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# The Use of Artificial Intelligence in EFL Literature Classes: An Investigation into the effectiveness of using Copilot in Literary Analysis

The case of Master I Students at The Department of English-University of Laghouat

A dissertation was submitted to the Department of Letters and English Language in partial fulfilment of the requirements for the master's degree in literature and civilisation.

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# *Declaration of Authenticity*

The work reported in this dissertation was carried out by me under the supervision of __*Ms. Nouioua Amira Hiba*_ at the Department of Letter and English_ Language_ Faculty Letters and Languages, University of Amar Telidji—Laghouat, Algeria.

I hereby declare that the title of the dissertation, "*The Use of Artificial Intelligence in Literature Classes: An Investigation into the Effectiveness of Using Copilot in Literary Analysis. The case study of Master One Students at The Department of English-University of Laghouat*" and the contents of this dissertation are the product of my own research, and no part has been copied from any published source (except the references, standard mathematical or genetic models/equations/formulas protocols, etc.). I further declare that this work has not been submitted for any other degree/diploma award. The University may take action if the information provided is found inaccurate at any stage.

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Date: ___15/06/2024___

# Dedication

I dedicate this work

To **myself**

To the king of my life, my father **Kaouka Atallah,** who did everything to put me on the path and to guide me.

I am so grateful for all the sacrifices you have made for me.

To the queen of my heart, my mother, **Lahreche Reguia,** who raised me well and provided me with everything.

I would ask for and for, always keeping your love in my heart.

To my dear supervisor, **Mrs. Nouioua Amira Hiba**, thank you for being an inspiring leader and supporter. This work would not have been completed without her constant guidance and support.

To my twin brother **Atallah,** who never saw the light of day, your short existence made a lifelong impression on my heart. Rest in peace, never forgotten.

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KR

## *Abstract*

Artificial intelligence (AI) integration in education has had a profound effect and has been widely applied in education over the last few years. The present study intends to measure the effectiveness of an AI tool, Copilot, in literary analysis among Master I students of English at the University of Laghouat. This mixed-methods study combined a qualitative examination of the literature with quantitative data gathered through an online questionnaire conducted with forty-four Master I students of English at the University of Laghouat. This study aims to investigate the influence of Copilot on the literary analysis skills of EFL students. This research shows that Copilot improves literary analysis among audiences by providing human-like analytical tools and reinforcing human interpretation. The use of Copilot creates a more engaging, interactive pedagogy that, in turn, promotes more sophisticated readings of literary texts and the formation of analytic interpretations. This research can open up the possibilities for AI in EFL literature classes. Copilot delivers real value, but wrapping it into traditional AI training modes is essential for comprehensive skill development. Ethical concerns, including data privacy and bias in algorithms, are other vital issues that need to be addressed to help ensure a net positive impact of AI systems on society. The research also echoes the spirit of an existing call for enhancing AI tools for educational purposes and the necessary ethical reasons for their development and use. By integrating AI technologies like Copilot, modern educators can teach and comprehend literature at a more advanced rate, consequently providing more educational value to students.

# List of Abbreviations

**AI:** Artificial Intelligence

**AIEd:** Artificial Intelligence in Education

**AR:** Augmented Reality

**API:** Application Programming Interface

**CNN:** Convolutional Neural Networks

**EFL:** English as a Foreign Language

**ELT:** English Language Teaching

**GPUs:** Graphical Processing Units

**NLP:** Natural Language Processing

**ML:** Machine Learning

**MS:** Microsoft

**ITS:** Intelligent Tutoring Systems

**Lit & Civ:** Literature and Civilization

**LSA:** Latent Semantic Analysis

**RNNs:** Recurrent Neural Networks

**VR:** Virtual Reality

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# General

# Introduction

## Introduction

Over the past few years, technological progress has rapidly changed our lives, redefining many sectors like healthcare, finance, entertainment, and education. Using technology, teaching and learning methods are gradually developing, and Artificial Intelligence (AI) is being infused into education. This research deals with using AI for literature courses and, more particularly, an investigation in the context of using an AI tool called Copilot for literary analysis. The study aims to investigate how effective it is in enhancing literary analysis skills among students of English as a Foreign Language (EFL). This section will provide an in-depth background of the research problem, detail the research questions, specify the research objectives, and detail the structure of the dissertation.

## 1. Background of the Study

The future of the digital age is being constructed at an accelerating pace, and this trend is affecting all aspects of human existence. Our future is being developed through an enormous technological leap, forming the fabric of the digital future where we currently exist, permeating every area of everyday urban life. This is a change that is not only accelerating but also reshaping what it means to be part of human civilisation as we know it. In the contemporary world, technology is more than just a tool. AI led to a massive technological revolution in many fields, from healthcare, finance, and entertainment to education.

Education serves as the foundation for the advancement of society and overall progress. It provides us with the tools to understand the world and acquire mastery in various fields, thereby contributing to individual and collective growth. AI is used to create virtual teaching rooms and produce simulative training, making the learning process more engaging and immersive. AI technologies are increasingly utilised to augment courses, integrating personalised learning models, adaptive assessment, and intelligent tutoring systems (ITS). This leads to a more focused way of teaching and, as a result, a more precise understanding. AI is increasingly being integrated into the educational cycle, and literature will start to evolve at such speed as a result of AI increments.

The discussion on literature is moving towards AI technology, and AI is about to affect literature on a much larger scale than it has been on its established themes. Copilot is an example of an AI tool that can be optimized to assist with in-depth analysis of literary works, providing valuable insights and support for literary scholars and students. This AI tool uses advanced algorithms; the text is deeply analysed and understood. These trained models do this through systematic ways of reading, the structural aspects of discovering themes, and stylistic gems in essays. It is an AI topic modeller that offers a method of analysis that is even better than the traditional manual interpretation for every researcher, scholar, and reader.

## 2. Statement of the Problem

For EFL literature courses. Traditional literary interpretations and methodologies have been based on human analysis. Still, the advent of digital tools, especially Copilot, allows for exploring a more technically advanced way of studying literature. This study gap reflects the need to understand how digital tools can alter traditional literary analysis tasks. Exploring the integration of AI tools in the field of education, in turn, will enhance more than one aspect of educational innovativeness. The study aims to fill a gap in the research on the impact of Copilot on EFL literature classes regarding literary analysis practice. Those interviews are all oriented towards providing a broader view of what the integration of digital tools might look like, how digital work might play out in terms of educational innovation, and how it might transform traditional practices of literary analysis in the newly digital educational landscape.

## 3. Purpose of the Study

This study explores the incorporation of a digital tool, Copilot, in EFL literature classrooms during literary analysis. The plan is to investigate the extent to which the incorporation of Copilot can enhance the utility and applicability of the customary methods of literary analysis in the EFL teaching landscape. This study investigates the supportive role of Copilot in EFL literature classes in terms of understanding and analysing literary texts. Moreover, the present study fits with the line of research on literature and the use of technology in language courses.

## 4. Significance of the Study

The importance of this study is that it should re-conceptualise literature classes in EFL settings by investigating the efficiency of an advanced tool called Copilot in literary works analysis. With the growing presence of technology in EFL classrooms, knowing how a tool like Copilot is used in literary analysis has become essential. Educators can leverage this research to gain a more subtle understanding of how AI tools can potentially help improve the teaching and learning experience in literature courses at the intersection of technology and language teaching. The study lays the foundation for implementing advanced computational tools in EFL literature instruction by assessing the efficacy of Copilot and, therefore, providing a more dynamic and all-inclusive learning environment for EFL students to analyse literature.

## 5. Questions of the Study

The principal objective of this study is to investigate the effectiveness of using Copilot for literary analysis in EFL literature classes.

**How does the integration of AI tools, including Copilot, impact the effectiveness of literary analysis and understanding in EFL literature classes?**

The present research study aims to answer the following research questions:

1. **How does the use of AI in literature classes affect students' abilities to perform literary analysis?**

D1: This question is helpful in order to know whether AI tools actually have a direct impact on the ability of students to perform literary analysis.

2. **How does integrating AI as a computational tool impact the effectiveness of literary analysis in EFL literature classes?**

D2. This research question investigates the utility of AI as a computing capacity to enhance the literary analysis process in EFL settings.

3. **To what extent does the integration of Copilot contribute to the literary understanding in EFL literature classes?**

D3. This research question explores how this AI-supported tool helps students in EFL literature classes understand literary texts.

## 6. Hypotheses of the Study

These hypotheses were made up in direct relation to the previously mentioned research considering the use of Copilot in analysing literary works in an EFL literature class, and they go as follows:

H1: Using AI in literature classes will adequately improve students' performance in literary analysis.

H2: Integrating AI as a computational tool for literary analysis helps increase the efficiency of scholarly analysis in EFL literature classes.

H3: The integration of Copilot improves literary understanding in EFL literature classes.

## 7. Research Methodology and Tools

To systematically investigate the role of Copilot in literature classes and literature analysis, the study adopted a mixed-methods research methodology that combined qualitative and quantitative data. Qualitative data was collected through an extensive review of related literature, and quantitative data was collected through the distribution of an online questionnaire among the EFL students of the Department of English at the University of Laghouat. Also, this study employed a descriptive-analytical approach. The study systematically assessed how AI is currently implemented in educational contexts through literary analysis.

## 8. Limitations of the Study

The research is limited to a single college, and therefore, its findings may need to be more generalisable to other authorities or educational landscapes. However, highlighting Master I students might not generalise the experiences and outcomes of students at other levels of education about their different experiences with AI tools. Research is also based on data provided by students themselves, where personal perception bias and response bias are at least as important. In addition, the test of the integration and efficiency of Copilot as an AI tool is done in the particular cultural and pedagogical context of Algerian higher education, which might present a significant difference from most other areas. A future investigation that needs to

coordinate subjective knowledge with the quantitative information proposed from this study might result in an extended plan, which may affect the logical consistency of the findings from this investigation. Lastly, the Copilot design efficiency and research findings might be affected by technological details such as Copilot accessibility, usability, and fit into the workflow. Therefore, this indicates that the results may vary depending on Copilot's exact version or implementation.

## 9. Structure of the Study

The dissertation *"The Use of Artificial Intelligence in Literature Classes: An Investigation of the Effectiveness of Using Copilot in Literary Analysis"* consists of three main chapters. The first chapter, "Overview of Artificial Intelligence in Education", this chapter sets the stage by clearly defining what AI is, looking back over its historical development, and staking out an inventory of the multiple types of AI. This is followed by an overview of AI in education (AIEd) more generally and a focus on its relevance in the context of English Language Literature (ELT). The chapter ends with a look at the ethics that are embedded in the deployment of AIEd. The second chapter, "The Use of AI in Literature and Literary Analysis", focuses back on literature and the relationship literature has with AI. This chapter briefly introduces AI in literature and then summarises the usual methods adopted for literature analysis, along with the process of the methods. It then discusses some of the results of the deployment of AI in literary analysis with respect to a traditional approach. Finally, the chapter concludes the section by analysing the usefulness and risks related to the use of AI in these. The third chapter is "Research Methodology and Data Analysis". This chapter explains the design of the specific study conducted for the dissertation. It elaborates on the type of research design selected for this study, the population, as well as the sample. Finally, it describes the full analytic specification of the plan and ends with a summary of the expected results.

# Chapter One
# An Overview on Artificial Intelligence in Education

**1.1 Introduction**

**1.2 Definition of Artificial Intelligence**

**1.3 Historical Evolution of Artificial Intelligence**

**1.4 Types of Artificial Intelligence**

1.4.1 Categorization by Learning Approaches

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**1.9 Understanding the Potential Impact of Artificial Intelligence on Teaching and Learning**

**1.10 Conclusion**

## 1.1 Introduction

AI in education has the power to transform customary instructional strategies into adaptive learning.[1] Opportunities in response to the performance and level of student engagement (Homles et al.). Holmes et al. emphasise the importance of carefully considering the impact of AI technologies on access and results for all of their students. The education industry will soon face complete turmoil caused by the emerging capacities of AI, which is the same side of computer science intended for developing systems that mimic human intelligence. AI, including machine learning (ML)[2] Natural language processing (NLP) is set to innovate traditional methods and profoundly change how we learn and teach.

This chapter provides a detailed assessment of AI in education, beginning with a general orientation to AI and its educational implications. This text defines AI, discusses its history and summarises the various forms it may take, going beyond simplistic, automated answers to elaborate ML and sophisticated problem-solving systems.[3]. The chapter also covers the ethical issues that should be considered and managed when implementing AI technologies in educational settings. The chapter also elaborates on the effects of AI in teaching and learning processes and stresses how AI helps enhance personalised learning, efficiency, and education performance. Finally, the chapter closes with a brief summary of the key points discussed and the implications of the chapter in relation to educational models. This leads the reader to have a detailed view with respect to the following chapters.

## 1.2 Definition of Artificial Intelligence

The field of computer science, known as AI, is primarily concerned with developing intelligent computers that can carry out activities that generally require human intelligence. AI systems analyse enormous volumes of data, identify patterns, and then make judgments or predictions based on the information discovered. ML is a

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[1] It is **one** tec**hnique for providing personalised learning**, which aims to provide efficient, effective, and customised learning paths to engage each student.

[2] A type of AI in which computers use vast amounts of data to learn how to do tasks rather than being programmed to do them.

[3] It is the act of defining a problem, determining its cause, identifying, prioritising, and selecting alternatives for a solution, and implementing a solution.

core part of AI systems because they have the power to become more intelligent over time as they are exposed to new data.

As time has changed, the definition of AI has evolved, leading to diverse views about its nature and scope. From a more traditional perspective, AI is a system that imitates human intelligence. This includes tasks such as understanding natural language, determining the contents of photos, or playing games. Some researchers, like McCarthy et al., once argued for a broader definition of AI. This would include any system that is able to perform tasks otherwise requiring human intelligence, whereas a model of human cognition is irrelevant or redundant. Because AI is multidimensional, it consists of various methodologies and applications in the field.

AI covers several of the major subfields within education. These subfields provide innovative approaches to advancing educational outcomes and learning experiences. ML, one of the most basic subfields in AI, aims to develop algorithms that allow computers to learn and make predictions or decisions based on data without being explicitly programmed. In education, ML algorithms can analyse student performance data to find patterns to provide customised learning experiences to meet an individual's unique needs and interests (Ghanbarian and Pachepsky). In addition to these essential topics of AI, there is NLP, which works on the interface of computers and human language. NLP approaches allow innovative educational technologies such as ITS, chatbots, and language learning applications to understand and produce human language meaningfully (Jurafsky and Martin).

AI is a compound field that includes a considerable range of skills and software applications of those skills in such things as learning, reasoning, and problem-solving. The variety of definitions of AI illustrates how many aspects of AI there are, as well as the many paths to enable it. The exigency of the times is to use AI to change education inside the schooling bracket, thus presenting several thrilling possibilities AI can confer in education. Using AI technology can create personalised learning opportunities, increase student engagement and achievement, and explore new possibilities for education.

## 1.3 Historical Evolution of Artificial Intelligence

One of the most transformative areas of contemporary science to have arisen around the year 2010 is the topic of AI. It includes diverse research and development activities that invariable forms and specialisations happen anywhere. You can track that idea from the exceedingly early theoretical foundations set in the mid-20th century. This article describes the 1956 Dartmouth Conference, which is often considered the moment that AI became an actual formal science. This conference was thus the birth of the field that, in this context, was called AI, which was used for the first time and is generally considered to have started in the year when the field started (McCarthy et al.). This led to game-changing progress in developing AI systems that could perform tasks that preserve human intelligence.

AI saw a significant boost from the late 1950s to the early 1970s. They marked the advent of expert systems and rule-based reasoning.[4]Even when AI became more advanced, it hit some significant roadblocks, thanks to the limits that computer capacity can impose on complex real-world problems. This revival was driven by substantial advances in ML, especially in neural networks.[5], during the 1980s and 1990s (Vapnik et al.). During this time, we also saw great strides in the capabilities of AI systems with the development of the backpropagation algorithm.[6] (Rumelhart et al.). Moreover, the development of expert systems such as MYCIN[7] Demonstrated that AI was ready for prime-time application in real-world domains (Swartout). The area of AI has also been subject to periods of disillusionment, which are popularly referred to as "AI winters." These periods are characterised by exaggerated expectations, followed by a lack of meaningful development.

The advancements in deep learning over the last few years have unleashed a new era of AI, allowing tasks in NLP, computer vision, and autonomous systems to be

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[4] Relies on the use of **syllogisms**, or arguments based on formal logic.

[5] Are computational models that mimic the complex functions of the human brain.

[6] A fundamental algorithm used in training artificial neural networks, where it efficiently computes gradients of a loss function with respect to the network's weights.

[7] An early expert system developed in the 1970s at Stanford University was designed to diagnose and recommend infectious disease treatment using rule-based AI to analyse patient data.

conquered. Deep learning architectures like convolutional neural networks (CNNs)[8] and recurrent neural networks (RNNs)[9] They have proven to outperform other models in tasks where even intricate AI systems used to struggle (LeCun et al.). Additionally, the availability of big data, in conjunction with advancements in hardware, namely graphics processing units (GPUs)[10], has further fueled the development of deep learning algorithms.

In historical measure, the history of AI is lined with milestones, from its roots to deep learning, from the seminal theories to the current developments in deep learning. Many technologies have driven the history of AI research and development, and many influential personalities have undoubtedly shaped it. An ongoing process of interdisciplinary collaboration and enhancements in computer technology is advancing AI. Consequently, AI continues to move forward in the face of hype and subsequent disillusionment.

## 1.4 Types of Artificial Intelligence

AI is a general term for many different methods computers use to behave intelligently. AI is making shifts in the field of education, with numerous applications that are changing the face of teaching and learning in this new era. Understanding diverse types of AI is necessary to understanding its perspective and the scope of work in this field.

Training an AI model with labelled data is known as supervised learning. During this process, the algorithm learns how to map input to output for different examples of both inputs and the expected output that would come from those same examples. For example, supervised learning can be exploited in the education domain to develop adaptive learning systems that can adapt to the individual needs of learners

[8] A class of deep neural networks primarily used for processing data with grid-like topology, such as images. They excel in tasks such as image recognition.

[9] A class of neural networks designed to handle sequential data by maintaining a memory of previous inputs in their internal state through loops within the network.

[10] These are specialised electronic circuits designed to rapidly manipulate and alter memory to accelerate the creation of images in a frame buffer intended for output to a display device.

by looking at their past performances and providing personalised guidance accordingly (Pardos and Heffernan).

Unsupervised learning is the process of training AI models using unlabeled data. This allows the system to discover latent patterns or structures unknown about the data going into the process. So, an AI agent is able to learn to choose what state to go to next using a straightforward learning process called reinforcement learning. This type of learning occurs as the agent interacts with its environment's perceptions and receives rewards or punishments in return. This method is called an adjustment series, and it can also be used indirectly in educational games or simulations to allow students to learn by trial and error in a safe, manageable, controlled environment (Baker et al.).

### 1.4.1 Categorisation by Learning Approaches

AI systems can be categorised based on their learning approaches.

#### 1.4.1.1 Supervised Learning

It only refers to the model and method files when registered as a data set. This will be ending up when training the AI model with labelled data[11] Sets. This data consists of the input (e.g., student responses) as well as the correct output (e.g., correct answer, learning target met). The model learns the patterns and relations in the data and predicts the future as new data comes in.

*Education Example:* An AI-powered tutoring system that is trained with student responses to expert solution pair data. The system then analyses this data, identifying errors and giving targeted feedback based on learned patterns (Wu and Goodman).

#### 1.4.1.2 Unsupervised Learning

Unsupervised learning identifies the hidden structure of unlabeled data.[12]. Using the data itself as its base, the AI model recognises patterns and structures without being supplied with predefined categories.

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[11] A group of samples that have been tagged with one or more labels.

[12] Refers to data elements that lack distinct identifiers or classifications.

*Education Example:* Use unsupervised learning to analyse student engagement data (time spent on activities) to indicate student struggles or areas of interest. You can use this information to personalise learning pathways and resources (Pan and Wollack).

