant information that bolsters the discussion of a particular topic in their essay. In addition, 20% of students utilize AI writing applications for the purpose of editing and proofreading their written work. Furthermore, 16.7% of students opt to compose the entire draft of their essay using AI writing applications. Conversely, 13.3% of students do not employ AI writing tools for the act of writing itself, but rather for research purposes. A small yet significant 3.1% of students utilize AI writing applications to paraphrase or rephrase specific sections of text. It is worth noting that other students suggested similar uses to the aforementioned options.

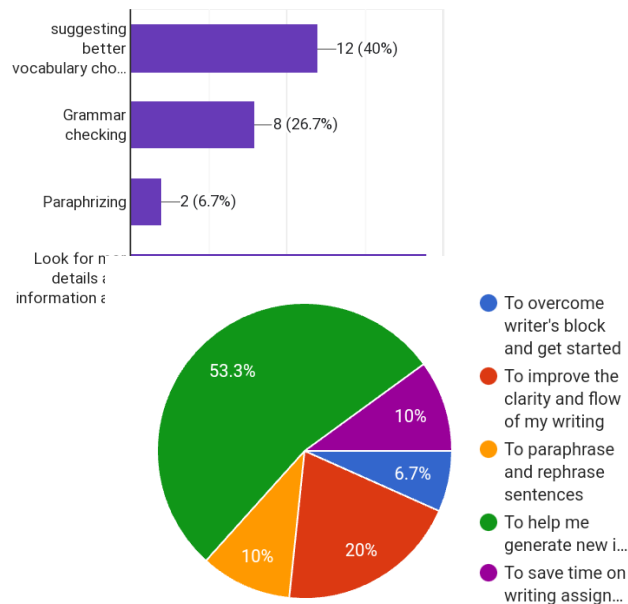
**Question 10 : what do you usually focus on while using AI in writing your essay?**

**Figure 3.9**

Students focus while using AI writing application

## Exploring the Effect of Using Artificial Intelligence Writing Programs in Writing Essay

The purpose of this question is to gain deeper understanding the main points that students focus on while using of AI writing application and thier specific requirements in writing essay.A significant percentage accounting 63 %of students indicate that they look for details and information by using AI Writing tools to supply their essay with more explanation,in the other



hand ,40% of students prioritize the selection of sophisticated vocabulary that may help them to improve their writing proficiency. Moreover,26.7 % of students check out grammar in order to fix spelling and grammatical mistakes and correct it while 6.7 % participants rely on AI Writing Applications in paraphrasing to ensure that ideas are understood and communicated clearly.

### Question 11: Why do you use AI writing tools for your essays ?

**Figure 3.10**

Students reason of AI writing application usage

The question asked to students is important for understanding the reasons behind students use of AI writing application.It also helps identify students' awareness of their strengths and weaknesses .

The results reveale that 53.3% of students employ AI writing application to help them generating

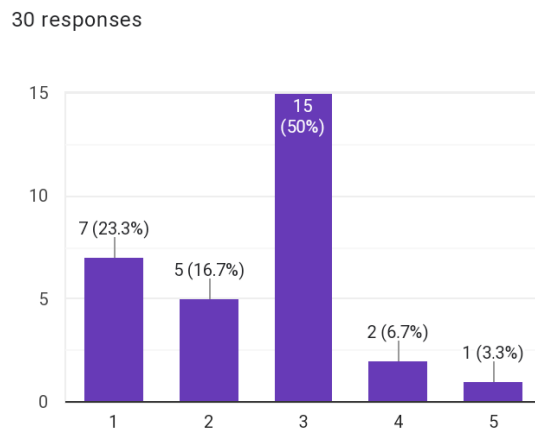
new ideas and argument thereby fostering critical thinking also enhancing their essay and persuasion skills. Additionally, 20 % of students use AI writing application to improve the clarity and follow of writing and make their essay easily to understood . While 10% of students regard the factor of time in writing their assignment equally other students make paraphrasing and rephrasing sentences through AI Writing tools. A minority of students account 6.7% use it to overcome block and get started their writing process when they are struggling to come up with ideas or words to continue writing. It can be a common obstacle for students.

**Question 12 :What is your opinion about the effectiveness of AI writing tools in your essay ?**

**Figure 3.11**

Students opinion about the effectiveness of AI writing application

Based on the results of this graph that describes the percentage of each student opinion about the effectiveness of AI that is powered the writing tools, 23% of students show strong agreement toward the effect of this programs on their writing and we see that 16.7 %of students reveal



agreement . While 50 % of students has chosen neutral attitude toward the effectiveness of AI writing program. Conversely, minority of students hold negatively perspective on the efficacy of AI writing assistance with 6.7 % disagree and 3.3 % strong disagreement.

