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Investigating the Effects of Generative AI Tools on the Academic
Integrity of English as a Foreign Language Learners When Producing
their Written Assignments: The Case of Third-Year Students of English
at Biskra University

Dissertation submitted in partial fulfillment of the requirements for a

Master Degree in Sciences of Language

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INVESTIGATING THE EFFECTS OF GENERATIVE AI TOOLS

Declaration

I, Messaouda BOUABDALLH, hereby maintain that this Master's dissertation titled

"Investigating the Effects of Generative AI Tools on the Academic Integrity of English as a

Foreign Language Learners When Producing their Written Assignments: The Case of Third-

Year Students of English at Biskra University" is my own research contribution to the

Algerian institutions of Higher Education, conducted with the guidance of Prof. Ahmed

Chaouki HOADJLI. Therefore, the research efforts from conceptuality to executing are my

own original inquiry, except where sourced.

To add, this academic product is submitted to the University of Mohammed Kheider of

Biskra as a partial requirement to get a Master's Degree in Language Sciences specialism,

not for any other kinds of credentials or academic titles at this or other educational

institutions.

Collaborative efforts are attributed through integral acknowledgement.

All of the participants appropriated their consent, and their anonymity and confidentiality are

preserved in line with the opted for ethical guidelines.

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2

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#### **Dedication**

First and foremost, all praise is to Allah, who privileged me with patience to finish this work. Alhamdullillah for everything, for the challenges and the achievements.

The second to whom I owe my whole life, to my parents; this dissertation is theirs more than it is mine. To my dad, the one who set aside his own hunger to fill mine, and to my mom, who gave me opportunities she never had.

To my brothers, the triple J, who are my love, my laughter, and warmth when I come back home.

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Finally, to me, the one

who struggled, doubted themself, and kept going despite uncertainty.

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#### Abstract

Academic integrity, with its core values of honesty, fairness, trust, respect, responsibility, and courage, plays a crucial role in governing educational practices. However, the widespread adoption of Generative AI (Henceforth, Gen-AI) tools triggered significant debates on possible effects on students' learning behaviours. Therefore, there was an urgent need for context-specific research in Algerian Higher Education, where pedagogical and ethical implications of Gen-AI tools remain understudied. The present study of research addressed this gap, espousing a Pragmatic stance, a Mixed-Methods Approach, and a corresponding Mixed-Methods Case Study Design. Accordingly, two research objectives were the main focus: (1) to understand how teachers of English at Biskra University perceive the use of Gen-AI tools by undergraduate students to produce their written assignments and (2) to develop strategies through which teachers and third-year students can collectively implement to ethically and ethically regulate the use of Gen-AI tools within EFL context. In the quest for these objectives, the researchers opted for an unstructured interview with 05 teachers and an attitudinal questionnaire posted online to 38 purposefully sampled third-year undergraduate students. Thematic analysis of interviews revealed that while Gen-AI tools may have the potential to undermine originality and critical thinking abilities of students, they can be learning facilitators if used effectively and, more importantly, ethically. Descriptive statistics derived from the questionnaire showed a high support from the part of students (94.7%) for collaborative teacher-student efforts to regulate their use within the EFL context. Cumulatively, the findings call for clear ethical guidelines and AI training to mitigate risks of AI misconduct. Recommendations emerged to consider institutional policies, AI literacy programs, and practical strategies for honest and responsible use of Gen-AI tools.

*Key words:* Academic integrity, collaborative teacher-student efforts, critical thinking, ethical guidelines, Generative AI tools, originality