#### 1.4.1.3 Reinforcement Learning

In this method, an AI agent interacts with an environment and receives rewards and punishments for its actions. The agent learns the best actions to take to earn the most rewards through trial and error.

*Education Example:* Reinforcement learning on adaptive learning platforms. The students are monitored in terms of their progress and the performance of the students on the platform. The platform does that by re-evaluating the difficulty or recommending different learning materials in accordance with the student's performance, which is basically a way to "reward" success in learning behaviours (Lin et al.).

AI is considered software with the capacity to think and process similarly to humans and can be utilised in many roles and areas. Narrow AI, or weak AI, is an AI system designed and trained for a particular task. General AI is an entirely autonomous AI that requires no human assistance in planning and problem-solving.

### 1.4.2 Categorisation by Capabilities

Another way to categorise AI is by its capabilities.

#### 1.4.2.1 General AI (Artificial General Intelligence)

This type of AI would have intelligence comparable to that of a human and the ability to learn how to adapt to any intellectual task. The constructs for general AI are still realistic and contemporary.

#### 1.4.2.2 Narrow AI (Artificial Narrow Intelligence)

These systems are great at certain things but could be more remote or generally capable of problem-solving like humans are. The most noticeable category is certainly educational AI applications.

### 1.4.3 AI Models and Algorithms in Education

An array of AI models and algorithms drives AI-based tools in education. Here is an overview of some egregious instances:

#### 1.4.3.1 Machine Learning Models

These models, including decision trees and linear regression, learn from data to make predictions or classifications. They are used for purposes such as student performance estimation, plagiarism detection, automatic essay grading, etc. (Siemens).

#### 1.4.3.2 Natural Language Processing (NLP)

NLP techniques make the understanding and processing human language by AI systems possible. These can include ITS, which is capable of providing customised feedback on student writing or web-based and mobile-based language learning environments (V and Naik).

#### 1.4.3.3 Deep Learning

Deep learning is based on artificial neural networks with multiple layers, which can learn various patterns from an extensive data set. Applications range from automated essay scoring and facial expression recognition to estimating student engagement and personalised recommendation of learning materials (Sarker).

Educators and researchers can take advantage of this by understanding what types of AI exist and what functions they serve to make their courses more effective and engaging for all students.

## 1.5 Definition of Copilot

In the context of AI and technology, Copilot refers to an advanced AI assistant designed to augment human capabilities by providing real-time support and automation in various tasks. Copilot is intended to be a more advanced AI assistant designed to collaborate with humans by offering real-time help and automation across multiple tasks. AI copilots usually use ML algorithms, NLP, and vast amounts of data

to write code, create content, manage workflows, and make recommendations. It provides context-aware code completions and suggestions, making the developer's life easy and helping deal with less manual work (Chen et al.). To ensure that their help is both on-topic and precise, these AI systems are trained on substantial amounts of data, including publicly available code and documentation. AI Copilots are a concept that is gathering even more momentum as industries stride forward to combine intelligent machines to allow enhanced human living (Devansh).

### 1.5.1 Copilot VS ChatGPT

Microsoft (MS) Copilot and ChatGPT are fundamentally different AI-based apps, and their user experience might solve various problems regarding productivity and creativity, thus being integrated in separate ways in the user's environment. ChatGPT, created by OpenAI, is a flexible language model capable of generating human-like text and conducting dialogue. It is used for writing essays, code, and poems. It can perform many natural language tasks in many languages, making it suitable for both casual and professional use in domains like customer service, education, and journalism (Kanerika). A free version provides basic functionality for chatGPT, and a premium version with more features up to GPT-4 (Manager).

By contrast, MS Copilot plays nice with the MS ecosystem and supports increasing productivity within MS 365 apps such as Word, Excel, PowerPoint, and Outlook. It is built on the same underlying GPT-4 technology as GPT-4. It is specifically designed to help you draft emails, produce reports, prepare presentations, and analyse data using your company data stored with MS 365 (Rowe and Rowe). This integration enables Copilot to offer even more contextual and personalised auto-completion suggestions, inherently streamlining workflows and boosting enterprise users' productivity. MS. ChatGPT works as a standalone tool that can be plugged in via APIs.[13] MS Copilot is available for multiple platforms, but it is directly related to MS 365, making it a great assistant for users of other MS products (Kanerika).

[13] It is a set of rules or protocols that enables software applications to communicate with each other to exchange data, features, and functionality.

## 1.6 Artificial Intelligence in Education

AI offers solutions to various challenges and opens doors for new ways of teaching and learning, revolutionising education. In particular, this module will focus on the operational dimensions of AI tools for personalising learning experiences, features for automatic assessment, and the architecture of ITS. AI has a remarkable and growing presence in nearly every field, and education is one of the upcoming fields with immense potential for adding value through its application. The suite of AI in education tools and technologies includes ITS, adaptive learning tools, auto-grading systems, and AI-based analytics. These technologies built on ML, NLP, and data analytics make learning more effective and individualised. AI integration in education targets catering to different learning needs, mitigating educational outcomes, facilitating administrative work, and ultimately changing the nature of traditional educational paradigms (Luckin).

### 1.6.1 Potential Benefits of AI in Education

#### 1.6.1.1 Personalised Learning

The huge promptness of AI in education is basically driven by the ability to automate the learning experience. AI-powered systems can create personalised learning routes and recommendations by analysing copious amounts of student performance and preferences data. All of these systems are able to adapt to an individual learner's strengths and weaknesses.

#### 1.6.1.2 Enhanced Student Engagement

Less powerful perceptions range from merely another gimmick to a slightly more plausible way to have students interact. In contrast, more powerful perceptions can be transformative in engaging students with interactive and immersive learning. Virtual reality (VR)[14] and augmented reality (AR)[15] AI-based tools help create virtual environments for students to have practical experiences. This results in a more

[14] The use of computer modelling and simulation enables a person to interact with an artificial three-dimensional (3-D) visual or another sensory environment.

[15] In computer programming, a process of combining or "augmenting" video or photographic displays by overlaying the images with valid computer-generated data.

concrete, relatable, and, hence, more memorable explanation of abstract concepts. AI-based chatbots and virtual assistants contribute instant feedback and support that maintains student motivation and engagement with their learning (Popenici and Kerr).

#### 1.6.1.3 Efficient Administrative Processes

AI can automate many administrative tasks in schools. For example, teachers are given more time to teach with the advent of automated grading systems that grade assignments and tests. AI analytics enable educators and administrators to get helpful information about students as well as operational information from institutions. This allows for informed choices for curriculum development, resource allocation, and student support services (Homles et al.).

#### 1.6.1.4 Supporting Special Education

AI also plays a vital role in special education, offering a unique learning method for students with special needs. Implement AI-powered tools. AI-powered speech recognition software and AI-powered text-to-speech converters can help students with hearing and visual impairments access educational content. Inclusive education is promoted as personalised interventions work to accommodate the individual learning needs of students with disabilities through adaptive learning systems (Abimbola et al.).

#### 1.6.1.5 Facilitating Lifelong Learning

In a world that requires lifelong learning to keep pace with global skill developments, AI can enable lifelong learning easily with learning that is easy to access and available anytime. AI-backed online learning platforms would allow learners to learn new skills and knowledge conveniently. AI will even recommend suitable courses and resources to match your learning goals and needs, enabling lifelong personal and professional development (Seldon and Adiboye).

To ensure transparency, fairness, and inclusivity in the applications of AI, it is essential to overcome the issues related to data privacy, algorithmic bias, and the digital divide. The widening of such inequalities will only get more damaging as things continue to advance technologically, so it is better to start sooner rather than

later, trying to promote digital literacy and ensure fair access to educational resources based on AI-driven systems (Ungerer and Slade).

## 1.7 Artificial Intelligence in English Language Teaching

In ELT, AI has started the revolution by introducing advanced tools and methodologies that make learning easy. Such AI applications in ELT include adaptive learning systems, intelligent tutoring, and automated feedback. They allow educators to deliver personalised instruction targeted explicitly at individual learners' unique needs. Intelligent applications supported by AI sift through massive amounts of data to discover patterns in student learning, enabling personalised learning pathways that reflect each learner in real time (Johnson).

The introduction of AI has sparked a lot of interest and development in the field of ELT. AI technologies offer many applications designed to enhance how people learn languages, adapt to the unique learning challenges any given individual may face in response to other tools, and deliver feedback to cater to individual desires and preferences. The benefits of using AI in ELT include personalised learning, better learner engagement, easy assessment, and an increase in the operational efficiencies of the administration, among others. These benefits not only improve the learning outcome but also help teachers provide an excellent quality of education. ELT itself will be far more AI-driven; this is just the tip of the iceberg, and as AI gets better and better, it is sure to have a massive impact on the way English is taught in the future, with some of the most fantastic teaching that has ever been experienced.

### 1.7.1 Specific Artificial Intelligence Tools in English as Literature Teaching

#### 1.7.1.1 Duolingo

It uses AI to design personalised learning pathways where the activities are adapted based on the learner's skill level. Academic research has shown that users have achieved attainment levels equivalent to completing a university language study semester (Loewen et al.).

#### 1.7.1.2 Grammarly

Grammarly uses NLP to provide real-time writing feedback, including grammar, punctuation, and style choices. It has been proven to increase users' writing quality by helping them spot and correct errors (Zinkevich and Ledeneva).

#### 1.7.1.3 Rosetta Stone

It is an AI-based language learning tool that adjusts class difficulty levels based on the student's performance. Nielson. Accordingly, this method has been found to be immensely successful in vocabulary learning and speaking skills.

Integrating AI in ELT began a new era and unveiled many benefits to enhance the teaching process and learning experience. As AI applications provide personalised learning experiences, improve student engagement, and optimise administrative processes, adoption in education is becoming more of a necessity than a luxury.

AI could soon revolutionise ELT by creating personalised learning experiences, boosting pronunciation and grammar, and fostering engaging language learning conditions. In ELT, the application of AI demands that educators and developers come together if we are to unlock the benefits that AI can provide. By making the most of the advances made by AI, instructors are fully equipped to grant students the power to achieve greater fluency, accuracy, and confidence in their use of the English language.

## 1.8 Ethical Considerations of Artificial Intelligence Adoption in Education

Nowadays, one of the most critical ways in which AI is affecting education has been discussed around the world. In public opinion, it is an idea that by connecting AI to the education system, we are waiting for a big revolution in the learning process. However, moral issues are also important, despite the potential benefits in this field. One of the first ethically worrisome issues that results from adding AI to educational contexts is the perpetuation of bias and inequity within AI algorithms. Just as AI algorithms are biased against specific demographic categories in other applications, educational AI systems may well display equally severe forms

of these biases. This could include things like grading or student evaluation algorithms that inadvertently discriminate against students from historically marginalised communities. (Wang et al.). Such prejudices can only serve to exacerbate already-pronounced educational achievement gaps, which are clearly discriminatory when it comes to universal equal opportunity.

This aside, two other critical ethical considerations—data security and the preservation of student privacy—need to be addressed. AI ed-tech systems often operate by using massive datasets of student information, sometimes including sensitive information on student academic performance, behaviours, and personal information. Williamson noted that this data could easily be compromised without appropriate safeguards, leading to privacy violations or identity theft. Adding to that, the fact that private firms can sell off information concerning snooping about kids rings some of these alarm bells, where tourist information is in danger of poor impacts.

What is even more critical is also the question of human control and accountability from an ethical perspective on the implementation of AI in the learning space. While an AI system can increase efficiency and automation, it should not have any room to obviate human agency or forego human oversight. In a pedagogical context, the type of judgment that AI algorithms can have a powerful influence over students' academic paths is not suitable for delegation to AI alone. Such decisions include course recommendations and disciplinary decisions. So, in order to ensure that ethical values are maintained and that responsibility can still be assumed, human educators should be given the authority to intervene, discuss, or supersede AI-based judgments (Selwyn).

It is necessary to implement several techniques in order to address these ethical concerns and encourage the adoption of AIEd in a responsible manner. Initially, there is a requirement for rigorous systems that ensure the openness and accountability of algorithmic processes. To facilitate independent audits and examinations, educational institutions and AI developers are required to reveal the underlying algorithms and data sources utilised in AI systems (Sharma and Sabri).

Transparency is critical to building trust; it allows stakeholders to review what happened and assess what went wrong or how it might have gone wrong ethically.

In the second place, privacy-preserving solutions like differential privacy or federated learning are advised to be incorporated to protect student data while allowing the necessary analysis and personalisation (Kaledio et al.). These approaches decentralise the storage and processing activities of data to provide a solution for privacy problems associated with centralised data repositories.

Moreover, an ethical culture at AI development companies, as well as within academia and regulatory bodies, needs to be nurtured by offering extensive ethical training (Floridi et al.). Those working in the education sector need to know what knowledge and tools are required in order to critically evaluate the moral implications of AI technologies and how to make decisions informed by that evaluation. Collaborations among faculty members, ethicists, technology designers, media specialists, and policymakers may support the broadening of ethical discussions and offer insight into policy frameworks intended to balance benefits with burdens associated with the AIEd that use students' personal data (Akgun and Greenhow).

With multiple perspectives and sets of knowledge integrated into the process, stakeholders can navigate the thorniest ethical terrain and create nuanced, mid-course solutions with the right amount of innovation and ethical obligation. To mitigate potential risks and ensure a responsible approach, many decision-making and proactive steps to deal with ethical issues are needed in AI deployment in education. Suppose they confront issues such as bias or fairness, privacy or data safety, and human control or responsibility. In that case, stakeholders can maintain ethical principles and unleash the transformative power of AI to improve learning and equity in education.

## 1.9 Understanding the Potential Impact of Artificial Intelligence on Teaching and Learning

Over the last few years, AI has disrupted multiple sectors, and education is no exception. The potential of using AI for education and learning is a hot topic and is being babbled by researchers and educators at every turn. Given AI's evolution and

potential, it is essential to be aware of how this technology can affect the respective learning journeys of students and educators alike.

One of the most significant areas where AI could provide value to educators is through personalisation, which can manifest in several ways to make educating students easier. According to André et al., AI-powered platforms can analyse vast data sets to customise student learning experiences in ways that suit their specific preferences, needs, and actions. For example, AI-powered learning management systems offer personalised learning material recommendations and activities based on individual student performance interests. AI may further automate administrative functions, including grading tests, freeing up teacher time, and allowing skilled interventions for needy students.

These insights can be derived from data about how students learn best and data about student performance. For instance, AI-driven analytics tools can alert teachers when kids struggle with certain concepts or skills. This would also enable teachers to provide timely, targeted interventions and support. Furthermore, AI may also support peer social learning, connecting students with other similarly talented students to collectively learn together. This will contribute to enabling a sense of community and shared knowledge.

However, both must recognise that the students and the teachers require good preparation and implementation. According to Holmes, AI is an enabler that can transform education. Still, such transformation can only occur if the data quality is good enough, the algorithms are well-designed, and the general system is developed to account for specific ethical issues. Concerns are also expressed about the biases that may exist in the AI algorithm, which may continue to enhance the existing disparities in the education system. Therefore, educators and policymakers should extensively study AI's ethical and social concerns in education and establish appropriate regulations to mitigate potential risks and ensure equal and just protection and opportunity for pupils.

The empowerment of educators, combined with AI-making classrooms and highly personalised data-driven learning environments, can drastically change the educational landscape. However, to reap these benefits fully, a great deal of planning,

responsible implementation, and continuous evaluation are needed. This ensures that AI technologies benefit students and teachers. Education stakeholders can then transform the potential of AI into perspective.

Finally, AI can boost student engagement by providing more interactive and adaptive learning experiences. The system becomes able to change, in due time, the content and the difficulty of questions based on the replies and progression of students, helping the students be more engaged and motivated towards learning (Baker and Siemens). For example, with ITS, activities that students work on can adjust the pace and difficulty to correspond to the specific learning trajectory of each individual student. This way, students are well engaged and understand the matter as much as possible. AI-enabled virtual reality and gamification methodologies are ideal for creating immersive, interactive learning environments that also cater to multiple learning preferences.

## 1.10 Conclusion

The present chapter provides a detailed discussion of the disruptive role that AI can play in education. After researching many diverse apps and implementations, it becomes clear that AI can revolutionise age-old education methods. The possibilities of that opportunity, particularly around the potential to personalise learning, drive learner engagement, and yield positive academic results, make AI especially attractive in education. In addition, AI-enabled tools can streamline tasks for educators (e.g., managing administrative requirements, developing curricula, and building and grading assessments), ultimately creating a more productive teaching and learning ecosystem.

This points to a way of rethinking something that is structured around the importance of ethical considerations and the excellent practice of implementation techniques in advancing the realisation of the potential that AI has to offer in the sphere of education. On the one hand, AI could help us solve the very problems in education, but on the other hand, it has a hatful of issues around privacy, bias, and equity. This makes ethical, transparent, and accountable considerations of developing AI systems for educational scenarios of the highest importance. Respecting these values allows educators to reduce the likelihood of future unintended consequences

while ensuring that AI technologies remain broadly beneficial to those who learn from them.

As for the future of AIEd, it has both bright and rigid sides. Research will continue to power the evolution of AI-based educational technologies and open up many new avenues for those students who need it the most to learn in the ways they learn. In addition, ongoing partnerships among educators, researchers, and technologists will lay the groundwork for integrating AI across different educational settings, enabling excellent education that is both inclusive and equitable. However, it is critical to remain sceptical and work hard to tackle data privacy challenges, algorithmic bias, and digital illiteracy so that the dream of AI in education can become a reality.

The efficacy of AI as a game-changer in education cannot be denied. Safe and effective implementation and use of AI technologies can enable education professionals to enhance teaching and learning, help students learn fast and operate cleverly, and promote innovation in education. As we navigate the evolving landscape of AI in education, we must remain vigilant, adaptive, and steadfast in our pursuit of educational equality, diversity, and inclusion. By working together on the ultimate crowdsourcing model and exhibiting some measure of responsible behaviour, we can ultimately realise the revolutionary power of AI, even becoming superhuman in the process. This would enable us to build a system of education that is accessible, delivered more engagingly, and brings about a more equal society for students across the board. All in all, AI has the power to reshape education by creating a unique, adaptive, and more efficient learning process. In the next chapter, we are going to look into the use of AI in literature and literary analysis in more detail.

# Chapter Two
# The Use of AI in Literature and Literary Analysis

**2.1 Introduction**

**2.2 The Artificial Intelligence in Literature**

**2.3 Brief Overview of Literary Analysis**

2.3.1 Plot

2.3.2 Characters

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2.3.4 Theme

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**2.4 Process of Literary Analysis**

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**2.7 Advantages & Disadvantages of Artificial Intelligence in English Literature**

**2.8 Ethical considerations in AI-generated literature**

**2.9 Conclusion**

## 2.1 Introduction

There has always been a deep connection between literature and technical advancement. What happened in the fifteenth century with the invention of the printing press was a turning point that made books possible and proliferated across the land after that. Hence, it facilitated better access to information and the emergence of literary culture (Eisenstein). During the 20th century, traditional media shifted with the advent of other new media forms. This led writers to begin a much more contemporary form of storytelling (Easa). In recent years, electronic literature has been taxonomised with the digital revolution and has contributed to the variables of hypertextuality, interactive storytelling, and multimedia interfaces (Hayles).

Machines powering AI have become more influential than before, having been in operation for decades in various industries. NLP, which is the study of linguistics, more specifically refers to a computer's ability to both understand and analyse human language and is an area in which AI has made significant progress. Technological developments in NLP are inching toward literary studies. This is where AI intersects with literature, and this chapter explores this intersection. It starts with the question of AI in literature and continues through the familiar modes of literary analysis, including how to analyse literature. Then, it explores how AI can be used in literature analysis. Afterwards, it compares previous and current methods and presents the advantages and disadvantages of AI in this domain. Then, it dives into the ethics behind automated writing a little more.

## 2.2 Artificial Intelligence in Literature

Given that AI is already making its way into every domain of life. The relationship AI will have with the written word from a dream is on the verge of fantasy AI. AI and its potential are not strangers to the science fiction genre. AI is a metaphor for human anxieties about technology and our place in the universe (Van Woensel).