**Question 13 : Have you encountered any difficulties while using certain AI writing tools ?**

**Figure 3.12**

Difficulty while using certain AI writing tools

Based on the data presented in the figure, a substantial 87.1% of students did not experience any challenges when utilizing AI writing applications. This data suggests that AI writing assistance tools are flexibility and adaptable for learning purposes, reflecting a high level of motivation among this generation to engage with such programs. In the other hand , 22.9% of students encountered difficulties in using AI writing applications, citing various reasons for their struggles.

**Question 14: if yes, please explain**

According to one of students who clarify own difficulty that faced with the use of AI writing tools by providing answer:

Student 19

- Occasionally, I conceive thoughts that are unrelated to my subject matter.

The student discussed the challenges he faced when using an AI writing application that did not align with the ideas he was searching for. This difficulty may stem from the lack of specificity in the recommendations provided by the application. The student elaborated on how this mismatch impacted his ability to effectively utilize the AI writing tool in editing essay.

**Question 15: How do you think universities can best address the growing use of AI writing tools among students?**

Student 2:

- Universities could implement workshops or courses that teach students about the responsible use of AI writing tools, emphasizing the importance of originality and ethical

considerations. They could also develop detection methods to identify AI-generated content and implement strict academic integrity policies.

**Student 4:**

- Universities can address the growing use of AI writing tools among students by incorporating education on ethical use of such tools into their curriculum, fostering critical thinking skills, and promoting originality and academic integrity.

**Student 5:**

- Integrate workshops or modules into the curriculum that teach students about AI writing tools. This can cover how they work, their limitations (factual accuracy, bias), and how to ethically use them alongside critical thinking skills.

**Student 16 :**

- Through creating easy access to these tools and teach how to use them effectively.

**Student 20 :**

- Universities could implement workshops or courses that teach students about the responsible use of AI writing tools, emphasizing the importance of originality and ethical considerations. They could also develop detection methods to identify AI-generated content and implement strict academic integrity policies.

**Student 29**

- Universities can address the surge in AI writing tools by educating students on their proper use in class. This way, students can benefit from these tools while maintaining academic integrity.

Students have expressed various opinions on how university addresses the use of AI writing tools among students. Many find that AI writing tools are crucial programs that improve students not

only in writing skill but also enhance critical skills . Therefore,they propose that AI writing tools should integrate in their courses also they view that university have to design specific workshop that teaching AI writing programs .They appreciate the practicality of AI writing assistance , as it enhances the overall quality and clarity of their essay, helping them learn various aspects of the English language.

Furthermore, it is recognized that students emphasis the ethicality in the utilization of AI writing application and they recommend to employ policies to avoid cheating and plagiarism.Ultimately, students appreciate AI writing assistance for making writing essay easier, more convenient, and correct.

### **Conclusion**

This chapter examined the analysis and discussion of the findings extracted from the questionnaire completed by the students. It also detailed the research methodology employed in this study, which encompassed elements such as the research design, data collection tools utilized for gathering data, and the sample size. Additionally, it addressed the administration and provided a thorough description of the questionnaire. Ultimately, the research findings were thoroughly examined and interpreted.

In conclusion, the results of this chapter suggest that AI writing tools have a positive impact on the writing proficiency of English as a Foreign Language (EFL) students. These tools are extensively used and appreciated by students, offering them invaluable support in improving the quality of their essay. This section of the research effectively summarizes the findings obtained from the students' questionnaire.





# **General conclusion**

### **General conclusion:**

Overall, this study presents convincing evidence to substantiate the view that the incorporation of artificial intelligence writing tools substantially enhances and refines the writing proficiencies of English as a Foreign Language (EFL) students. The results of this investigation shed light on the use and acceptance of AI writing software by students, emphasizing its considerable worth as a dependable writing aid in terms of enhancing writing essay.

The study employed a mixed methodology to collect data, involving the distribution of a questionnaire to third-year students at Mohammed Kheider University of Biskra to gather their opinions on AI writing tools. The sample population consisted of 31 third-year students from the English department at the University Mohammed Kheider of Biskra. The findings of this research successfully validated the hypothesis under investigation.

In conclusion, the students exhibited a positive attitude towards the utilization of AI writing support, thus enhancing its effectiveness and convenience as an indispensable writing tool. The students' appreciation for the user-friendly interface, immediate feedback, and comprehensive suggestions epitomize the tool's capacity to provide assistance tailored to specific writing requirements. This reception highlights the crucial role of AI writing support in fostering student involvement in the writing process .

### **6.1 .Limitation of the study :**

The study presented previously has certain limitations that should be taken into consideration including the duration and the sample size that was small limiting the generalization of the findings .Moreover ,the study might have been conducted without balance between the two gender because the number of male participants was too small in regard with female .