#### **List of Acronyms**

AI: Artificial Intelligence

**EFL:** English as a Foreign Language

Gen-AI: Generative Artificial Intelligence

APA: American Psychological Association

**CAI:** Computer-Assisted Instruction

ICT: Information and Communication Technology

CAL: Computer-Assisted Language Learning

**ITS:** Intelligent Tutoring Systems

ML: Machine Learning

**NLP:** Natural Language Processing

LMSs: Learning Management Systems

VAEs: Variational Autoencoders

**GANs:** Generative Adversarial Networks

RLHF: Reinforcement Learning from Human Feedback

**MoE:** Mixture of Experts

**ICAI:**International Center for Academic Integrity

### **List of Tables**

Table 3.1 The Structure and Aim of the Interview    100
Table 3.2 Student Questionnaire Sections and Objectives    104
Table 4.1 Teachers' Years of Teaching EFL   109
Table 4.2 Teachers' Awareness of Students' Use of Gen-AI Tools    110
Table 4.3 The Effects of the Integration of Gen-AI Tools on the Quality of Students' Written
Assignments 112
Table 4.4 Teachers' Definitions of Academic Integrity when it Comes to Students' Written
Assignments
Table 4.5 The Perceptions of Teachers on their Students' Awareness of Ethical Implications
of Using Gen-AI Tools for their Written Assignments
Table 4.6 Strategies for Ethical and Effective Use of Gen-AI Tools by Students for their
Written Assignments
Table 4.7 The Efficacy of Said Strategies in Ensuring Successful Use of the Tools by
students in their Written Assignments
Table 4.8 Teachers' Suggestions128
Table 4.9 Gender Distribution129
Table 4.10 Students' Familiarity with Gen-AI Tools    130
Table 4.11 Frequency of Students' Use of Gen-AI Tools for their Written Assignments 132
Table 4.12 Students' Attitudes towards Teacher-Student Collaboration in Ensuring Effective
and Responsible Use of Generative AI Tools in Academic Settings
Table 4.14 Ethical Commitment and Academic Honesty    137
Table 4.15 Responsible Genenrative AI Utilization    139
Table 4.16 Transparency and Citation Practices   140
Table 4.17 Collaboration and Communication   141

INVESTIGATING TH	E EEEECTS O	E CENED ATE	VE ALTOOLS
INVESTIGATING IT	E EFFEC IS O	OF GENERALL	VE ALTOOLS

	.142	

Table 4.18 Skill Development, Feedback, and Self Evaluation	142
Table 4.19 Students' Feedback Mechanisms	143

# **List of Figures**

Figure 4.1 Gender Distribution	130
Figure 4.2 Students' Familiarity with Generative AI Tools	131
Figure 4.3 The Frequency of Students' Use of Generative AI Tools for their V	Vritten
Assignments	132
Figure 4.4 Students' Attitudes towards Teacher-Student Collaboration in Ensuring Ef	fective
and Responsible Use of Generative AI Tools	133
Figure 4.5 Students' Feedback Mechanisms	145

# **List of Appendices**

Appendix 1: Teachers Informed Consent	176
Appendix 2: The Interview Questions	178
Appendix 3: Interview Opinnionnaire	179
Appendix 4: The Interview Validation Form	182
Appendix 5: Students Informed Consent	183
Appendix 6: Students' Attitudinal Questionnaire	185
Appendix 7: The Interview Transcripts	190

#### **Contents**

Declaration	2
Dedication	3
Aknowledgements	4
Abstract	5
List of Acronyms	6
List of Tables	7
List of Figures	9
List of Appendices	10
Contents	11
General Introduction	
1. Background of the Study	16
2. Statement of the Problem	
3. Main Research Aims and Specific Objectives of the Study	19
4. The Research Questions	20
5. The Research Hypotheses	20
6. The Research Methodology for this Study	20
<b>6.1</b> Population, Sampling Techniques, and Sample	21
7. Significance of the Study	22
8. Delimitations of the Study	22
9. The Writing and Referencing Style	23
10. Structure of the Study	24
Chapter One: Generative AI Tools in Higher Education: Ar	Overview
Introduction	28
1 1 Artificial Intelligence	28