As AI becomes a tool for writers to explore themes, writers increasingly turn to AI to help generate their work. However, AI-driven algorithms can also be helpful

in grammar optimisation, detecting plagiarism, story structure tools, and even character and plot development software. Some argue that AI is fast replacing human writers altogether; however, some view technology as a tool to enhance their creativity and productivity (Raza). AI can help automate ideation workflows, examine divergent storylines, or even fight writer's block.

The most extraordinary development is now arriving, with AI having the skill to co-author written works. For instance, AI explores AI-powered methods in many creative outlets, including poetry and computer programming code. That only adds to conversations about whether machine-generated writing counts as “real” literature, a debate about the nature of storytelling and authorship that this kind of partnership is blurring (Van De Cruys).

The relationship between AI and literature is as fluid as they come. AI is already defining the ecosystem of literature as an inspiration, a reflection, a tool, and even potentially as a co-creator. The future is ripe for a symbiotic relationship between human creativity and technological advancement. The field of literature, which is usually linked with innovative human work and expression, is seeing a massive transformation thanks to the arrival of AI. AI is the ability of computing devices to perform tasks requiring human-level intelligence, such as visual or emotional recognition, human creativity, social interaction, or domain-dependent expertise (Russell & Norvig).

One of the most fascinating applications of AI as a tool for creative discovery is in literature. Such tools work as AI writing assistants to help authors with idea generation, narrative element proposals, author writing techniques, etc. ShortlyAI and Jarvis are the same kind of software applications that use NLP to analyse massive amounts of text data. They could be pretty helpful for authors suffering from writer's block or for authors who want a fresh look at their work.

Especially in the field of literature, the rise of AI-generated texts has given rise to a more significant debate about whether AI should be part of the creative work of artists. AI sceptics argue that AI lacks the emotional depth of human experience necessary to write significant prose (Minsky). The point being made is that AIoids are unoriginal copies of the most banal and insipid kind—that mimic established patterns

not in their nature but in what some have come to see as a cosmic vacuum, lacking true human creativity.

On the other hand, advocates see AI as a powerful tool that can push the boundaries of what we can articulate. Moin says supporters claim AI has the potential to generate innovative ideas and forms, thus breaking the confines of linear narrative. Additionally, AI can democratise the creative process, allowing practically any human to try to write as long as they have the technology on hand.

With ever-improving AI technology, the literary realm is not going to escape those impacts in any significant way. Its manner of respect is the promise of the possible birthplace of the future of our literature in the cooperation of human cleverness with AI-computational capabilities so that we may generate new imaginative energy and an intellectual and artistically satisfying stimulus for the world.

## 2.3 Brief Overview of Literary Analysis

Literary analysis is at the core of literary studies. These sentences and things remain the creeks running through the text of a story, poem, or play, the text excused and exposed as the writer's craft and the terrible lie hidden by the critical coils of language and narrative. Close reading is a form of literary analysis that allows us to approach a text as a window into what makes the book tick; it is what turns simple reading comprehension into developed techniques that provide an understanding of a book, how it works, and what it does.

In simple terms, literary analysis is breaking the composition down into its essential elements, looking at how the author develops an idea, using literary techniques to create various effects, and using a structure to communicate a message to the reader. This involves critically examining elements such as:

### 2.3.1 Plot

A kind of literary analysis in which the arrangement of events within a narrative structure is analysed to determine the poetics operating in otherwise inaccessible or unobservable discourses, enabling individuals to write about the

relationship between sequences of events in narrative text and the specific construction of its overall strength and authority (Vincent and Leitch).

### 2.3.2 Characters

At its core, the analysis looks at how the characters change throughout the story, the reasons for their change, and how they interact with each other and the space around them (Meyer).

### 2.3.3 Setting

The time and place in which that narrative is set, the characters, the plot, and the overall tone are under investigation for the impact that environment has to play in the text through the lens of literary analysis (Abrams).

### 2.3.4 Theme

What is the overall message or idea that is addressed in the text? Or what is literary analysis? It is analysing or reading more deeply into the predominant themes and how they are conveyed through the various parts of the piece (MasterClass).

### 2.3.5 Literary Devices

The use of the means an author selects to deliberately affect an interpretation of figurative language, symbolism, and point of view is made to understand how they affect meaning (Corbett).

### 2.3.6 Authorial Intent

When we look at the author and his place in history, it is integral to slip into the skin of the creator of this piece and consider the varied factors that may have contributed to this composition, such as why the author chose to put it together the way it did. This framing will underline the author's message using the quote (Culler).

### 2.3.7 Critical Lenses

Various critical lenses improve the processes for examining literature. The collected work is open to consideration from feminist, Marxist, or psychoanalytic perspectives, which can offer novel readings and new perspectives (Tyson).

### 2.3.8 Argument Development

A solid literary analysis identifies the aspects and presents a claim or argument about the text itself. We additionally prove this point by quoting evidence from the text, proving that you fully understand the techniques and strategies used (Kusch).

The analysis of literary genres rises to the level of more than academic conduct. When readers take that active role in reading, they can better understand and appreciate the author's craft and the story's complexity. Literary analysis requires close attention to reading, analysis, and interpretation and provides critical thinking skills that are helpful in all areas of life. Moreover, literature can be a way for people to interface with the world, as well as with human experience and the historical times in which they live. In literary criticism, the reader links the work to broader issues and circumstances in a cultural context. Literary analysis is a perpetual discussion of a text. In literature, a cognitive process called literary analysis refers to the inspection, interpretation, and evaluation of the distinct parts of the literature, and the objective is to pinpoint the underlying meanings of that particular literature.

## 2.4 Process of Literary Analysis

Literary analysis is a mental exploration of a story, analysing it piece by piece to understand its structure and hidden message. It is like looking at a well-thought-out mosaic and appreciating the beauty of every tile but being aware that they all work together to create the whole masterpiece. In this post, we will offer you a detailed plan that will provide you with a clear picture of how to structure your very own literary analysis article.

The first step is to thoroughly and critically peruse the text. This is not a lightweight read where you can coast through an experience. Take notes, highlight, and document any questions. The key is to watch and listen closely: pay attention to

repeated symbols, tone shifts, and character motivations, as they always hint at something bigger (MasterClass).

Stanley Fish, a famous literary critic, once argued that "reading is a species of writing" (Fish 1980, p. 3), and one way in which you might do the same thing is through marginalia. You also create a more intimate and meaningful dialogue with the author and the world they have created by physically interacting with the book.

A solid literary interpretation situates a work within a landscape. Also, consider the author's biography, the historical period in which the work was written, and contemporary literary currents. What are other scholars' opinions on the work? Look into the literary criticism of the novel. Using these external sources improves your analysis because you can show that you are aware of other views (Culler).

Part of the work of literary studies involves literary analysis, a body of knowledge that moves beyond simply being able to relate a story's plot or extract the literal meaning from a poem. This is a close reading of the various strata the author has built, a glimpse of the hidden meaning and grace notes that bring a work of literature to life. The technique itself looks simple, but it contains a lot of publications and analyses and takes the ability to read not only plain text but also the interrelationships of different literary techniques and thematic elements.

The standard methods used in literary analysis are thus a tool for understanding the abounding layers in a piece. This is where close reading begins gradually, reading every part of the text and all analysis while reading every picture of words and notes (Tyson). This meticulous analysis can help an analyst spot crucial pieces, reused patterns, and the overall structure of the code. This is like going up close and personal with, say, a painting and the paint looking with an enlarged microscope with the agenda, keeping track of every detail and how the brush strokes that make the brush lines affect the whole image.

Having thus laid the groundwork by methodically reading, the analyst then turns to identifying figures of speech. The writer uses these techniques to create different effects and develop an understanding of the entire essence. There are many literary devices available for authors to incorporate: metaphors, similes, symbols,

foreshadowing, and irony. Identifying these devices is not merely recognising them but understanding the experience they create for the reader (Kusch). If one describes a character in passing as a storm, that single descriptor conjures up a slew of word images while also hinting at that character's internal state.

After the findings, the analysis follows with the first significant step of identifying patterns and themes. Some of the concepts they touch on resonate with broader human themes or social issues. This includes identifying the theme and then studying how the author examines and develops it, creating and developing the theme plot, character, and literary devices (Meyer).

This means that the theme of love operates not just in the relationship between two characters but in the representation of the landscape or what is implied in the dialogue as the people connect or fail to connect. However, it is not just about a pre-designed process of literary analysis—analytical thinking and interpretation of information fuel its bloom. The analyst cannot simply identify elements; they must extensively examine authorial decisions and their possible consequences. Why did the author choose this particular metaphor? How does this symbol fit into the more prominent theme? Why does this seemingly trivial detail matter? These essential inquiries, mentioned above, are the root of understanding what the text is saying, thus helping the analyst to create their own claims (Culler).

Interpretation, which is what most literary analysis is essentially doing, is making a well-reasoned case about the meaning of the text. This appeal requires more than only opinion but rather support for the argument through examining specific passages, directly pulled quotes, examples of literary devices used, and their interconnectedness to the topic at hand. Being efficient in interpretation involves accepting that there are several ways to interpret something, provided, ideally, you construct a convincing central theme that allows you to create a giant leap between thoughts (Goulimari).

Reading literature is not a passive leisure activity but rather an alert and alert form of participation in the text that requires considerable intellectual energy. A manic inspection, interpretation of tropes, dissection of memes, rationalisation, and explication unfold from the analyst's hands to take root in the space crafted by the

author. Trenching into developing research skills and exploring intellectual curiosity enhances our recognition of the innovation and craft of literature beyond only revealing the hidden depth of a piece of writing and sharpening critical thought processes.

## 2.5 The Use of Artificial Intelligence in Literary Analysis

The burgeoning potential of AI is about to usher in a significant disruption in literary analysis. AI offers a new set of methods and approaches that can make that practice even better when combined with literary studies as they have traditionally been practised. One exciting way AI can be used in literature is its ability to streamline tedious research tasks. From the results of AI-driven systems, it is possible for computer analysis on a large scale of textual material to reveal constant patterns, thematically constrained constructs, or frequently occurring stylistic features in a mass of articles (Gefen et al.).

This helps an academic gain a larger perspective on a literary movement, a trend in an author's work, or the development of a particular trope. Another excellent method AI can assist with is literature reviews, where the AI can sort through what academic papers are relevant and what they mainly argue and summarise the paper, saving the researchers time and effort (Andy Stapleton). It is necessary to ingrain literature classification because it is essential. The perspectives of systems are highly salient to identifying patterns and features in nature, which are the natural capabilities of AI and how AI can detect relationships in a text with Latent Semantic Analysis (LSA). This should reveal hidden meanings or recurring patterns that a human reader could miss (Nawaz).

This approach has particular merit when dealing with complex narratives, as the writer may use metaphor or intertextual references. According to Canda, AI can also be used to analyse sentiment and emotional tone in a single work or a body of work, giving insights into the author's purpose and the character's emotional arc. AI can do more than help with standard literary analysis. AI on the horizon is soon expected to be able to generate even more original creative output, such as poetry keys, drama lines, and storylines. Some of this work may need more nuance and sophistication than what a human might write, but it represents the first step and is a

valid work of literature. AI can also help create interactive experiences to engage the readers in new and innovative ways in those literary works (De Van Cruys).

AI-driven literary analysis has immense potential to advance literary research. As AI technology continues to be developed, researchers can look forward to a new era of tools that will enable a deeper understanding of our literary canon. However, it is essential to remember that AI is a tool, not a human verification replacement. They likely will be best used through some form of collaborative strategy that enlists AI assistant scholars to help their human scholar colleagues navigate the scale, range, and depth of literature researchers will need to explore and understand.AIs can also help with tasks like data mining and literature reviews, giving researchers a comprehensive look at the current academic works in any publication or genre (Andy Stapleton).

Innovative Compositions AI can also evaluate enormous amounts of text, which means those who understand will find concealed themes and correlations in creative compositions. LSA essentially allows AI systems to find relationships between themes and stylistic similarities throughout thousands and thousands of texts (Eric). This may bring about new angles regarding the development of an author, the path of a specific literary genre, or even the cross-civilisational exchange of ideas. AI can discover intertextual references that even human experts have overlooked and trace how historical events shaped literary creativity.

AI techniques can also analyse sentiments, that is, extract the emotions out of a text. By looking at what words have been used and how sentences have been structured, AI can help academics identify characters' emotional journeys, the mood of a piece of literature, and even what the author intended to impact the reader (Canda). This quantitative methodology can act as a complementary confirmation of the emotional effect of literature, which can augment traditional close reading techniques by unbiasing these methods. However, it is essential to realise the limitations of AI in literary analysis. AI cannot replace the human ability to place a work in its historical and cultural context or replicate human understanding of the complex, carefully considered emotional response that shapes literary interpretation.

AI provides a treasure chest of innovative technologies and possibilities that could change literary analysis. Solving your monotonous jobs, your hidden patterns,

and how you relate to others' emotions, AI has the potential to do all of the above, given that it is set up correctly. However, it will inevitably overpromise and underdeliver because it will fall into the trap of equating AI with human interpretation. Optimally, any strategy would involve a combination of humans and AI, exploiting the strengths of both to achieve a deeper and more nuanced understanding of literature.

## 2.6 Traditional Methods VS Contemporary Methods in Literary Analysis

Traditional methodological and critical solutions have been established by formalism and by reflection upon modernity, which, above all else, have provided the conditions for an understanding of practice and history. Meanwhile, contemporary approaches challenge these bases by incorporating historical context, reader response, and outside influence. Influenced during the early twentieth century, formalism focuses on a novel's narrative and formal aspects (Levin). Formalists analyse the technical elements of literature, including the purpose of the work and character growth, how the author presents the story or the diverse ways the author uses language. They wish to expose the artifice of the author and the possible combination of elements that can create a text as a whole (Culler). New criticism, a type of formalist literary theory, advocates "the textual analysis of literary texts, with no consideration of the reader's experience, the external circumstances of the author's life, or the cultural systems that inform the reader" (Eaglestone). New critics will claim that the text gives every essential clue for decoding its intended meaning, citing the revelation of universal themes and timeless truths.

Traditional approaches provide a reasonable starting point for analysing literature. Analysing the formal elements develops a sophisticated appreciation for the writer's craft. Close reading helps develop critical thinking skills by teaching students to look for patterns, spend time looking at language, and focus on making connections between various parts of the book. The formalist and new critical methodologies, both emphasising the need for clarity and detachment of analysis, form an essential starting point for discussion and interpretation.

Traditional methods are not worthless, but they may sometimes feel confining. The sole attention to the text betrays a failure to consider the influence of elements of the primary environment in the space that lies outside of the page. The work of a text can have different relations with facts because the meaning of the work can be affected in many ways, such as historical, social, and political reality or the author's biographical background. There is also the risk that a very formalistic approach needs to realise the fact that interpretation is subjective. The way readers interact with a book is determined by their experiences with other readings and long-term biases that distort their comprehension of the text.

More acute and refined perceptions of literature are accordingly made possible via the new methods. The built-in historical context and awareness of the reader's role enhance the understanding of the complexities of a work. It also stimulates critical engagement with subjects of concern and social or political power that a particular topic can raise in a text. The subjective focus in modern methodologies could lead to subjective interpretations that deviate significantly from what the author initially meant. On the other hand, navigating the vastness of analytical perspectives can be intimidating, and narrowing down the best framework for a particular text can be challenging.

The best way to go about literary analysis is not by choosing between tradition and modernity but by acknowledging and appreciating their existence in cohesion. Conventional approaches meet modern approaches by providing a solid foundation for any text analysis, as they might introduce us to other social, historical, and subjective ways of creating meaning. Like a tapestry, literary analysis is woven intricately from multiple threads, all of which add to the complexity and depth of how we understand the written word.

The introduction of AI in the literature study represents a change of method rather than a method of change. With the evolution of AI tools and the increase in the depth and complexity of these tools, their role will likely expand. AI is expected to help identify authors, spot plagiarised passages, and maintain and provide access to humanity's (presumably entire) written record. However, the natural power of humans to be analytical, sympathetic to the emotions of others, and creative in thinking of new

ways will still remain unmatched. The proper future of literary analysis is different from human versus machine. It is human and machine in devolved, mutually reinforcing exploration that leads to fuller and more nuanced discoveries of a broad swath of written texts.

In traditional approaches to literary analysis, close reading has been prioritised; this meticulous and exhaustive assessment of the text itself has been posited as the foundation of literary study. It highlights the close examination of plot, characters, symbolism, imagery, and language use. It also shows the reading, which uncovers the author's aim behind the works and reveals the pupils' aim. New criticism, a central literary theory, called for a close reading of the text on its own merits, detached from the author's life story or historical context. It was articulated by Welleck and Warren in 1949 and reflected a retreat from autonomous literary work. Formalism, a traditional methodology, analyses the form and structure of the text and how these elements give context to the universal meaning (Youvan).

This permits traditional analysis to continue using the available analytical paradigms: Marxism, Feminism, and Psychoanalysis. These frameworks provide insight into the text's underlying social, political, and psychological forces (Eagleton). While this framework certainly enhances our understanding, it also tends to force preconceived readings, which can sometimes ignore the finer nuances of a text.

AI has changed literary analysis forever. NLP refers to the ability of machines to extract meaning and identify patterns, themes, and stylistic elements present in copious amounts of written or spoken data. The sentiment analysis may provide insight into the emotional tone of the conversations and stories of the characters. Indeed, machine learning algorithms can determine literary genres and assess potential influences on the author's works (Eric). One of the critical advantages of AI is that it can process data at a scale in a way that is faster than humanly possible.

Now, the subtle nuances of language are challenging for AI to grasp, and the same goes for irony, sarcasm, and metaphor. Explaining the meaning of a book is essentially a human activity that AI cannot learn as it needs to understand the cultural context and history on which human comprehension is based (Frankish et al.). In

addition, AI analyses could be biased depending on the data they are trained with, and they might reinforce preexisting literary prejudices.

The best path for literary analysis does not imply replacing the traditional with AI but enabling them in tandem. AI methods, on the other hand, make powerful servants, supplying academic factual information and hidden patterns within texts. Afterwards, human analysts could employ this newfound wisdom to supplement their inferences, challenge existing assumptions, and explore new lines of inquiry. Literary Scholars Lead ChangeThe use of AI can help make sophisticated research methods more accessible to more kinds of scholars, encouraging the democratisation of literary analysis.

For instance, AI might be used to detect recurring patterns in a novel and the human analyst to analyse their cultural symbolism in more detail. In addition, AI can help pinpoint potential influences on how an author was working that a scholar could then seek out in terms of historical or literary connections that may have been overlooked. However, the human solver must still undertake a final analysis, bringing their eye for detail, historical context, and interpretation across cultures to the text.

## 2.7 Advantages & Disadvantages of Artificial Intelligence in English Literature

AI is progressing so rapidly and changing so many aspects of our lives that literature is one of the fields in which it has become an innovator as well. One of the most promising uses of AI is its potential to aid in the literature analysis. AI algorithms can be fed with vast amounts of literary data, making them capable of detecting patterns, reoccurring themes, and stylistic traits in massive text corpora. This is especially helpful for historical comparison researchers, who need to see trends going back as far as possible, for genre development, or for discovering certain seeds impressed upon other authors. AI-enhanced distant reading techniques can detect hidden connections and trends in all your literature constituents. This trend may spawn new readings and a deeper understanding of genres (Culler).

AI is almost certainly a handy instrument in the quest to make literature more accessible. AI-driven text-to-speech tools enable the visually impaired to consume the

same book. For one thing, AI-based translation systems break the language barrier and make it possible for a diverse audience to engage with artworks from a wide variety of cultural backgrounds. Democratising access can foster a broader and more diverse literacy landscape.

Additionally, AI could revolutionise the entire authorship industry. Providing grammar help, style suggestions, and even helping with how the story should end is the type of machine learning that will shape writing in the future. While it is unlikely that these tools will entirely supplant human creativity, they offer writers valuable tools for writing, streamlining the writing process and perhaps even inspiring unique forms of storytelling.