#### **6.1.1.Reaseach Methodology :**

The best methodology to accommodate and overcome the gaps in this inquiry seems to be a mixed-method approach. This kind of methodology collects data using a range of techniques to compile more effective information and offers several ways to interpret the results, which helps the researcher meet his needs throughout the research process. The study collects data on how EFL learners use AI writing applications when writing essays using a particular type of data gathering tool called a questionnaire. The purpose of the questionnaire is to investigate and ascertain how much EFL students use artificial intelligence (AI) writing tools, what their preferences are, and how these applications affect their writing abilities and general academic achievement.

## **6.2.Recommendations for future research**

In light of the overall findings of this study, it is strongly advised that educators and institutions adopt the utilization of Automated Writing Evaluation (AWE) tool to enrich the essay writing proficiency of EFL students. The results undeniably affirm the theory that AI writing assistance has a favorable effect on writing excellence and grammatical precision, rendering it an indispensable asset in language acquisition.

- ❖ Based on the findings of this study, a follow-up experimental investigation could be conducted to delve deeper into the issue.
- ❖ Educators of Academic Writing place greater emphasis on the practical application of the subject to familiarize students with the concept of Artificial Intelligence.
- ❖ Instructors have the ability to incorporate ICT materials into their classrooms to support the language learning curriculum and its impact on EFL learners' language proficiency.

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- ❖ Instruct students on how to utilize and integrate the Automated Writing Evaluation tool to enhance their writing skills through critical analysis.
- ❖ Examines the ethical considerations surrounding the use of AI writing assistance tools in enhancing EFL learners' self-efficacy in writing, while also addressing the balance between reliance on such tools and the development of independent writing skills.

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## Appendix

### L3 Students' Questionnaire

**Dear participants, I sincerely welcome you to participate in this study by answering the following questions regarding the the use of AI based writing tools among Biskra university EFL learners.**

Your age ?

1.What's your gender?

Male

Female

2. How do you describe your writing level?

Very good

Good

Acceptable

Poor

Very poor

3.How do you often write in English ?

Never

Rarly

Sometimes

Often

Always

4.Do you find difficullty in writing ?

Yes

No

5. Have you ever used Artificial intelligence writing tools?

Yes

No

6.if Yes , How often ?

7.which specific AI writing tools have you used?

8.How do you typically use AI writing tools in your writing work ?

To brainstorm and generate ideas for essays

to write complete drafts of essays

to paraphrase or rewrite specific section of text

To edit and proofread my writing

I do not use them for writing but for research

Autre :

9. What do you usually focus on while using AI in writing your essay ?

suggesting better vocabulary choices

Grammar checking

Paraphrasing

Look for more details and information about topic

Autre :

10.Why do you use AI writing tools for your essays ?

To overcome writer's block and get started

To improve the clarity and flow of my writing

To paraphrase and rephrase sentences

To help me generate new ideas and arguments

To save time on writing assignments

11.What is your opinion about the effectiveness of AI writing tools ?

Strongly agree

1

2

3

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4

5

Strongly disagree

12. Have you encountered any difficulties while using certain AI writing tools ?

Yes

No

13.If yes, please explain

14.How do you think universities can best address the growing use of AI writing tools among students?



## المخلص:

تهدف هذه الدراسة بشكل أساسي الى البحث حول تأثير استخدام برامج الكتابة بالذكاء الاصطناعي الثالثة في اللغة الإنجليزية كلغة أجنبية بجامعة محمد خيضر بجامعة بس (AI) لتعزيز إتقان كتابة المقالات لدى طلاب السنة في مدى فعالية أدوات الذكاء الاصطناعي في قدرات الطلاب على كتابة المقالات. يسعى هذا البحث لتقديم الذكاء الاصطناعي كأداة لتقييم الكتابة الآلية وتطوير الطلاب لمهارتهم الكتابية من خلال إستعمال سواء لغرض تصحيح الأخطاء أو تزويد مقالاتهم بالتفاصيل و المعلومات التي تخدم مواضيعهم أو البحث عن اقتراحات نحوية أفضل و بأسلوب أحسن . الهدف هو جذب اهتمام الطلاب بالموضوع من خلال صقل مهاراتهم من خلال الممارسة وتمكينهم من تولي مسؤولية تعلمهم واعتمادهم على أنفسهم. ولتحقيق أهداف دراستنا، اعتمدنا المنهج الوصفي الذي إشتهل على أداة جمع البيانات عبارة عن استبيان تم توزيعه على الطلاب، مع التركيز على متعلمي اللغة الإنجليزية كلغة أجنبية في السنة الثالثة (العدد = 31). توضح النتائج أن الطلاب يدركون الفوائد المحتملة لدمج الذكاء الاصطناعي في المناهج التعليمية، وأن أداة تقييم الكتابة الآلية لديها القدرة على تحويل مهارات كتابة المقالات لدى الطلاب وتعزيزها