1.1.1 Definitions of Artificial Intelligence	29
1.1.2 Early Foundations of Artificial Intelligence	30
1.1.3 Historical Evolution of AI in Higher Education	32
1.1.3.1 Computer-Assisted Instruction	33
1.1.3.2 Intelligent Tutoring Systems	35
1.1.3.3 E-Learning Platforms	36
1.2 Generative AI	38
<b>1.2.1</b> Definitions of Generative AI	39
1.2.2 Mechanisms of Generative AI	39
1.2.2.1 Variational Autoencoders	40
1.2.2.2 Generative Adversarial Network	41
1.2.2.3 Transformer	41
<b>1.2.3</b> Generative AI Tools in Higher Education	42
<b>1.2.3.1</b> ChatGPT	42
1.2.3.2 DeepSeek	44
1.2.4 Benefits of Generative AI on Learner Learning	44
1.2.4.1 Personalized Learning	45
<b>1.2.4.2</b> Promoting Creativity	46
1.2.5 Limitations of Using Generative AI	47
1.2.5.1 Technical Limitations	47
1.2.5.2 Impact on Learning Processes	48
1.2.5.3 Threats to Academic Integrity	48
Conclusion	49

# Chapter Two: Academic Integrity of Higher Education in the Era of Generative AI Tools: Reviewing the Fundamentals

Introduction	51
2.1 Academic integrity	51
2.1.1 Definitions of Academic Integrity	52
2.1.2 Core Values of Academic Integrity	56
<b>2.1.2.1</b> Honesty	57
<b>2.1.2.2</b> Fairness	59
<b>2.1.2.3</b> Trust	61
<b>2.1.2.4</b> Respect	65
2.1.2.5 Responsibility	68
<b>2.1.2.6</b> Courage	71
2.2 Academic Misconduct	73
2.2.1 Plagiarism	75
2.2.1.1 Traditional Means of Plagiarism	76
2.2.1.2 Digital Plagiarism	77
2.2.1.3 AI-giarism	77
2.2.2 Contract Cheating	79
2.2.2.1 Commercial Outsourcing	80
2.2.2.2 Collusion	81
2.3 Written Assignments in Upholding Academic Integrity	82
2.3.1 Definitions	82
2.3.2 Written Assignments as an Assessment of Learner's Learning	84
2.3.3 Expectations of Original Productions	85
Conclusion	87

# **Chapter Three: The Methodology for this Research Study**

Introduction	89
3.1 Research Methodology: Theoretical Background, Choices and Rationale	89
3.1.1 Research Paradigm	90
3.1.2 Reseach Approach	95
3.1.3 Research Design	97
3.1.4 Data Collection Methods	98
<b>3.1.4.1</b> Interview	99
3.1.4.1.1 Structure and Aim	99
<b>3.1.4.1.2</b> Validation	101
<b>3.1.4.1.2</b> Piloting	101
3.1.4.2 Questionnaire	102
3.1.4.2.1 Structure and Aim	103
<b>3.1.4.2.2</b> Validation	104
<b>3.1.4.2.3</b> Piloting	105
3.1.5 Data Collection Procedures	105
3.1.6 Data Analysis Procedures	105
3.1.7 Population, Sample, and Sampling Technique	106
Conclusion	106
Chapter Four: Fieldwork and Data Analysis	
Introduction	108
<b>4.1.1</b> Analysis of Teachers' Unstructured Interview	108
4.1.2 Analysis of Students' Attitudinal Questionnaire	129
<b>4.2</b> Synthesis of the Findings	146
Conclusion	148

General Conclusion	149
Pedagogical Recommendations and Implications	150
Limitations of the Study and Suggestions for Future Research	153
References	155
Appendices	176
ملخص الدر اسة	208

#### **General Introduction**

#### 1. Background of the Study

In today's evolving globe, technological promotions are urging avant-garde modifications that sound in a variety of academic disciplines, in particular Higher Education. With all the technology, Artificial Intelligence (Henceforth, AI) preserves its delineation as a divisor of development and a critical component in this revolution, according to which the traditional dynamic of learner-teacher relationship can be altered.

Across the annals of history, the esteemed institutions of Higher Education engaged in a continual process of refinement and at the forefront of teaching and learning. This process mainly involves adopting or adapting recent technological resources, and ensuring their effective implementation during the different phases. Consequently, the available resources of AI are somehow gradually becoming incorporated at university level. In the main regard, these resources excel as a peculiarly transformative power, yet a controversial initiation to be made.