One of the foremost pluses of AI in literary studies is its ability to augment efficiency by a considerable margin. Literary researchers would historically resort to cumbersome methods to do things such as detect recurring themes, track character development, or trace the historical context. Systems driven by AI can automate these processes by looking through vast troves of textual data and trying to make sense of them, something that would take a human year to do because these systems operate on a larger and more efficient scale than a human alone is capable of (Farzand). This helps scholars further explore the complexities of literary writings, which could otherwise never be recognised.

In addition, AI can potentially improve fairness in reviewing data. Literary criticism is a subjective field, bound to the biases and backgrounds of speakers as well as the theoretical frameworks they choose to apply. With AI algorithms, text data can be analysed according to predefined parameters, which offers a comparatively unbiased view. AI can be used to uncover repetitive stylistic patterns in a collection of texts without being plagued by prior conceptions of the author or the genre (Lauriola et al.).

We can instruct an AI algorithm to recognise literary devices like metaphors or similes. This will allow scholars to study them on a massive number of textual occurrences and determine their stylistic significance. AI has the ability to provide certain benefits, but it remains a challenge to the field of English literature as well. It is also critical to consider if AI is overused for literary interpretation. Yes, AI can

identify patterns, but a profound reading that requires a human understanding of the human experience and history behind it is not in its hands. Literature thrives on dispatch with its suspense, symbols, and human story factors that may prove to be quite difficult for AI to grasp (Jta and Al-Batineh).

A central second area of debate concerns the potential for discrimination in AI systems. When it comes to ML, if an AI system is trained on the data sets already available, it can end up reproducing the biases inherent in those data sets. This, in turn, leads to a biased literary interpretation that either elevates a select few perspectives to prominence while discarding the rest of the women or, alternately, relegates unrepresented voices to silence. Addressing bias in AI algorithms is vital to ensuring that AI remains a tool that helps encourage diversity in the literary space.

AI writing assistants imply that they are helpful tools. Still, they also run the danger of being blatantly utilised to create anything less than original or imaginative work, which would diminish the singularity and inventiveness endemic to great literature. The AI-English literature correlation is indeed a work in progress. This debate also serves as a lesson, a middle ground where AI can and should be used to analyse and then even retrieve information. Still, it is equally essential that human interpretation and creativity should maintain their sheen and importance. We could and should see AI less as a replacement for our human experience of books in literature; we are used to viewing them otherwise and as an augmentation of them.

Alternative methods exist to ensure careful integration when using AI in literature examination and production. Transparency and the ability to detect bias in the AI system are essential. Equally important is the necessity to develop ways to partner human and AI interpretive frameworks in the interpretation of literature by academics and scholars. The responsible progression of AI writing tools is inherently better used towards integrity and betterment.

In terms of literature analysis, AI is only sometimes an effective tool. A significant restriction is the current need for more instinct and understanding of AI. Most importantly, literature is not just a collage of facts but a complex interplay of language, feelings, and culture. These subtleties, however, are complex for AI to grasp

and tend to focus on the surface structure of a piece of literature rather than what may be deeply profound to human readers (Frankish et al.).

The partiality of AI methods is yet another notable issue. In most cases, these AI systems are trained on large volumes of data, and this data itself can be biased either because of the data the creators used to train the AI or due to data that the AI has learned during its training. For example, an AI system trained in 19th-century British literature might struggle to interpret female or postcolonial texts. It requires an awareness of the potential biases, hence a research architecture impressive enough to critically evaluate the resulting outcomes of deploying AI to present a sheer analysis of literary works.

In addition, reliance on AI might devalue those close reading skills that are indispensable to many of us as we work with literary texts. While AI may be an excellent tool to detect patterns, AI cannot replace the contextual understanding you might get from detailed, careful reading and interpretation. Human touch, critical thinking, and the ability to relate to the literature to read and enjoy it in depth are essential requisites (Al-Batineh).

However, the prospects of AI have also raised much hope and a compelling set of questions for the field of English literature. The key to maximising the potential of AI in analysis, information access, and improved writing is to be mindful of our biases and how we interpret the human factor. This will ensure that AI is used as an aid to increase our understanding and appreciation of literature.

AI is enumerated as a fascinating opportunity in English literature. This is not to say that its appeal is limited to enhanced productivity, greater objectivity, and novel methods of inquiry. Nevertheless, that does not mean that we should not now be careful while using AI, and it can also be biased. AI is not displacing the importance of the humanities in text interpretation; it is only an addition to it. In this view of the future, researchers are ideally suited to engage with the literature for an all-important breakthrough and to retain the key elements of critical reflection and human social interaction necessary for a deep understanding of complex scientific material.

## 2.8 Ethical Considerations in AI-Generated Literature

AI is reshaping many other creative spaces. Literature is already one of them. AI now easily facilitates autonomous writing, which includes the composition of poems, scripts, news articles, and entire books. While the tech behind this will likely lead to a lot more authoring and creative products, a dozen ethical considerations must be vetted.

A major ethical issue related to AI-written text involves bias or discrimination. AI models ingest massive corpora of existing text, which may carry historical race and gender biases that can be reflected and amplified. For instance, an AI system that is trained on a corpus of historical news items is likely to generate content that perpetuates gender stereotypes or racial prejudices. This raises concerns about how fair and accessible AI writing maybe when it comes to its use in education and gaining knowledge.

Many believe that AI is an extension of human creativity, like the paintbrush that helps the artist. Zagalo and Branco explore the juncture at which AI supplements human creativity instead of accelerating it. The sweeping arrival of AI-written books could damage creativity for people everywhere. Depending too much on AI tools in the game of writing could stunt not only the development of critical thinking but also the art of storytelling. Furthermore, because AI can generate material quickly and efficiently, an oversaturation of banal and unoriginal creations could flood the market.

AI-generated literature is a fascinating and unexplored area of writing. While it offers exciting avenues of creativity and increased efficiency, it also raises ethical concerns regarding bias, plagiarism, authorship, and human ingenuity. As this technology develops, it becomes mandatory to create ethical paradigms and best practices to ensure the ethical use of AI in literature.

## 2.9 Conclusion

This chapter explored how AI can function multiplicitously and dialectically in literature and also at the level of literary analysis. Regarding literature, AI can already

be seen as changing the generation and interpretation of literary works. AI helps us understand this ancient art better by developing new tools and perspectives.

The future of AI in literature is rife with exciting possibilities. Expect NLP progress to lead to more sophisticated AI-influenced literature that can more accurately portray the complexities of human language and emotion. AI could go beyond the text and fit the period to the text to conduct literary analysis because cultural surroundings always characterise language. This integrated approach can help better to understand the work (Alice et al.).

However, one needs to remember that AI is just a toy; it cannot replace human intellect and understanding. As Hu points out, AI can often struggle to understand literature's more subjective and emotional aspects, which are usually the most necessary in understanding the meaning a piece of literature wants to address—where the writer's intentions become alive.

AI shines in writing and its ability to work alongside people as an assistant. Imagine a day when AI has the capacity for joint ideation with writers, live feedback from readings, and even personalised experiences for books. In the field of literary analysis, AI could also be used as an inexhaustible research assistant that works away in the background, leaving human analysts to focus on the critical and interpretive thinking that lies at the heart of literary studies.

AI and humans are not rivals in writing. Combining human creativity and emotional intelligence with AI's intense computational and analytical power provides a fresh set of solutions for unprecedented literary inquiries. For all those writers and for every future generation, such a collaborative approach could enrich both the making and experience of literature.

One key thing related to AI is the ability to read through a mass amount of textual material. AI algorithms can also identify various texts' patterns, themes, motifs, and literary styles (Canda). This allows scholars to identify relationships between the words and passages, correlations, and patterns that may fall outside of human recognition, thereby offering new readings and uncovering more profound understanding across various literary movements and trends.

# Chapter Three
# Research Methodology, and Data Analysis

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**3.2 Study Design**

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**3.7 Limitations of the Study**

**3.8 Conclusion**

## 3.1. Introduction

This chapter outlines the methodological framework used in this study. It explains the research methodology, the research design, the method and equipment used to collect data, the study population, and the selection of sample practices. The study used a mixed-methods research methodology, combining the qualitative and quantitative data collected through questionnaires. This research focuses on the implementation of AI in literature courses as well as its impact on enhancing literary analysis among Algerian EFL learners.

## 3.2. Study Design

### 3.2.1. Research Method

This study capitalises on a mixed methods approach, which combines qualitative and quantitative data collection and analysis techniques. The method has been widely acclaimed in the academic field. This is characterised by its application of both qualitative data (often interviews, focus groups, and open-ended survey responses) and quantitative data (measures with numerical data and statistical analysis). The principal aim of using mixed methods is to achieve a more complex view of research issues than would be obtained by using either qualitative or quantitative methods separately (Robinson).

This study employs a mixed methods approach as it allows for a holistic and in-depth understanding of the research topic, as incorrectly believed in several previous studies. A mixed-methods study combines qualitative and quantitative methodologies to take advantage of the strengths of each type (Robinson). The narrative reviews accumulate descriptive information that provides deep theoretical and contextual understandings of AI employed in literature lessons. Conversely, the data collected through questionnaires can provide some full proof demonstrating the extent of AI tools and how often they effectively perform better literary analysis on texts. The use of multiple data sources in this triangulation improves the validity and reliability of the findings as well as offers an in-depth investigation of the research topics from different angles (Tashakkori).

This study uses a mixed-methods methodology to provide an in-depth understanding of the effectiveness of using AI-based technologies, particularly Copilot, for literary analysis in a literature class. This method combines quantitative and qualitative methodology to fill all knowledge gaps on both sides of the investigation. The quantitative aspect of the research is the administration of a structured questionnaire to Master One Lit and Civ students at the Department of Letters and English Language, University of Laghouat. The tools will measure the students' literary analysis skills performance before the integration of Copilot and the subsequent performance of the same students after the integration. This will create the ground truth of the effect of the tool.

The other half, simultaneously, is the literature review, which is the qualitative part. This will facilitate a detailed exploration of the diverse and complex results relating to the benefits and difficulties experienced in the practice of Copilot use, documenting subjective experiences, attitudes, and opinions—something that would otherwise be near impossible with purely quantitative methods. Integrating quantitative and qualitative narratives through mixed-methods analysis offers a complete picture of Copilot treatment effects. The aim is that these findings will be robust and trustworthy and accurately reflect the complex nature of educational interventions.

Mixed-methods research is advantageous in educational contexts because educational phenomena are often complicated and complex to understand with one approach. They require exploration from multiple perspectives to uncover their nuances (Christensen & Johnson). Therefore, a mixed-methods study can deeply investigate the impact of AI on reading, which could be helpful for educators.

### 3.2.2. Research Approach

The descriptive-analytical approach is a research method that is designed to systematically overview or deconstruct a phenomenon to piece together its elements to break it down so it can be measured and compared so you can evaluate your hypotheses. In the field of educational research, this model is found to be more effective for studying the integration of technologies, particularly AI technologies, in pedagogy. According to Nassaji, descriptive research is a technique that

comprehensively summarises a particular occurrence within the natural environment. In short, analytic research provides a comprehensive description as well as an analytical and critical conclusion based on the source of the data. Researchers can display the current situation of AI use in literature classrooms as well as its impact on students' literary analytical skills. Creswell argued that his integration supports a complete understanding of the qualitative and quantitative boundaries of the research subject. So, in this descriptive vein, this study will detail where Copilot, and more broadly, AI, is being used in literature classrooms. The second part of this analysis will evaluate how AI contributes to literary analysis by looking at these observational data together with statistical data.

Descriptive analysis allows researchers to systematically count and analyse events in the classroom, providing a broad perspective on how Copilot enhances student engagement and analytic abilities. This technique is beneficial because it combines qualitative observations with quantitative data, allowing us to understand more deeply the ways in which AI tools augment those skills. Descriptive research provides a rich, contextual understanding of the nuanced and complex nature of educational interventions that Creswell highlighted. Additionally, the analytical component works to ensure that the data is more than just descriptive but also invites a critical analysis that assesses patterns and implications. Ultimately, this feeds into the broader discourse about educational technology (Christensen and Johnson).

## 3.3. Population and Sample

### 3.3.1. Population

This research focused on Master One students of Lit and Civ at the Department of English, University of Laghouat. These students are more or less comfortable with traditional and contemporary methods of literary analysis. This group was chosen because they participated in complex literary works and their evolution of literary analysis skills, which are essential for a profound literary understanding.

These Master One students in Lit and Civ are essential for this study because of their exceptional place in the academy and the type of pedagogical orientations

currently in place. At that stage, these students need to further their superficial understanding of literature and delve into more intricate readings of literary texts.

### 3.3.2. Sample

The sample consists of all Master One students specialising in Lit and Civ at the Department of English, University of Laghouat, as the academic records of the program revealed their number reached sixty-five students. Participants are determined by enrollment in the Master One Lit & Civ program. This ensures that all participants have comparable levels of academic readiness and are similarly exposed to the curriculum that is relevant to the study. With a total population size of sixty-five students, 44 students were in this study. This range allows for a sample size to be large enough to generate significant quantitative and qualitative data but still small enough for intensive research.

The chosen sample will adequately capture the diversity within the Master One Lit & Civ program. All of these attributes will come from various genders, with differing degrees of expertise with AI tools in the past, different levels of success in academia, etc. We need multiple thoughts and experiences to make sure that this study is valid and worth publishing.

## 3.4. Sampling Paradigms

The sampling technique used in this study was purposive sampling. Researchers identify a set of people likely to provide information for the research and then carefully try to obtain the maximum amount of information possible. The sample consists of one class of Master I students majoring in literature and civilisation in the Department of Letters and English Language at the University of Amar Telidji-Laghouat.

Purposive sampling, or judgmental sampling, does not rely on probability to help you choose the units to include in your sample. Here, the researcher picks participants according to a set of characteristics required for the research study. Our model comprises students from the Master One degree in Lit and Civ. This group was purposefully selected due to the field of study of its members and their courses, which

closely align with the research question of how effective the use of the AI tool Copilot is in the discipline of literary studies.

Research objectives drive the purpose of selecting the purposive sample to evaluate the impact of AI tools on students' literary analysis skills. The target group for the project are the Master One students within the Lit & Civ program, who are directly engaged in literary studies and are expected to have observations to offer in AI tools for their academic activities. Purposive sampling is helpful and practical when the target group is about sixty-five students. This ensures that the sample size remains viable. It also allows for a more focused analysis, allowing the researcher to focus on a specific subset of the student population. Purposive sampling enhances the quality of the data by selecting only those individuals who meet the specific criteria of the study. Since these students would be chosen, they will likely provide helpful and thoughtful comments on their use of AI technologies such as Copilot in literary analysis. It will reinforce the power and confidence that the results of the research hold.

## 3.5. Description of the Data Collection Tool

The data collection tool in this study is an online questionnaire, which could address the research aims and objectives and its hypotheses. This questionnaire wants to ask a variety of questions in English for Master One students in the Lit and Civ departments at the University of Laghouat. It is a 29-questionnaire (24 are closed-ended and five are open-ended questions). Those questions are devided into to six sections. This questionnaire is intended to capture the students' experience with and perspective on their literary analysis assignments with the assistance of an AI-enabled tool called "Copilot." We intend to use the data mentioned above to understand how this technology influences student learning in terms of their grasp of themes, ability to identify techniques, and ability to craft arguments in literature classrooms.

This technique helps gather quantitative and qualitative data, and we can extract particular details from the respondents. The results might provide reasons for decision-making and some ideas about improving the AI's effectiveness as part of the narrative navigation lessons.

**Section 1: Demographics :** This section is composed of questions that aim to extract information regarding basic personal details from the users, such as education alone with their past interaction experience of AI tool platform. This background information helps to frame the participant responses in later section where they were asked about their familiarity with and context around AI.

**Section 2: General Attitudes towards AI in Education :** This section will measure participants' general perceptions about the use of Artificial Intelligence within literature classes. This survey will begin by probing whether it relegates participants to the belief that AI can improve literature classes, and continues with questions related to what tasks they use AI tools like text analysis writing help desk research. The tool also measures participants' willingness to use AI for educational needs and their readiness to recommend the tools. Last, it inquires participants to identify the challenges and benefits they have found experiencing AI tools within their classes of literature. Open space is available for responses.

**Section 3: Impact of AI on Literary Analysis Skills :** Analyse the impact that participants believe should have tools from IA on their literary analysis skills. The first asks if respondents have used AI tools to work on literary texts; and how often they use them. The survey then goes on to ask if AI has had any effect on the quality of their literary analysis, whether it helps them analyze better or do they think that can be achieved by a traditional method. The open-ended part of the survey asks participants to provide descriptions on how well AI has helped or given them trouble with literary analysis.

**Section 4: Effectiveness of AI as a Computational Tool :** Examining the way that AI might help to speed up and enrich literary analysis. Participants will rate their agreement on statements about AI ability to speed up the literary analysis, underpin thematic elements clarity and purify literature classes of necessarily inadequate analytical training. We also ask participants to share examples of how AI tools could be improved upon in terms of making them more conducive to supporting literary analysis for EFL classes through open ended answer proces.

**Section 5: Experience with Copilot :** It begins by inquiring whether the participants know Copilot and if they have ever employed it before, especially for tasks related to literary analysis. Those taking part are further required to categorise themselves into beginners, intermediate or advanced when it comes to their experience of Copilot. This section will provide information about the level of responses during interactions with Copilot directly by participants.

**Section 6: Contribution of Copilot to Literary Understanding :** Participants are instructed to rate how much they agree that Copilot can help with functions such as organize themes in literature and identify literary techniques . The latter section then evaluates Copilot's fit for the tools helping construction of arguments or a possible recommendation and evaluation within this purpose. In addition, the participants are induced to tell us whether Copilot is a transformative tool which should be incorporated into literary education. Last, participants are asked to explain how Copilot has impacted their practice in literary analysis.

## 3.6. Data Analysis and Results

### 3.6.1. Section One: Demographics

**Question 1:** Level


**Figure 3.1:** *The Statistical Measurement of Participants*

The first figure shows the educational levels of the respondents, with forty-four people, all of whom are Master 1 students. This is essential demographic information and serves the required context to interpret the training of respondents and the amount of intricate scholarly topics like AI technologies they are going to be familiar with.

**Question 2:** Experience with AI Tools

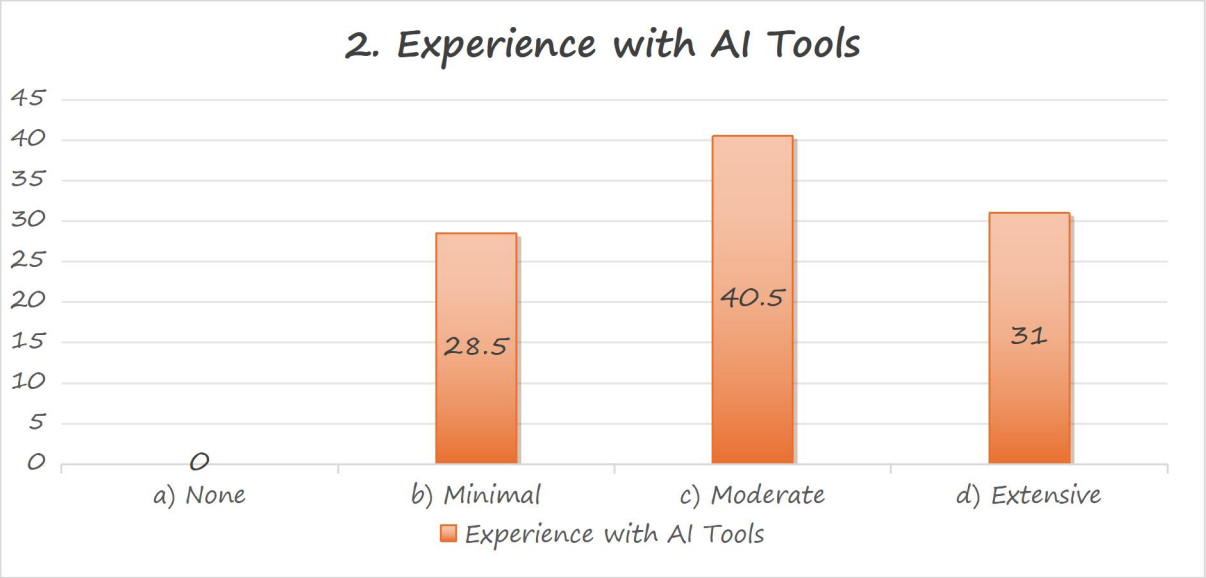


**Figure 3.2:** *The Experience with AI Tools Among Master 1 Students*

The distribution of the students with respect to their familiarity with AI tools is illustrated in the second figure. In addition, the study revealed that 28.5 per cent of the students need to learn about any AI technologies, 40.5 per cent have low knowledge, and 31% have medium knowledge. There is considerable distribution in the understanding of AI technology among the students, with the majority having only little or no previous experience with the subject. These results indicate a gap in the curriculum or in the support for AI training, which underlines the importance of better training interventions to make students more fluent with AI tools.