To elucidate its origins, the conceptual foundations of current AI were introduced by philosophers and scientists who sought to revive human cognitive features in machines approximately in the mid-twentieth century. Their attempts, therefore, began with the development of the calculating devices, which offered directions for today's algorithmic systems to mimic human reasoning (Kaplan & Haenlein, 2019). As for today's AI, it relates to "creating intelligent agents" (Russell & Norvig, 2022, p. 9) which in the context of English as a Foreign Language (Henceforth, EFL) presents Gen-AI tools as useful references for producing texts equivalent to human written productions, and through this agency, they could offer a supportive academic experience.

Gen-AI tools, such as ChatGPT and DeepSeek could assist EFL learners in crafting a reasonable and appropriately contextualized content to a certain degree, especially for those

searching for help with writing due to the complexity of its process. To elaborate, Nunan (1999) defined writing as the construction and organization of sentences that demands a thorough understanding of language elements and their meaning; its complexity, thus, stems from the desire to express ideas effectively while also bearing in mind the grammatical and stylistic rules. Equally, Flower and Hayes (1981) emphasised the intellectual efforts in addition to the repetitive cycle of drafting, revising, and polishing in order to develop a coherent and cohesive written material. Thereupon, the writing process necessitates producing a text which is a result of deep understanding and critical thinking.

Furthermore, it is believed that learning or improving the writing skill is one which is difficult for EFL learners to be developed due the multifaceted nature it displays. Nonetheless, written assignments are often considered one of the most efficient ways for assessment to measure learners' comprehension level and critical thinking abilities (Suleiman, 2000). Following this point, AI-generated outputs can match the human writing to the extent that one cannot distinguish it from that of a learner. In case it was used by EFL learners for their written submissions, it may influence the efficiency of assessment practices (Miller & Thompson, 2023).

Additionally, the several features offered by Gen-AI tools could, intentionally or unintentionally, erode the genuine abilities of EFL learners, as well as raise concerns about authenticity of their academic submissions. As Perkins (2023) discussed in their exploration about the impact of AI, in general, on academic integrity, their use would complicate the boundaries between the two notions of assistance and authorship, and thereby it perplexes the standardized definitions of originality and plagiarism.

After a closer observation on the field, the third-year learners of English at Biskra University have been noticed to use the aforementioned tools, especially for producing their written assignments. For the latter, upholding academic integrity might be a matter of choice,

either a priority or an obstacle. Addedly, the most frequent justifications for such a behaviour can be their inability to adequately convey what they think or that writing is a particularly challenging skill to be learned in a foreign language the same as research skills. Accordingly, addressing the effects of Gen-AI tools on the academic integrity of EFL learners when producing their written assignments is the main focus of this research study.

#### 2. Statement of the Problem

Since its materialization, AI-powered tools have progressed from being simply perceived as rudimentary technological novelties to their current status as the prime driver of advancements in diverse sectors worldwide, including the field of Higher Education. Within the latter, AI has introduced different tools to enhance the teaching-learning process, mainly in terms of the ways learners produce their written assignments.

Gen-AI is a type of AI that generates content on a diverse of subjects based on the user's input, that is a prompt. Its hype and simplicity often encourage EFL learners, especially those who struggle with deadlines, to take advantage of them for tasks that require writing or research aspects. The drawback, meanwhile, is that it can easily be misused and that EFL learners become overly dependent on it at the expense of maintaining real language learning and developing research skills, and therefore compromising the authenticity and authorship of their work. That being so, instances of AI-giarism, such as copying word-forword outputs or paraphrasing without proper citation of sources, and engaging in other related behaviors raise ethical concerns.

Based on the researchers' observation, research contact, and the findings of Chan et al., (2024) conducted in a related context, EFL undergraduate learners at the Department of Language and English Literature at Biskra University seem to be more likely to refer to Gen-AI tools for producing their written assignments. To elaborate, the recent research of Chan et al., (2024) shed light into the concern that learners could be more oriented to use these tools

to elevate the quality of their submissions. Notwithstanding, dependence on Gen-AI tools may lead to a lack in personal engagement in the learning process. That is, learners may dismiss the cognitive processes that are essential for having a complete understanding or a sound knowledge building.