### 3.6.2. Section Two: General Attitudes towards AI in Education

**Question 1:** Do you believe AI can enhance the learning experience in literature classes?

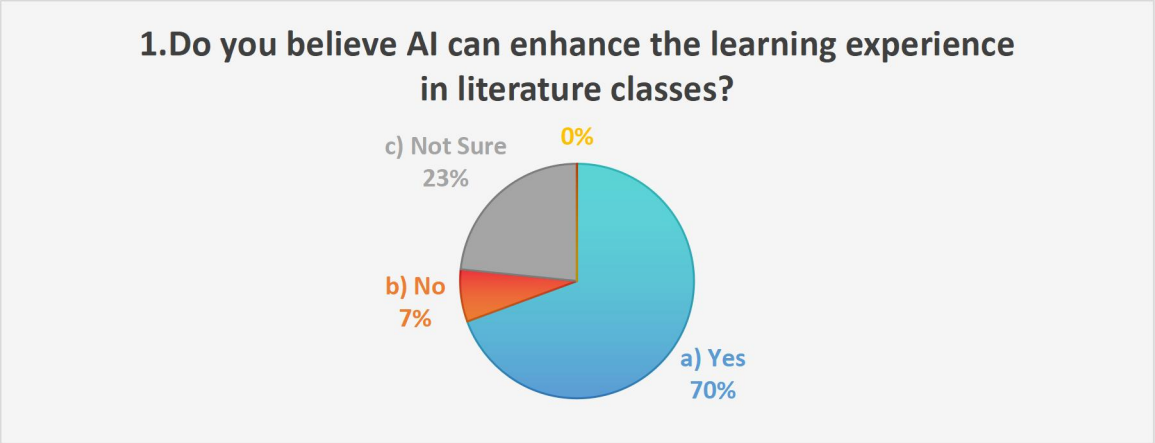


**Figure 3.3:** *The Belief in AI Enhancing Learning Experience in Literature Classes*

Over 70% of the respondents surveyed think AI increases the quality of the learning experience when it comes to literature lessons. Clearly, there is a crowning and inspiring perception of what good AI might deliver in the classroom. A mere 7% of dissenters illustrate a lack of substantial scepticism, while 23% of agnostics suggest a supplementary look into and further education on AI is warranted.

**Question 2:** What types of tasks do you use AI tools for in literature classes?

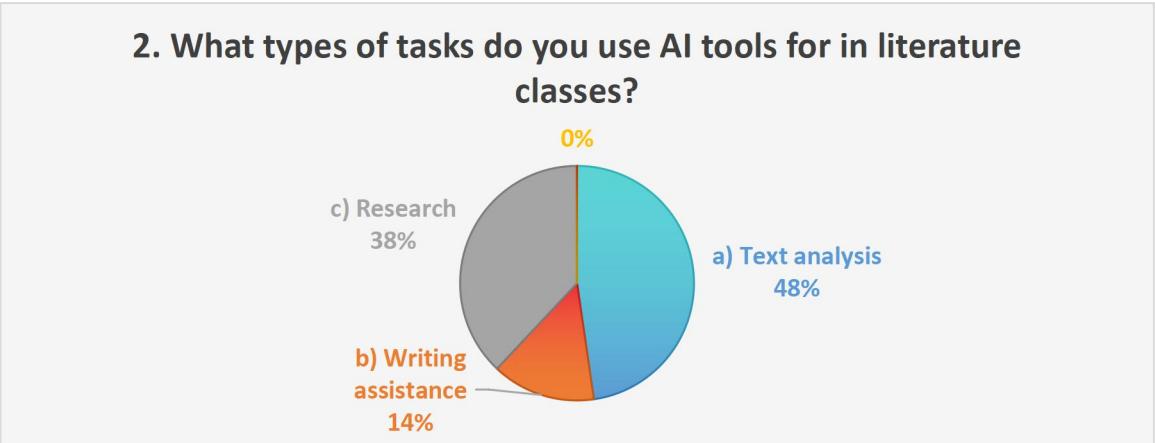


**Figure 3.4:** *The Types of Tasks for AI Tools in Literature Classes*

This figure demonstrates that AI tools are most commonly used for text

analysis (48%) and research (38%). Only about 14% used writing aids. This shows that academic areas highly appreciate AI for its analytic skills.

**Question 3:** Are you comfortable using AI tools for academic purposes?

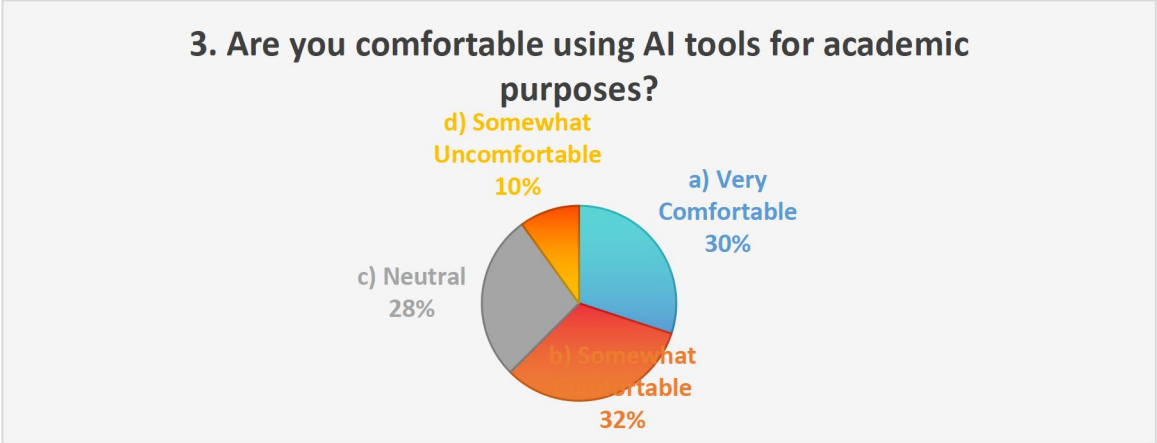


**Figure 3.5:** *The Comfort Level Using AI Tools for Academic Purposes*

As can be seen in this chart, respondents' comfort ratings are relatively balanced, with a slight bias in the direction of comfort. Altogether, some 62%—a clear majority—say they have a very or somewhat high degree of comfort using AI products, suggesting the technology is normalising in the mass market. However, 28% of people are neutral on the issue, and 10% report some level of unease about it. This makes it clear that AI applications need better training and use.

**Question 4:** Would you recommend the use of AI tools in literature classes to others?

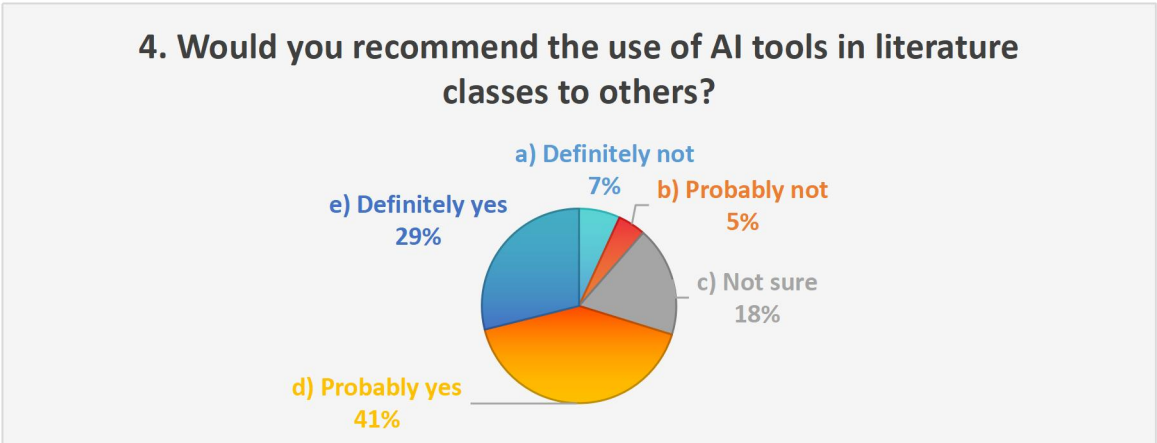


**Figure 3.6:** *The Recommendation of AI Tools in Literature Classes*

This pie chart shows that AI tools are recommended for use in literature classes. Forty-one per cent (41%) said they were most likely to give suggestions on such devices; 29% remain in solid contract, bringing the mixed total to 70% overall. Why does this clear commitment show so much trust in the benefits of AI? Just 12% of respondents are against backing AI, and 18% remain undecided. Even better still, it shows the need for a broader understanding of and evidence of the effectiveness of AI.

**Question 5:** What advantages and disadvantages have you experienced while using AI tools in your literature classes?

This open-ended question was designed to elicit students' personal viewpoints and experiences regarding how AI tools are being used in literature classes. It also encourages students to evaluate the pros and cons of incorporating AI technology as part of their studies.

**Student 1:** "*AI can provide quick access to vast information and resources, making research easier. However, a potential disadvantage could be that relying too heavily on AI might detract from the personal interpretation and critical thinking skills that come from analysing literature on your own.*"

**Student 2:** "*Advantages: Enhanced Efficiency: AI tools can automate tasks like grammar and plagiarism checking, freeing up time for deeper analysis and discussion. Disadvantages: Limited Critical Thinking: Overreliance on AI for analysis can hinder students' ability to develop critical thinking and independent interpretation.*"

**Student 3:** "*The advantage is helping me with the assignments and summarising texts. The disadvantage is like the inaccuracy of information; in the end, it is an AI.*"

The deployment of AI tools in literature classes can yield definitive results in terms of faster and more efficient research and analysis, quicker extraction of volumes of data, and ultimately in, the accomplishment of student tasks. These technologies are able to automate tasks that distract students from becoming skilled at more in-depth literary interpretation and engagement. However, the disadvantages include the risk of reduced critical thinking if there is less reliance on AI. The use of AI with

conventional methods is able to develop the analytical abilities of the students as well as their ability to engage deeply with literary texts.

The data in the second part showed a positive inclination toward using and implementing AI tools in literary courses. Most respondents agree that these tools have the connotation of being able to make learning better, both in specific text analysis and within the semantic web space. It provides excellent overall comfort for many reasons, and only a slight sense of satisfaction and confidence can be sought. The tendency to support AI tools adds further support to their value in education.

### 3.6.3. Section Three: The Impact of AI on Literary Analysis Skills

**Question 1:** Have you used AI tools for literary analysis before?

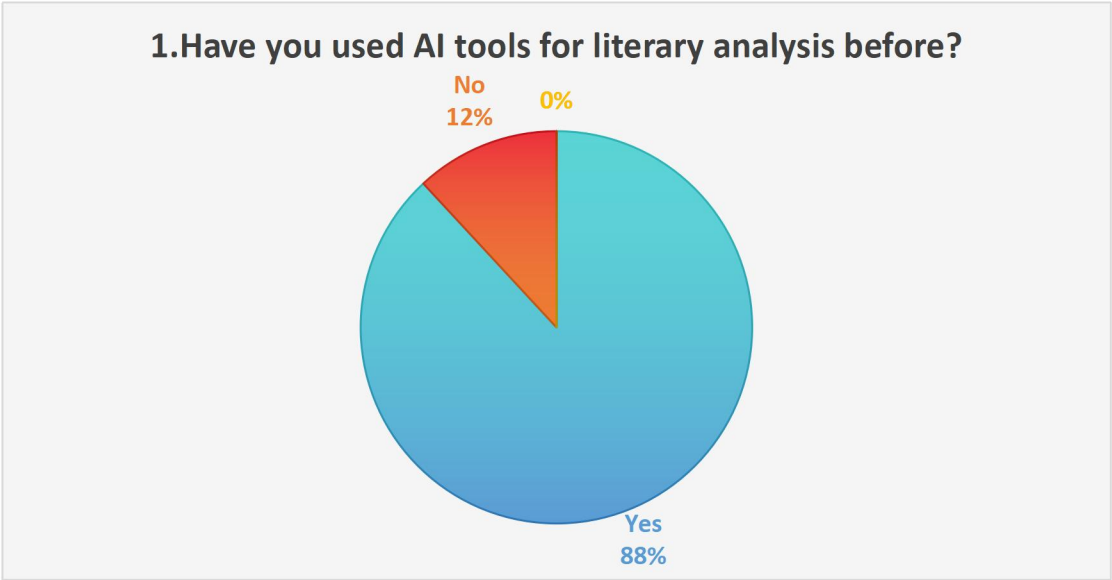


**Figure 3.7:** *The Previous Use of AI Tools for Literary Analysis*

Overall, 88% had already used AI tools for literary study, as reflected in the overwhelming agreement on using this type of computational development in literary analysis. However, they remain a minority; 12% of users have not yet used this new tool.

**Question 2:** How often do you use AI tools for literary analysis?

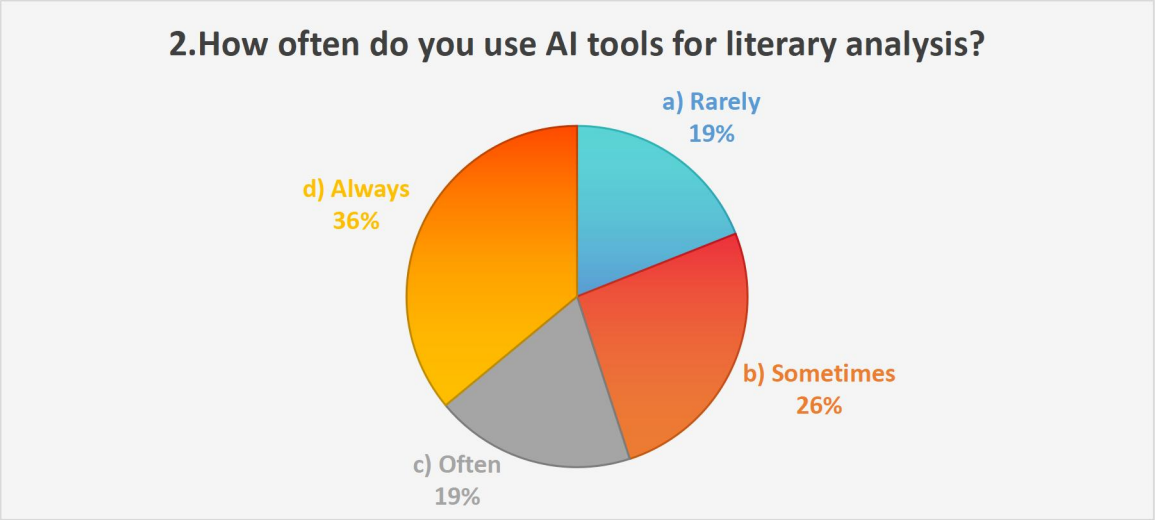


**Figure 3.8:** *The Frequency of Using AI Tools for Literary Analysis*

This diagram shows that 36% of respondents use AI tools "always" and another 19% "often." Nearly two-thirds (55%) reported regular or constant use of AI tools. This indicates that the remaining 45% of users who marked this question with "rarely/sometimes" tend to use the tools only as needed. This is a sign that these people may accept the use of AI tools more if they are made more available.

**Question 3:** Has using AI tools improved your ability to perform literary analysis?

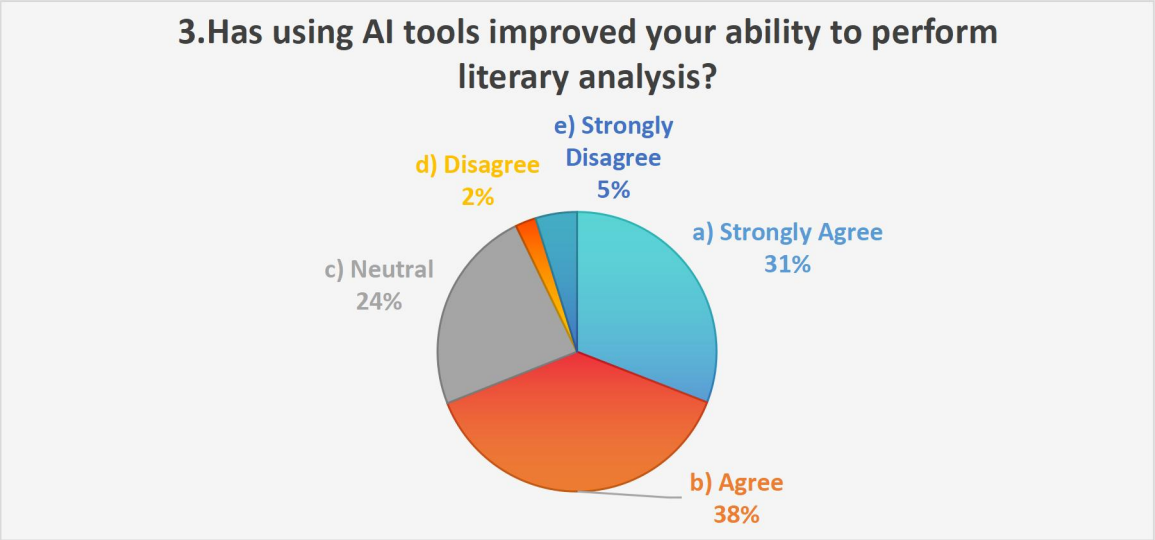


**Figure 3.9:** *The Improvement in Literary Analysis Due to AI Tools*

As can be seen in Figure 9, many respondents claim that AI tools have improved how they collaborate with models within literary analysis; 31% strongly agree, and 38% agree. The remaining 31% are neutral, and a small percentage (5%) disagree. It implies that while AI is overwhelmingly seen as a good thing, it is essential to consider and address such neutral and negative sentiments for technology to gain greater acceptance and be viewed as effective.

**Question 4:** Do you think AI tools can replace traditional methods in literary analysis?

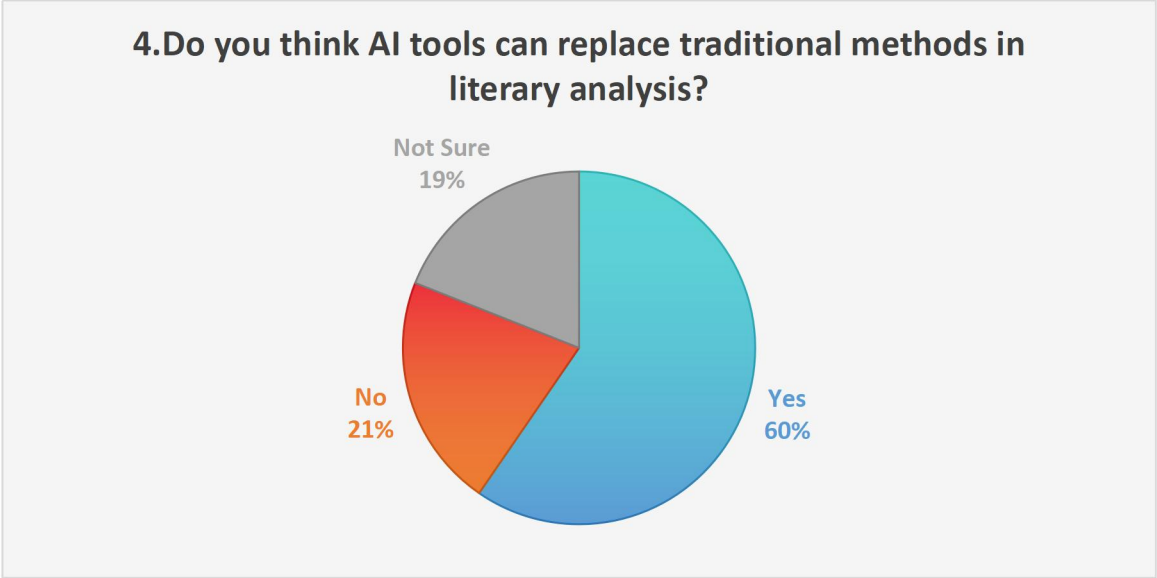


**Figure 3.10:** *The AI Tools vs. Traditional Methods in Literary Analysis*

Most notably, 60% of respondents think AI tools could one day replace traditional methods for literary analysis, a decisive vote of confidence in AI capabilities. However, 21% of people believe the opposite and 19% are unsure. Indeed, the fundamentally different views demonstrate that despite the growing sense of AI, there is still much ground to be covered before a considerable percentage of correspondents think of the edge of traditional tactics.

**Question 5:** What benefits have you observed from using AI in literature classes?

This inquiry aims to collect comprehensive input regarding the beneficial effects that students have observed while integrating AI tools into their literary studies.

**Student 1:** "*Using AI tools in literature classes is a practical way when it comes to text analysis or book analyses because it really helps in understanding the literature language style, the author's background, and the details of the text*."

**Student 2:** "*AI tools can provide quick access to a wealth of information, making research more efficient. They can also help with language analysis, identifying themes, and generating insights. Additionally, AI can facilitate collaborative learning and offer personalised recommendations based on individual interests.*"

**Student 3:** "*Using AI in literature classes offers benefits such as Deep Textual Analysis, Personalised Learning, Enhanced Writing Skills, Accessibility for Students with Disabilities, Increased Engagement and Motivation, and Access to Wide Literary Resources."*

That is one of the advantages that have been found using AI techniques in literature learning. They include things such as holistic text analytics, adaptive learning, writing support, accessibility for students with impairments, and so on. Artificial intelligence will make learning highly individualised and interactive by choosing content that improves engagement and motivation. Finally, they are fast and effective, as they give access to a large number of resources, making the research broader and more insightful. They do both things, which contribute to proving AI's magical prowess and further developing how literature is taught and read.

**Question 6:** Have you encountered any challenges when using AI tools for literary analysis? If yes, please describe.

How did students experience AI in their literary study, and what challenges and barriers did they encounter? The students are encouraged to provide examples and

explanations of her issues, be it comprehension of specific intonations on literary devices, her own technical deficiencies, or obstacles in using tools better.

**Student 1:** *"AI can give you more information than you require, yet it is not ready for academic purposes. It sometimes uses difficult vocabulary and does not provide reliable sources."*

**Student 2:** *"The challenges of using AI tools for literary analysis include context understanding, subjectivity and interpretation, language complexity, bias in training data, overreliance on quantitative metrics, and privacy and ethical concerns."*

**Student 3:** *"Limited Nuance: AI excels at processing data and identifying patterns but can struggle with language's complexities and subtle nuances. Literature is rich in symbolism, irony, and figurative language—things AI might miss, leading to potentially shallow interpretations."*

Although AI methods are significant in the literature analysis sector, they also face many challenges. A few of these challenges are understanding literary parts in a more universal sense, accurately interpreting hyper-contextual contexts, and managing complex language patterns. Finally, because biases already exist in the training data, the outputs and interpretations may already be skewed. More reliance on quantitative measurements may prevent the qualitative aspects of literary analysis from being overlooked. Using data and algorithmic decision rules introduces a lot of privacy and ethical overhead. AI tools need to be improved and enhanced continuously for this to happen. This will include enhancing comprehension of subtle language nuances, reducing biases, and ensuring data are used ethically.

The data in this section demonstrates a wide adoption of digital literary analysis practices, mainly using AI tools, with highly positive reviews of their effectiveness and productivity regarding analytical capabilities. There is still considerable conviction in the potential for AI to replace traditional methods to a great extent, with not all everyday users using it—still, virtually all appropriate users using AI to some degree. The generally positive outlook emphasises the enormous potential of AI in literary studies, providing relevant and gradual guidance and integration for various levels of acceptance and comfort.

### 3.6.4: Section Four: Effectiveness of AI as a Computational Tool

**Question 1:** Do you find AI effective in making literary analysis more efficient?

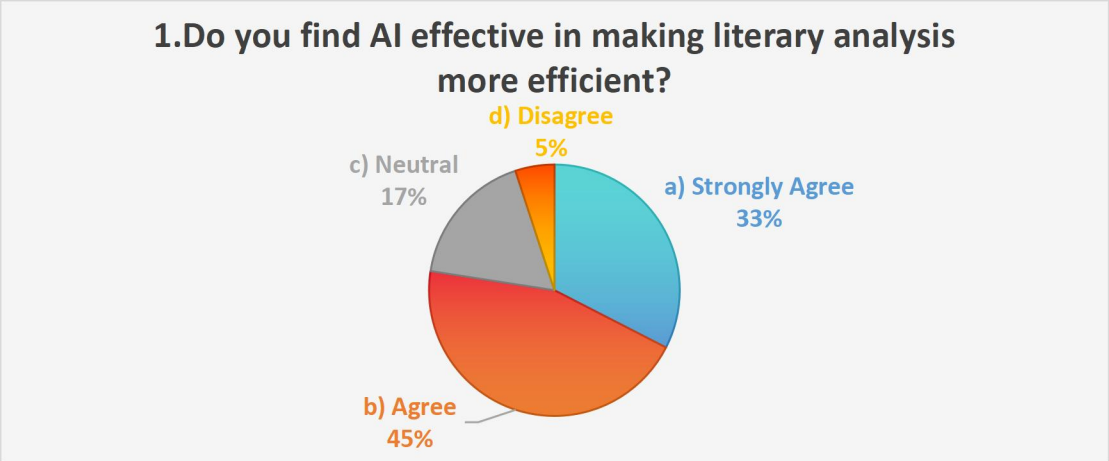


**Figure 3.11:** *The Effectiveness of AI in Making Literary Analysis More Efficient*

Roughly 78% of respondents either strongly agree or agree that AI increases the efficiency of literary interpretation. This majority is a positive sign of AI's potential to increase productivity. Even so, 17% remain neutral, and 5% disagree, showing that some users are not experiencing a significant gain in productivity or are struggling with implementing AI.

**Question 2:** Do AI tools help you better understand literary texts' thematic elements?

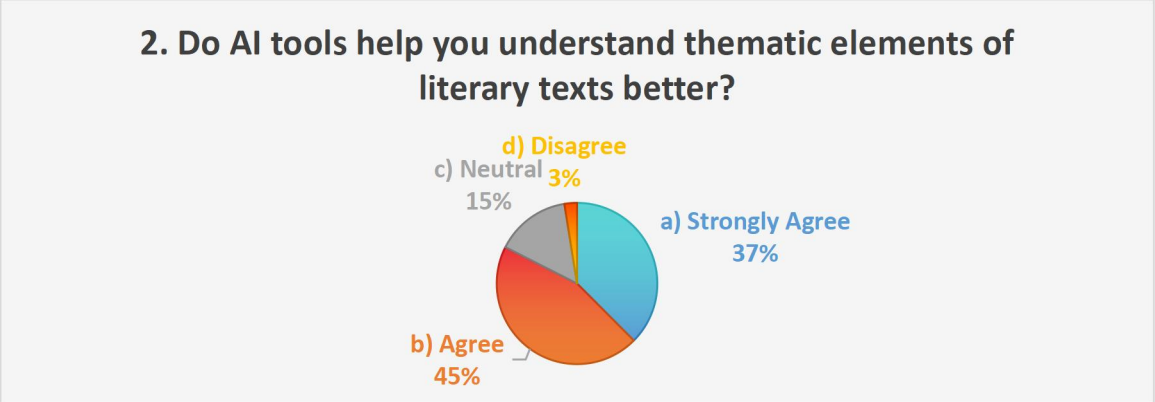


**Figure 3.12:** *The AI Tools in Understanding Thematic Elements*

Eighty-two per cent and 82% agree that AI tools help them grasp themes in literary texts, including 37% who agree strongly and 45% who tend to agree. This positive feedback reinforces the importance of using AI to enhance theme comprehension. Still, a slight minority (3%) say AI cannot understand and interpret information for specific users.

**Question 3:** Do you believe AI tools provide deeper insights into literary texts compared to traditional methods?

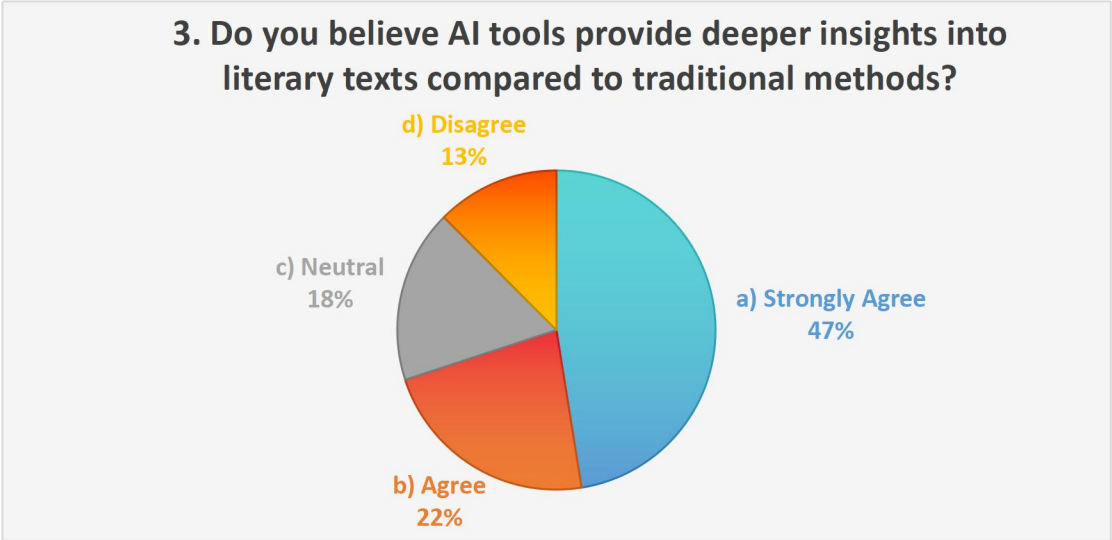


**Figure 3.13:** *The Deeper Insights Provided by AI Tools*

Nearly half of the participants (47%) strongly agree that AI methods provide deeper insights into literary texts than traditional techniques do. This, when combined with the 22% who approve, suggests a substantial recognition of the difficulty of AI analysis. Still, 18% are in the 'neither agree nor disagree' camp, and 13% disagree more than agree.

**Question 4:** Has the integration of AI tools in your literature classes improved the quality of literary analysis?

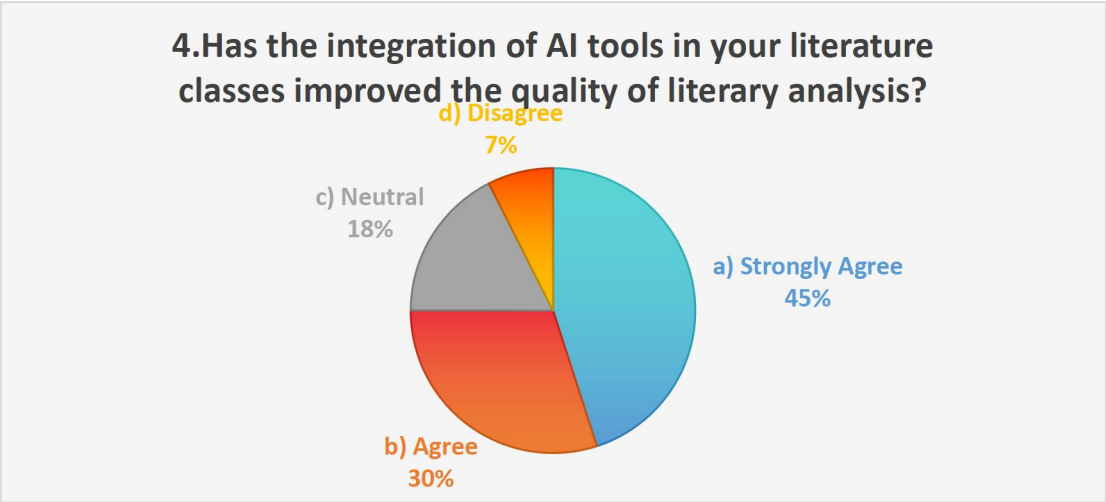


**Figure 3.14:** *The Improvement in Quality of Literary Analysis with AI Tools*

Three-quarters of respondents believe that applying AI techniques has improved the quality of their literary analysis. Of these, 45% strongly agree, and 30% agree. This is a positive impact of AI. However, 18% of users stay on the fence, while 7% disagree, implying that some users might have yet to notice drastic improvements or are having trouble integrating AI.

**Question 5:** In your opinion, what improvements could be made to AI tools to support literary analysis in EFL classes better?

This question seeks meaningful feedback to develop AI technologies that assist in analysing literature for EFL classrooms. This PrimeTime activity aims to develop more refined literary analysis tools in the students, have them reflect on their experiences, and then suggest concrete ways in which AI technologies could be more valuable.

**Student 1:** "*Enhancing the language comprehension capabilities of AI tools to understand complex literary texts better and provide more accurate analysis. It would also be beneficial if AI tools could offer interactive exercises and activities to help EFL learners practice their language skills while engaging with literature.*"

**Student 2:** *"Integrating visualisations, multimedia content, and interactive storytelling elements into AI tools can make literary analysis more engaging and accessible for EFL students."*

**Student 3:** *"To better support EFL learners in literary analysis, AI tools could improve by incorporating features that address cultural context and second-language processing. This could involve offering simplified explanations or highlighting culturally relevant aspects of the themes."*

Many AI features are required for practical literary analysis in EFL to facilitate the deconstruction of complex literary works and to apply interactive activities to enhance the student's literary analysis skills. Visualisation, multimedia content, and an integrated narrative make learning more understandable and enjoyable. Furthermore, AI technologies must be deliberately engineered for diverse cultural contexts and second-language handling. They should remain faithful to the complex subject matter but deliver it in a way that makes more sense to people with different beliefs and cultural understandings. New additions would permit the tailoring of AI implements for EFL students, thereby increasing research efficiency.

Overall, this research suggests an encouraging trend in the efficacy of AI technologies in literary analysis, both with regard to improved efficiency and increased understanding. The consensus is that AI vastly enhances the ability to analyse respondents and the quality of the work. However, a significant part of the audience remains neutral, which again implies the potential for further improvement and dissemination of AI technologies in the area of literary studies.

### 3.6.5. Section Five: Experience with Copilot

**Question 1:** Have you previously heard of Copilot?

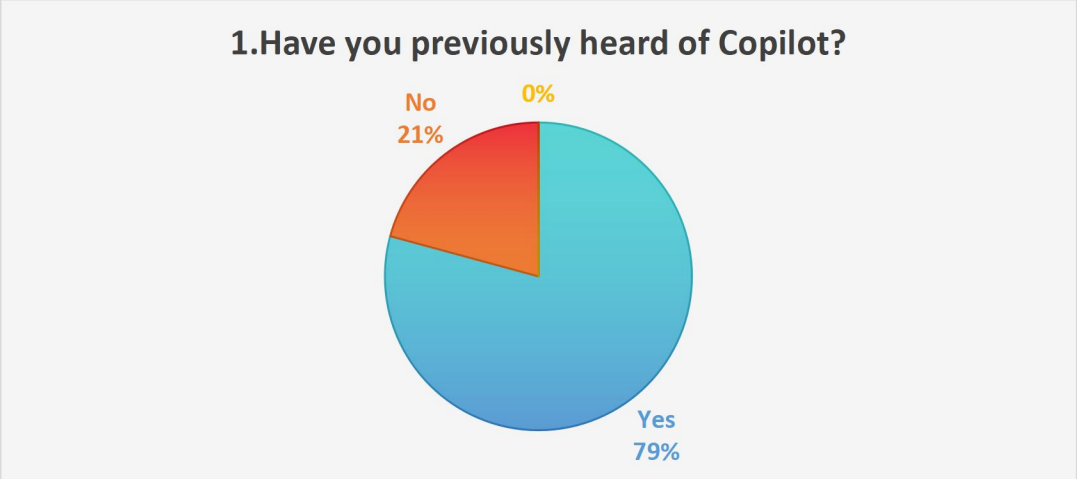


**Figure 3.15:** *The Awareness of Copilot Among Students*

Among the respondents, a substantial majority (79%) are aware of Copilot, demonstrating a notable level of awareness. The fact that 21% of individuals are unaware of Copilot indicates that there is still potential for raising awareness about this instrument.

**Question 2:** Have you ever used Copilot for any purpose?

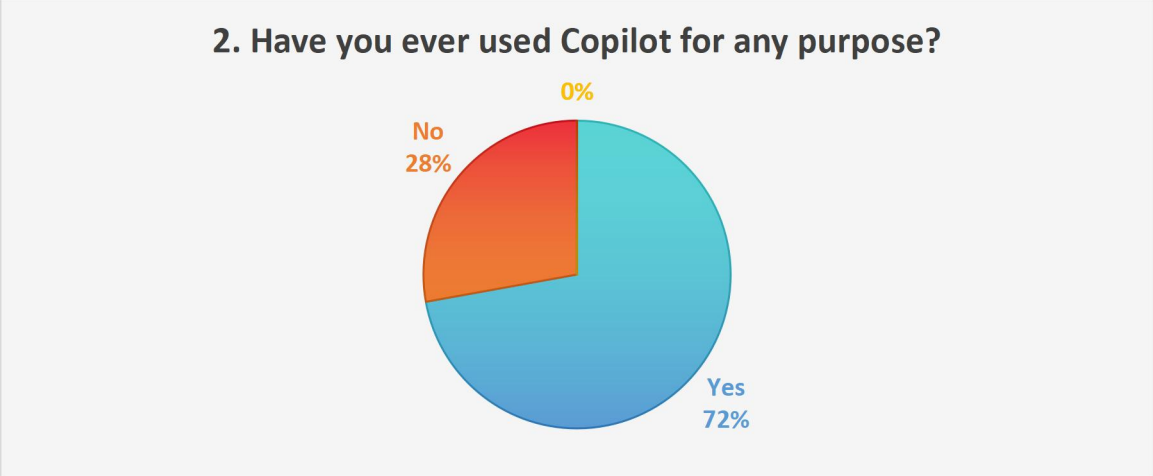


**Figure 3.16:** *The Use of Copilot for Various Purposes*

Further, 72% of the respondents have used Copilot for varied purposes, indicating widespread application and acceptance. Meanwhile, as only 28% of people have used Copilot, there is room for more engagement and introduction to the tool's features.