Addedly, the ease with which EFL learners would bring forth essays, research papers, and other written assignments using Gen-AI tools threatens the core values of education, assessment, and academic integrity. As for the scope of upholding ethics, the rise in AI-giarism cases stimulates teachers' dissatisfaction with learners' use of such tools. Besides, major concerns emerged regarding the extent of collaboration between EFL learners and Gen-AI tools that can be identified as one' work and effort.

Although this issue has been studied in foreign research, a neglecting gap orientation remains in the local body of literature. Significantly, the lack of research regarding the actual effects of Gen-AI tools hampers the ability of Algerian teachers, administrators, and policymakers to arrive at well-informed decisions. Therefore, this research study aims to fill in the gap and save the academic reputation by investigating the effects of such tools on the academic integrity of EFL undergraduate learners when producing their written assignments at Biskra University. Ultimately, the study also aims to offer practical guidelines for both teachers and EFL learners for a proper use of Gen-AI within EFL context.

#### 3. Main Research Aim and Specific Objectives of the Study

The current research study, in a general sense, aims to investigate the use of Gen-AI tools among EFL undergraduate students when it comes to producing their written assignments.

More specifically, this research work aims to:

- Understand how teachers of English at Biskra University perceive the use of Generative
   AI tools by undergraduate students to produce their written assignments.
- Develop strategies through which teachers and third-year students of English at Biskra
   University can collectively implement to ethically and effectively regulate the use of
   Gen-AI tools within the EFL context.

#### 4. The Research Questions

This research seeks to answer the following research questions:

**RQ1**: What are the perceptions of teachers of English at Biskra University on the use of Generative AI tools by undergraduate students for producing their written assignments?

**RQ2**: How can teachers and third-year students of English at Biskra University regulate the use of Generative AI tools to uphold academic integrity within the EFL context?

#### 5. The Research Hypotheses

Based on the aforementioned research questions, the researchers of the preset study propose the following research hypotheses:

**RH1:** It is hypothesized that teachers of English at Biskra University would express concerns that the use of Generative AI tools may undermine undergraduates' originality and critical thinking abilities.

**RH2:** It is hypothesized that collaborative efforts between teachers and third-year students of English would help in establishing strategies that promote ethical approach for using Generative AI tools within the EFL context at Biskra University.

#### 6. The Research Methodology for this Study

Given the complex relationships between Gen-AI tools, pedagogical practices, and learner's learning behaviors, relying on a single research approach is unlikely to spring a satisfactory understanding of the subject matter. In order to comply with the non-

experimental nature of the current research, as well as the main objectives of the study and their corresponding research questions, the researchers opt for a Mixed-Methods Case Study Design, which correlates with Mixed-Methods Approach, and thereby aligning with Pragmatist Research Paradigm.

The suggested methodology for this investigation primarily reflects the researchers' pragmatic assumptions and intended contribution for understanding the existing research problem and providing possible strategies as a final maneuver. That is, a first qualitative initiation is appropriate for gaining a preliminary understanding, followed by a quantification of results. In line with Creswell and Plano Clark (2011), one source of data may take precedence over the other. Importantly, the two types of data remain distinct, conducted one by one, and analyzed separately. Therefore, the study makes use of an unstructured interview followed by an online, attitudinal questionnaire to accomplish the intended research objectives.

It is our understanding that such choice for data collection methods would be appropriate for the purpose of the present study, with each method being designed to provide a specific facet of the research problem. As with any investigation of such nature, which is based on Mixed-Methods Approach, a mixture of analysis procedures from both approaches must be in action. Accordingly, the execution of analysis could be facilitated by implementation of thematic analysis for the unstructured interview, in addition to descriptive statistics for the attitudinal questionnaire. The two procedures are distinct with regard to their particular use of digital tools, with MAXQDA for the purposes of qualitative data transcription and Google Forms as a means to the descriptive method.