**Question 3:** Have you ever used Copilot for literary analysis tasks?

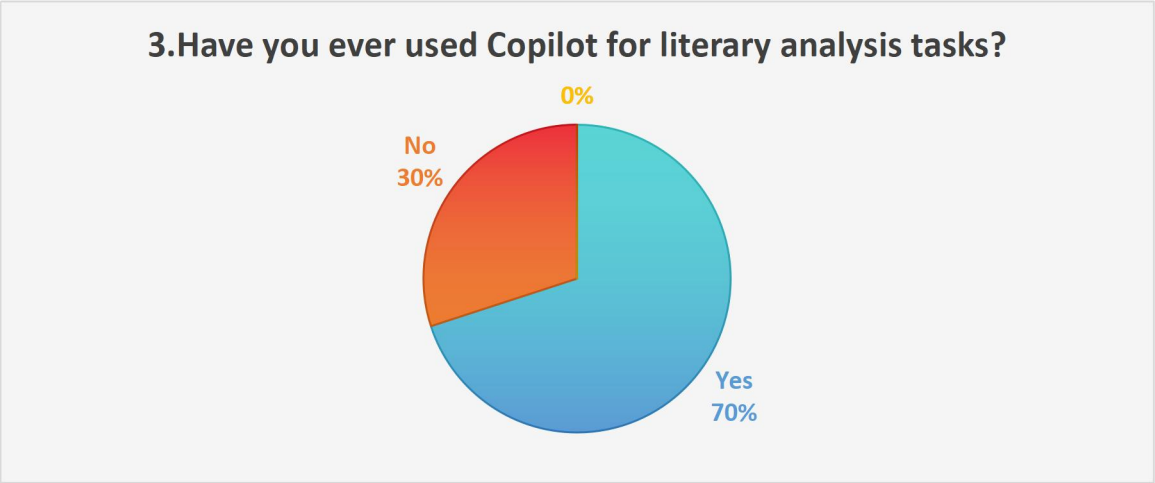


**Figure 3.17:** *The Use of Copilot for Literary Analysis*

This confirms the relevance and effectiveness of using Copilot in this academic domain, as 70% of the participants use it only for literary analysis tasks. Thirty per cent of non-users need to become more familiar with this AI tool.

**Question 4:** Briefly describe your experience level using Copilot.

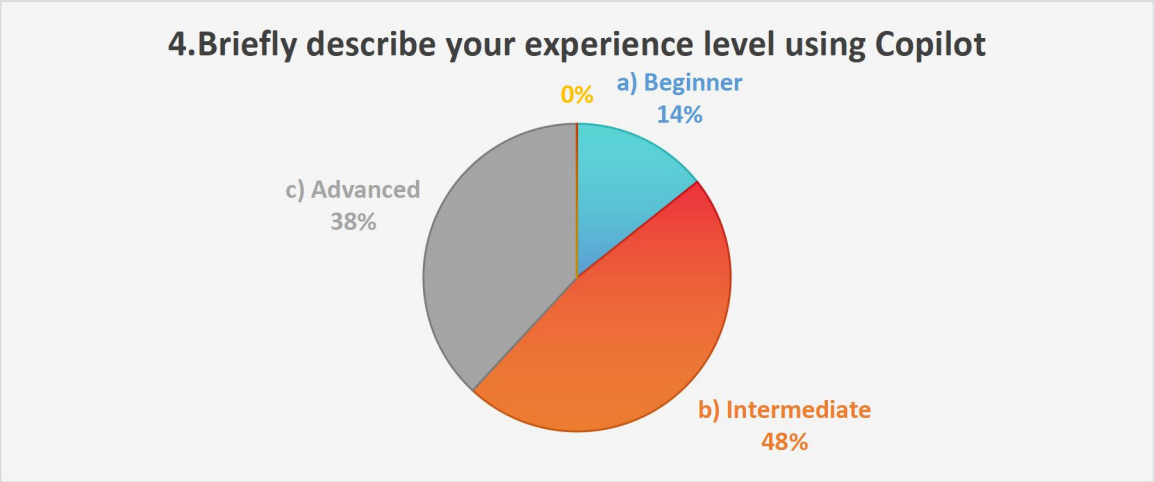


**Figure 3.18:** *The Experience Level with Copilot*

Most participants, 48%, describe themselves as intermediate Copilot users, while 38% indicate that they are advanced Copilot users. This shows that many users have understood the product very well. Fourteen per cent of novice users suggest that training and help with Copilot are still required to allow them to use it efficiently.

This section suggests a proficient level of awareness and high use of Copilot among the internals, particularly for jobs in literary analysis. The vast generality of expertise levels implies an abundance of novice users, even as there are a large number of users who are already relatively proficient in Copilot usage, demonstrating a lower barrier of entry for the former cohort of users while revealing a new group of users who would greatly benefit from additional support or resources. By and large, Copilot has earned positive feedback for what it brings to scholarly and analytical endeavours in literary studies.

### 3.6.6. Section Six: Contribution of Copilot to Literary Understanding

**Question 1:** To what extent do you believe Copilot can help understand literary themes?

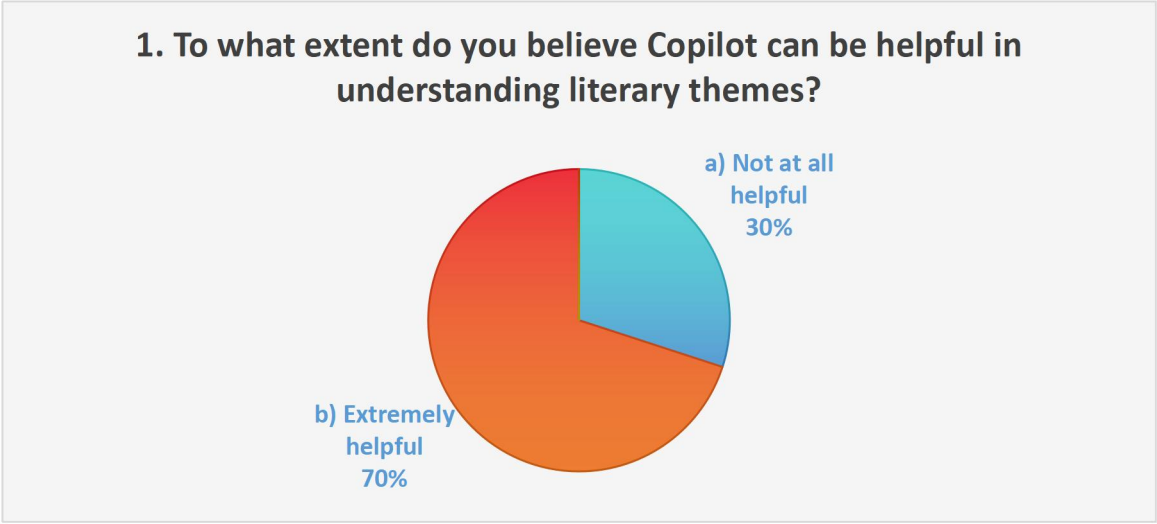


**Figure 3.19:** *The Helpfulness of Copilot in Understanding Literary Themes*

70% of the respondents see Copilot as very or extremely useful for understanding literary concepts. Copilot works and is thought of as a useful tool. The

other 30% that find it not helpful mean that people either have problems using Copilot efficiently or they just like the old ways of doing literary analysis.

**Question 2:** How effective do you think Copilot is in identifying literary devices (e.g., metaphors, similes)?

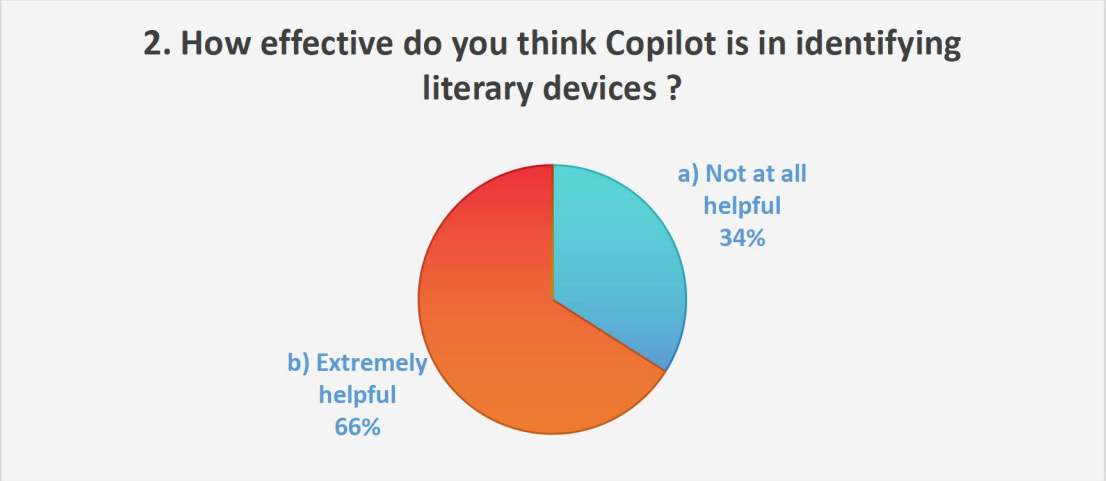


**Figure 3.20:** *The Effectiveness of Copilot in Identifying Literary Devices*

Most of the respondents (66%) rated Copilot as an exceptionally valuable tool for detecting literary devices, a narrow area of literary analysis for which this tool is useful. However, 34% of users do not find Copilot helpful, so it could be improved to identify literary devices better or to provide better guidance to the user.

**Question 3:** How well do you think Copilot assists in constructing arguments for literary analysis essays?

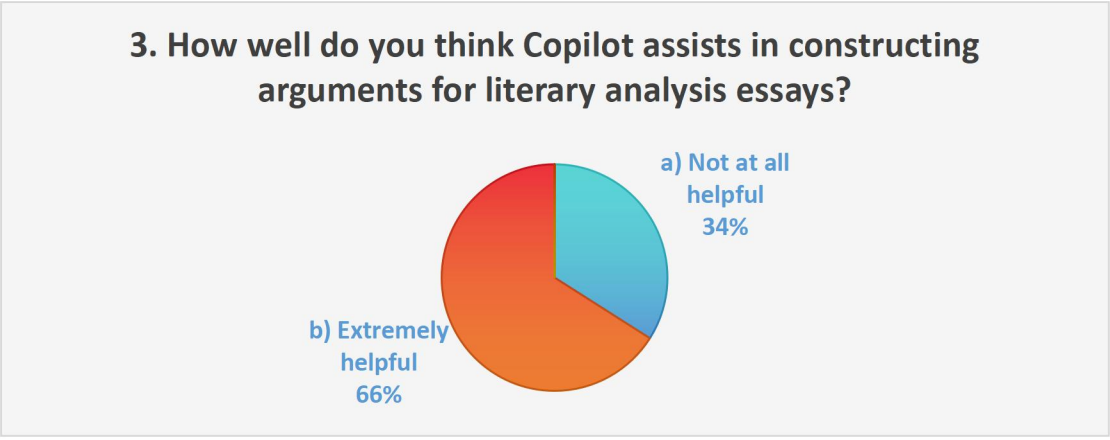


**Figure 3.21:** *The Assistance of Copilot in Constructing Arguments for Literary Analysis*

Sixty-six per cent of the respondents think that Copilot is a considerable help in writing literary analysis essays, which is a significant amount. This suggests that Copilot helps students. Those who do not find it helpful might benefit from new functionality or guidance on using Copilot for that particular purpose.

**Question 4:** How likely will you recommend using Copilot for literary analysis tasks?

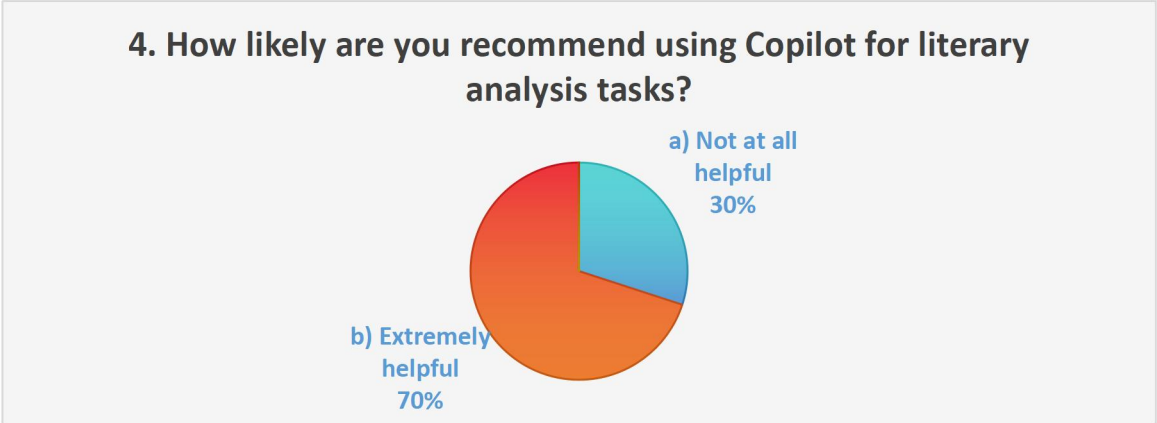


**Figure 3.22:** *The Likelihood of Recommending Copilot for Literary Analysis*

There is also a strong feeling in favour of Copilot being recommended for literary analysis tasks, with 70% of respondents saying they would recommend it. Of the 30% who are likely to say that this could have been due to restrictions they have faced with this tool.

**Question 5:** Do you consider Copilot to be a transformative tool in literary education?

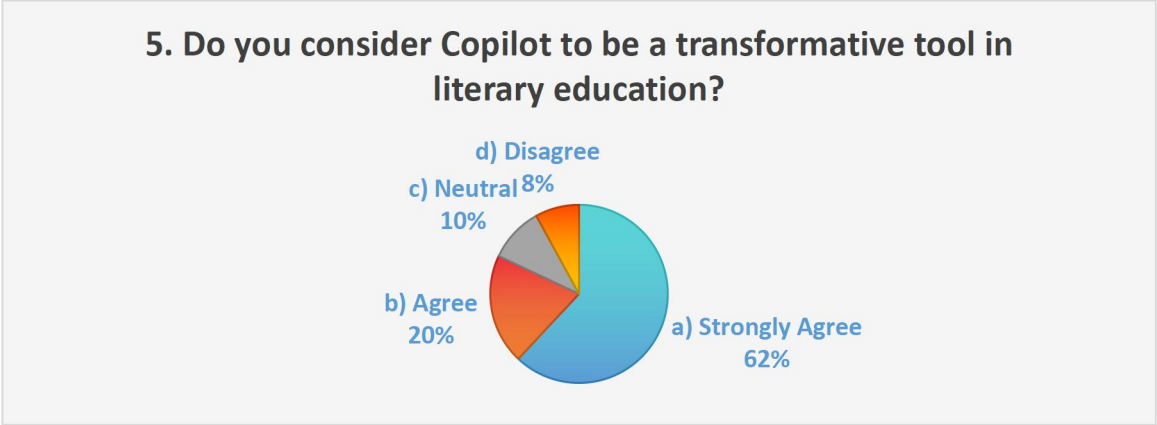


**Figure 3.23:** *The Perception of Copilot as a Transformative Tool in Literary Education*

About 62% of participants feel that Copilot claims that this is a revolutionary tool in literary analysis. Additionally, 20% agree. This is quite exciting news and a testament to how impactful Copilot is. Considering that 10% have a neutral view and 8% disagree, this indicates that while Copilot is considered groundbreaking, there is still scope to improve its adoption and utility among certain users.

**Question 6:** Should Copilot be integrated into the curriculum for literature classes?

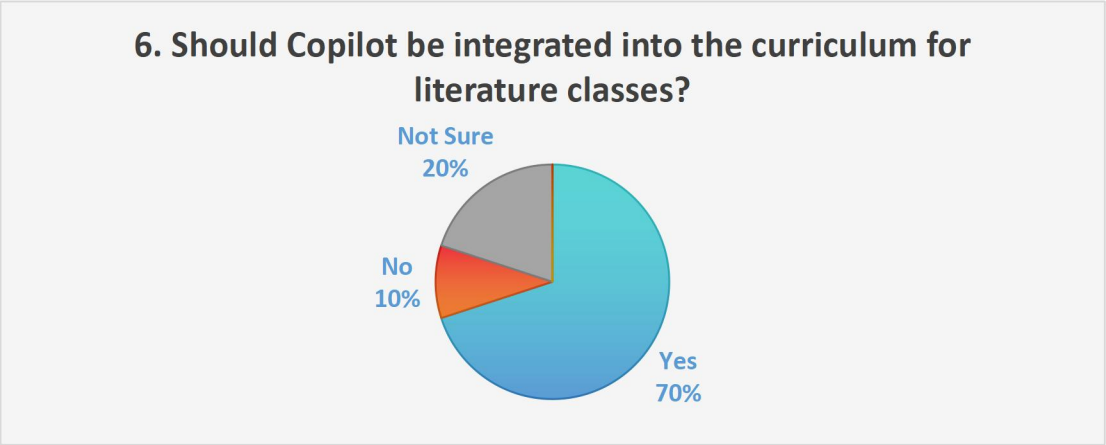


**Figure 3.24:** *The Integration of Copilot into Literature Classes*

Many participants, 70%, believe Copilot should be integrated into literary lessons, providing a compelling case for the tool's academic adoption. Still, 20% of individuals are unsure, and 10% disapprove, which indicates that they feel it has yet to be done successfully.

**Question 7:** How has the use of Copilot influenced your approach to literary analysis?

This question aims to examine the influence of utilising Copilot, an AI tool, on students' approaches and tactics for literary interpretation. Students are then asked to reflect on how Copilot might influence their critical thinking, reading and analysing texts, etc.

**Student 1:** "*AI tools like Copilot could potentially assist in literary analysis by providing quick access to relevant information and helping with language analysis.*

*They might offer suggestions and insights that could enhance the overall analysis process. Seeing how technology can support and enhance our understanding of literature is always exciting!*"

**Student 2:** "*I became somewhat lazy and no longer have to do extensive analysis by myself; however, it is indeed beneficial for I relate everything I learned from Copilot to new novels that I read.*"

**Student 3:** "*AI tools like it could influence literary analysis by suggesting relevant resources or interpretations. This could be a boon for research, but similar to how programmers might rely too heavily on code snippets, overdependence on AI suggestions could hinder the development of critical thinking skills crucial for literary analysis.*"

Responses to Copilot in the context of literary studies also reflect the multiple ways it might reshape how students approach their work. Copilot has the added benefit of being able to surface information relatively quickly and provide insights that can help enhance the analysis overall. It looks hopeful about how technology could enrich and amplify our understanding of literature. On the other side, several users confess that while Copilot has made them more proficient in their ability to analyse, it has consequently made them lazy to an extent, narrowing the breadth of their own analysis. There is also an unease that relying on such AI assistance as Copilot could override the critical thinking skills required for complex literary interpretation. Such observations highlight the need to balance the help conveyed through our AI systems with our more traditional ways of doing analyses, which we should use and put to decent work in the holistic and critical evaluation of literary buildings.

The data shows a robust and positive perception of Copilot's efficacy in improving literary analysis in elements of theme comprehension, understanding literary devices, and argument creation. The majority of respondents viewed it as a transformative technique. It, therefore, recommended it be integrated into the curriculum, but a minority still expressed qualifying points of consideration that need to be validated and trained further. Across the board, an optimistic view of Copilot could significantly impact teaching and studying literature.

## 3.7. Limitations of the Study

The limitations of this study on the use of Copilot in literary analysis among Master One students in the Literature and Civilization Lit & Civ classes at the University of Laghouat. To begin with, this study is limited to a single university, which restricts the generalizability of the results to other settings or educational environments. Furthermore, the focus on Main One students might be different from what students at other levels in the curriculum or with different knowledge of AI tools have experienced or achieved. The study also relies on student self-reporting, which can be contaminated by personal perception biases, errors, and accuracy in responding.

What makes Copilot preferable to other AI tools is its explicit design for literary analysis, a quality that perfectly aligns with the research objectives. Its algorithm offers more advanced mechanisms for parsing through literature, making it more likely to notice patterns, themes, and stylistic nuances. This ensures that Copilot will be able to provide more profound pointers and guidance for the analysis that students have to do in these literary classes. Also, the ease of usage and the simplicity of inserting it in the school scenario make it practical for both the educational process and the student, making it possible to customise the classroom further, helping with the academic results. It focuses on literary analysis.

Moreover, the evaluation of its integration and effectiveness as an AI device occurs within the Algerian higher education system's specific academic and cultural framework. It suggests possible variances compared to other contexts. Because of this, even if the authors have used qualitative and quantitative methodologies, they might struggle to bundle the qualitative insights with the quantity data, resulting in less coherent insights. Technological factors such as accessibility, usability, and flexibility of the tool might influence the effectiveness of Copilot and so affect the study's findings. This means that the results could be altered depending on specific versions or implementations of Copilot.

Several significant factors determined the use of a descriptive-analytical approach rather than an experimental method in this study. Descriptive-analytical techniques provide a valuable way of examining phenomena where interest lies in

providing a richer understanding and detailed description of the current state of play and underpinning processes. The fundamental goal in this context is to study the use of Copilot for literary analysis and evaluate its impact on students' comprehension and critical analytical skills.

An experimental design, where variables are manipulated, and control groups are established, is likely inappropriate for this study. However, AI models like Copilot might also be distinct based on factors surrounding their use in educational settings, e.g., the differences between each student or teaching methodologies and the greater educational context. These features present challenges to both control and manipulate in order to create more refined experimental models. Furthermore, a descriptive-analytical examination of students' orientations and experiences regarding the application of AI technologies to a broader extent may help to gain insights into prominent issues in literary teaching and the direction in which developmental research and implementation of AI technologies in this field should move.

The explicit decision to focus on Master One students rather than Master Two students was due to the study's aims. Master One students, typically in their first year of coursework in the literary disciplines, are on the ground floor of a stage where they learn the basic ins and outs of the art of poetry and are habituated to literary analysis. As such, many of them are likely to benefit significantly from better analytical support, making them an ideal group to look into the usage of innovative technologies like Copilot.

## 3.8. Conclusion

This chapter has detailed a study on applying AI tools, such as Copilot, as a trainer to enhance the literary analysis skills of students from Master One at the English Department, University of Laghouat, and reports methodology, data collection process, and outcomes. Collating both qualitative and quantitative data enabled the study to use a mixed-methods research methodology and achieve high-level insights into how AI influences educational practice.

The results reflect a positive attitude that supports the integration of AI techniques in literature classes. Most ImpactAI users are highly confident that AI can

be safe and beneficial. In order to enhance their learning experience, especially in text mining and research. While a small proportion worry or are unsure, the consensus suggests there is an overwhelming endorsement of the use of AI in teaching.

It showed that the AI tools strongly affected students' abilities to perform more advanced literary analysis, with many pupils noting that using tools such as Copilot led to more efficient, more profound, and better work in analysis. However, it became clear that traditional literary analysis methods still hold relevance for a large segment of the student population, underscoring the importance of a holistic approach that includes AI technologies but does not replace traditional ones.

The shared awareness of Copilot among students and their support in understanding literary subjects, identifying literary techniques, and creating arguments demonstrate the profound power of AI in literary education. Nonetheless, key challenges remain for AI adoption, including the risks of overreliance on AI and the need to further improve AI-generated articles in terms of accuracy and context. The challenges indicate what still needs to be developed and brought to the next level.

In summary, this chapter has clearly demonstrated that AI tools, in general, and Copilot, in particular, have a significant impact in terms of honing the literary analysis skills of Master One students. The study also supports the introduction of AI into the curriculum as long as it also supports and adds value to traditional teaching methods. With the recognition of the AI challenge and the benefits associated with the tools, educators can harness the power of these tools to foster a deeper understanding and a less cumbersome literary analysis, thereby enhancing the student's educational experience.

# General

# Conclusion

The present study aims to investigate the effectiveness of using Copilot, a highly advanced AI tool, in EFL literature classes. The research focused on how AI tools could enhance the literary analysis process. The primary objectives were to measure the impact of Copilot on students' literary analysis competence and the efficacy of literary analysis in EFL settings.

This work adds value in the sense that it can lead the required evolution of literature classes into EFL towards the filling in of AI tools like Copilot. These provided valuable insights into the status of integrating sophisticated computing tools into EFL literature instruction, as seen through the lens of Copilot's performance in the study. To fill a gap in current approaches to technology and language education.

The findings in this study highlight the promise of AI for transforming EFL literature classroom practices. Copilot embodies the full potential of literary analysis approaches when AI is used since it is based on the other engines' powerful algorithms and computational powers. Copilot-type AI in the hands of teachers might be an opportunity to push some teaching practices over the edge. Technological innovations may be utilised to enrich academic environments and final results. By identifying the challenges and opportunities of AI technologies and making them accessible to educators, the literature students of the digital generation can meet complex literary texts and critically engage with them.

The study results offer the following recommendations that may benefit educators who wish to use existing AI tools in their literary classes:

**1. Integration of AI with balance:** Although using AI tools is advantageous, we must strike the right balance between AI and traditional teaching methods. This way, the ultimate goal of students learning technical and analytical skills will be assured.

**2. Ethical Concerns:** Teachers need to be aware of the ethical implications related to the use of AI in the education domain. This includes protecting data privacy, eliminating bias in AI's just-in-time systems, and fighting for AI to be used for good.

This dissertation has contributed meaningfully to investigating the role of AIEd in literary analysis in EFL. Using a mixed-methods design in this study helped

our team examine the qualitative and quantitative data more thoroughly. It allowed us to understand how AI tools like Copilot can successfully integrate into educational settings. This highlights the potential of AI to, on the one hand, further knowledge of literature, stimulate critical and analytical thinking on the other, and create a much more participatory environment for learning.

The implications for future research are vast. More research on other AI-applied sciences in various academic settings could supply valuable insights and understandings. Given these considerations, the reliability and validity of the results could be improved by further expanding the range of the study to other educational levels, colleges, and cultural settings. Additionally, research about the long-term effects of using AI tools on students' analytical skills and academic successes should be conducted to understand a complete picture of the benefits and drawbacks of this way of learning. Furthermore, it can be interesting to investigate the development and implementation of training programs, focusing on competence building among teachers and students regarding how AI tools can be successfully used.

In conclusion, the potential for AIEd, especially in literary analysis, is vast. However, it would be a mistake to minimise the obstacles such an innovation faces when it hits the ground running. Key elements to consider are over-relying on AI, scoping the accuracy of AI-generated analysis, and the need for comprehensive training programs. Tackling the ethical issues associated with data privacy, bias, and other vital factors needs to be dealt with by any fair and equitable educational ecosystem. Chargeless-sharing the benefits of AI like Copilot, combined with rectifying the aspects where AI fails in this especially more complex domain of literature, will enhance teaching and learning, robust on the scholarly.

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# Appendices

## Appendix I

# Questionnaire

This questionnaire aims to gather information from students in the Department of English at Ammar Theledji University of Laghouat regarding their experiences with the use of AI in literary analysis. The survey aims to gather data on the effectiveness of Copilot, an AI tool, in aiding literary analysis within literature classes. The information collected will investigate how students or instructors perceive Copilot's influence on tasks like understanding themes, identifying literary devices, or constructing arguments, ultimately gauging its impact on learning.

**Thank you for participating in this survey.**

**Section 1: Demographics**

1. Level :

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2. Experience with AI Tools:

a) None
b) Minimal
c) Moderate
d) Extensive

**Section 2: General Attitudes towards AI in Education**

1. Do you believe AI can enhance the learning experience in literature classes?

a) Yes
b) No
c) Not Sure

2. What types of tasks do you use AI tools for in literature classes?

a) Text analysis
b) Writing assistance
c) Research

3. Are you comfortable using AI tools for academic purposes?

a) Very Comfortable
b) Somewhat Comfortable
c) Neutral
d) Somewhat Uncomfortable
e) Very Uncomfortable

4. Would you recommend the use of AI tools in literature classes to others?

a) Definitely not
b) Probably not
c) Not sure
d) Probably yes
e) Definitely yes

5. What advantages and disadvantages have you experienced while using AI? Tools in your literature classes?

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**Section 3: Impact of AI on Literary Analysis Skills**

1. Have you used AI tools for literary analysis before?

a) Yes
b) No

2. How often do you use AI tools for literary analysis?

a) Rarely
b) Sometimes
c) Often
d) Always

3. Has using AI tools improved your ability to perform literary analysis?

a) Strongly Agree
b) Agree
c) Neutral
d) Disagree
e) Strongly Disagree

4. Do you think AI tools can replace traditional methods in literary analysis?

a) Yes
b) No
c) Not Sure

5. What benefits have you observed from using AI in literature classes?

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6. Have you encountered any challenges when using AI tools for literary analysis? If yes, please describe.

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**Section 4: Effectiveness of AI as a Computational Tool**

1. Do you find AI effective in making literary analysis more efficient?

a) Strongly Agree
b) Agree
c) Neutral
d) Disagree
e) Strongly Disagree

2. Do AI tools help you understand the thematic elements of literary texts better?

a) Strongly Agree
b) Agree
c) Neutral
d) Disagree
e) Strongly Disagree

3. Do you believe AI tools provide deeper insights into literary texts compared to traditional methods?

a) Strongly Agree
b) Agree
c) Neutral
d) Disagree
e) Strongly Disagree

4. Has the integration of AI tools in your literature classes improved the quality of literary analysis?

a) Strongly Agree
b) Agree
c) Neutral
d) Disagree
e) Strongly Disagree

5. In your opinion, what improvements could be made to AI tools to support literary analysis in EFL classes better?

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# Appendix I

## Section 5: Experience with Copilot

1. Have you previously heard of Copilot?

a) Yes
b) No

2. Have you ever used Copilot for any purpose?

a) Yes
b) No

3. Have you ever used Copilot for literary analysis tasks?

a) Yes
b) No

4. Briefly describe your experience level using Copilot

a) Beginner
b) Intermediate
c) Advanced

## Section 6: Contribution of Copilot to Literary Understanding

1. To what extent do you believe Copilot can help understand literary themes?

a) Not at all helpful
b) Extremely helpful

2. How effective do you think Copilot identifies literary devices (e.g., metaphors, similes)?

a) Not at all effective
b) Extremely effective

3. How well do you think Copilot assists in constructing arguments for literary analysis essays?

a) Not helpful at all
b) Very helpful

4. How likely will you recommend using Copilot for literary analysis tasks?

a) Not likely at all
b) Extremely Likely

5. Do you consider Copilot to be a transformative tool in literary education?

a) Strongly Agree
b) Agree
c) Neutral
d) Disagree
e) Strongly Disagree

6. Should Copilot be integrated into the curriculum for literature classes?

a) Yes
b) No
c) Not Sure

7. How has the use of Copilot influenced your approach to literary analysis?

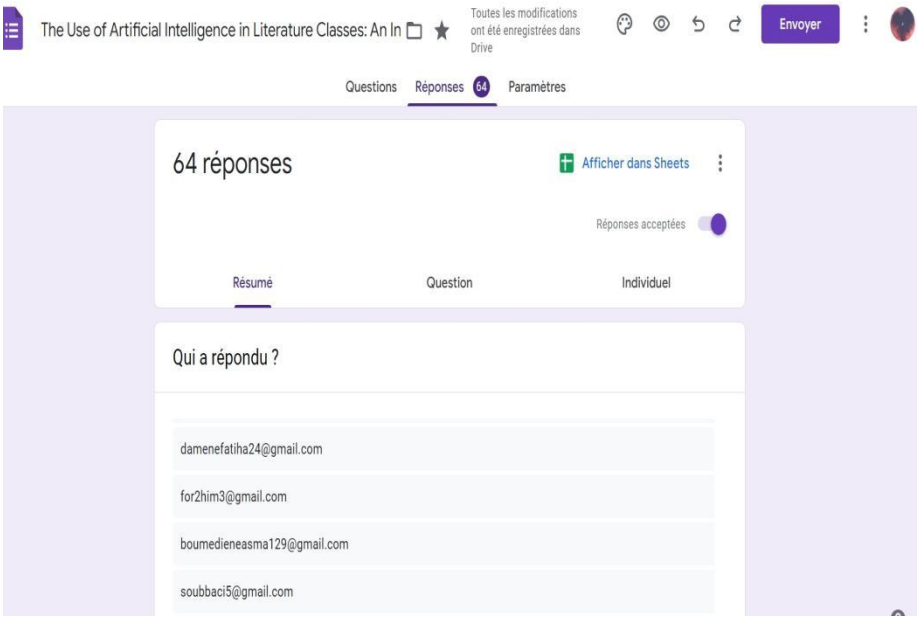
.....
.....
.....

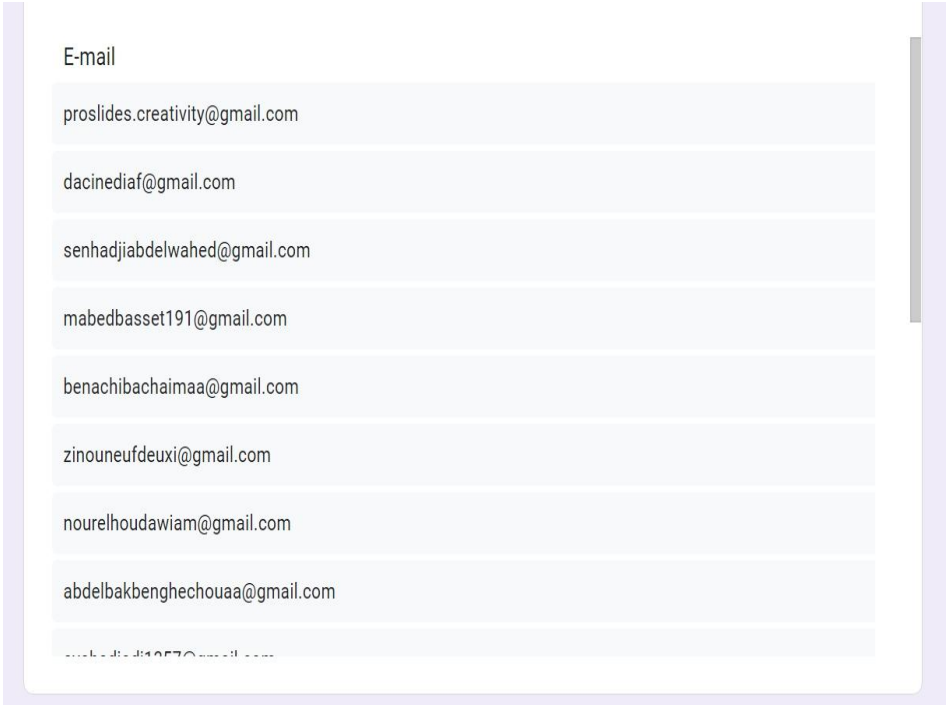
**Thank You**

# Appendix II

Link of the questionnaire :

https://docs.google.com/forms/d/e/1FAIpQLSfmykIUN-At3lEX-poNP3gDpPktNbGXijypH-UNri7hpAY0qg/viewform?usp=sf_link



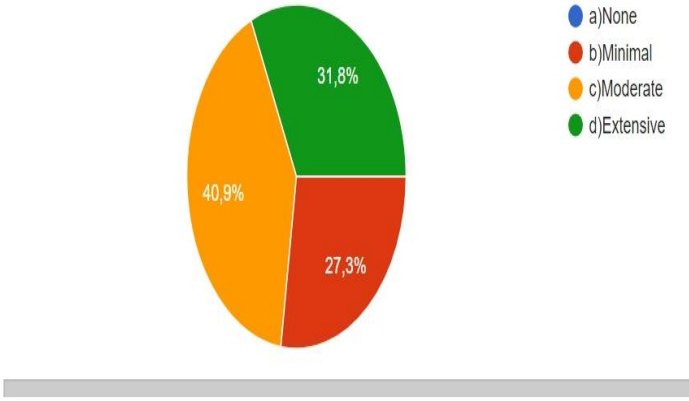



# Appendix II

Copier

2.Experience with AI Tools

44 réponses




5. What are the advantages and disadvantages you have experienced while using AI tools in your literature classes?

30 réponses

They give minimal information on literary text and do not delve deep into the analysis

Literature is supposed to be a human natural esthetic process, the intervention of a non human factor would give a text without soul, just like a robot.

easy research

Nothing I think

They are many

The advantages itself can lead to some disadvantages, one of which is we rely on AI too much to the point that we forget our abilities and just look for quick and easy way to get done with. Also I guess am speaking

# Appendix II

5. What benefits have you observed from using AI in literature classes?

29 réponses

It gives a different perspective and promotes close reading and more in-depth analysis as it's not very deep it makes you the reader go deeper in analysis

None, the same words and sentences are repeated in different contexts

Ease of access to information in literary thought

I rarely use artificial intelligence in analyzing literary works or in literary classes in general, but what I noticed is useful for time and effort in case you are in a hurry and do not have enough time to do it by yourself.

There is varios informations

Facilitating the understanding

Detailed information in a short time

7. How has the use of Copilot influenced your approach to literary analysis?

16 réponses

Actually I did not use it befor

I did not personally use it however I heard it is a very effective AI tool and it will have many updates that would improve the services that this AI tool gives I might want to try it later

It influenced my approach to literary analysis positively

AI tools like Copilot could potentially assist in literary analysis by providing quick access to relevant information and helping with language analysis. They might offer suggestions and insights that could enhance the overall analysis process. It's always exciting to see how technology can support and enhance our understanding of literature!

The use of Copilot hasn't directly influenced my approach to literary analysis since it's a tool tailored for assisting in programming and generating technical texts. However, similar techniques could be employed in developing literary analysis tools to provide additional assistance in understanding and analyzing literary texts.

## Résumé

Cette dissertation vise à explorer l'intégration de l'intelligence artificielle dans les cours de littérature liés à l'anglais langue étrangère grâce à l'outil numérique sophistiqué Copilot. Plus précisément, il s'agit d'analyser comment l'outil Copilot, qui présente des capacités algorithmiques étendues, stimule l'amélioration des méthodes d'analyse littéraire dans divers environnements EFL. De plus, ce travail vise à évaluer l'efficacité de l'outil Copilot pour la formation des compétences des étudiants en matière d'analyse littéraire, la connaissance des œuvres littéraires et l'établissement d'un environnement d'apprentissage approfondi et interactif. Finalement, cette étude repose sur les étudiants de première année Mastère Littérature et Civilisation de l'Université de Laghouat et contribue également à identifier les défis et les avantages liés à l'utilisation de l'outil Copilot. Les résultats obtenus permettent de conclure que Copilot favorise la connaissance des œuvres littéraires et le développement des compétences d'analyse critique chez les étudiants, tout en favorisant l'amélioration de l'attention et de la concentration en classe. Aux fins de cette étude, on propose des recommandations liées à une intégration équilibrée de cette technologie et recouvrant la formation de l'encadrement professoral et des étudiants et des aspects liés à l'éthique de l'utilisation des technologies d'intelligence artificielle.

**Mots-clés :**
Intelligence Artificielle, Analyse littéraire, Enseignement de l'anglais comme langue étrangère (EFL), Copilot, Compréhension littéraire.

## الملخص

كان لدمج الذكاء الاصطناعي في التعليم تأثير عميق ، وتم تطبيقه على نطاق واسع في التعليم خلال السنوات في القليلة الماضية . تهدف الدراسة الحالية إلى قياس فعالية أداة الذكاء الاصطناعي Copilot لتحليل الأدبي لطلاب الماجيستير في قسم اللغة الإنجليزية بجامعة الأغواط .

وقد اتخذت هته دراسة أساليب منهجية جمعت بين الفحص النوعي للأدبيات الكمية التي تم جمعها من خلال استبيان عبر الأنترنت تم إجراؤه مع طلاب الماجستير للسنة الأولى في اللغة الإنجليزية بجامعة الأغواط .

تهدف هته الدراسة إلى معرفة تأثير أدوات الذكاء الاصطناعي على مهارات التحليل الأدبي لطلاب اللغة الإنجليزية كلغة أجنبية .

يوضح هذا البحث أن من خلال توفير أدوات تحليلية شبيهة بالإنسان ، تؤدي إلى إنشاء طرق تدريس أكثر فعالية و تفاعلية . و التي تسهل على الطالب تحليل النصوص الأدبية و تشكيل تفسيرات تحليلية .

يمكن أن يساعد هذا البحث في فتح إمكانيات للذكاء الاصطناعي لإدراجها في فصول اللغة الإنجليزية لتعزيز مهارات التحليل الأدبي لدى الطلاب .و تهدف هته الدراسة إلى تسليط الضوء على الأخلاقيات المتعلقة باستخدام الذكاء الاصطناعي في فصول الأدب و في التحليل الأدبي .



**كلمات مفتاحية :**

الذكاء الأصطناعي ، التحليل الأدبي ، فصول الأدب ، أخلاقيات الذكاء الاصطناعي ، اللغة الإنجليزية