#### 6.1 Population, Sampling Techniques, and Sample

The targeted population for the present research study comprises of undergraduate learners enrolled in the Department of Language and English Literature, specifically those

required to produce written assignments as a requirement for their courses. The sample therefore is a cohort of 38 purposefully selected third-year students from the same department. Teachers of English (n=5) are similarly chosen based on the direct exposure and experience supervising learners' written assignments.

#### 7. Significance of the Study

To keep it concise and precise, the present study of research expresses and addresses an urgent need to understand how Gen-AI tools re-construct the principles of academic integrity in Algerian Higher Education, a context where such studies are rare. A combination of qualitative insights and quantitative proofs allows the present study to communicate actionable strategies for balancing the modern-day issue of Gen-AI use by EFL learners. Therefore, it contributes to three dimensions; it contributes to the theory in terms of expanding current ethical discourse on the effects of Gen-AI tools on EFL learners' originality and critical thinking to Algerian systems of Higher Education, to the policy in terms of informing Algerian institutions on collective teacher-learner strategies for Gen-AI tools regulation, and to the practice in terms of providing teachers with evidence-based guidelines that encourage ethical use of such tools for EFL learners' written assignments.

#### 8. Delimitations of the Study

The compass and parameters of the present research study have to be defined in order to exclude any external factors that would affect the results. Therefore, the following lines set the boundaries determined for the purpose of this investigation:

• The participants are confined to third-year learners of English at Biskra University, as they are at a crucial phase in their education, to get a Licence of English Language, where they are submitting written assignments more than previous years. This is primarily relevant to the objectives of this study. That is, this delimitation is supported

by the researchers' need to focus on a specific group that is directly affected by the inclusion of these tools into their academic activities.

- The study is determined to focus on teachers who teach and/or have taught writing courses or in charge of courses that require a significant number of written assignments. This comply with the researchers' aim to understand perceptions of teachers regarding the use of Gen-AI tools by learners for producing written assignments. Moreover, the scope of this investigation does not extend to other stakeholders, such as administrators or policymakers, although their perspectives might also be valuable. As an alternative, the emphasis is placed on teachers who maintain active engagement with EFL undergraduate learners and assess their written assignments.
- The investigation is limited to written assignments that are done outside the classroom. The rational behind this is that EFL learners would have a higher possibility to work on their assignments independently, away from any direct supervision from the part of the teacher and where they might be more likely to use Gen-AI tools. Therefore, it is intended to exclude in-class written assignments that are checked instantly by teachers.
- The study considers solely Gen-AI tools that have the potentiality to produce textual content, with no account for other types of AI-resources that could generate audio or visual output. The decision, in this case, is justified since it facilitates the process for the researchers to conduct a more focused investigation into the effects of text generators on EFL learners' written productions in relation to academic integrity.

#### 9. The Writing and Referencing Style

In the pursuit of communicating an academic, written work, it is recommended for the researchers to identify and incorporate a method that ensures clarity and consistency. Given these introductory notes, this dissertation abides to the American Psychological Association (Henceforth, APA) 7<sup>th</sup> edition writing style. The letter is decided upon due to its

alignment with the academic writing conventions in Social Sciences specialism, and its widespread adoption and relevance to the Educational Research.

As a joint effort with the supervisor, a notable modification is agreed upon to be displayed. while the requirements of the APA typically specifies left-aligned text to a certain degree, it is determined to opt for the justified function, which would hopefully increase the two qualities of readability and visual coherence of this work. Accounting for the entirety, this exception corresponds to a careful consideration for both the aesthetic preferences and the standards of academic writing.

#### 10. Structure of the Study

The intended structure for this dissertation is as follows:

Chapter One will offer a comprehensive overview of AI in Higher Education. After compilation, it is planned to define Gen-AI, explain their mechanisms, and outline two of the tools receiving attention, notably ChatGPT and DeepSeek. It will concentrate on their benefits as well as possible complexities in academic settings, with an indication on how these tools may affect learners' learning paths and raise questions about academic integrity.

Chapter Two will regard the conception of academic integrity, specifically with regard to EFL learners that use Gen-AI tools for written assignments. This chapter will explain academic integrity as well as its importance in Higher Education. Addedly, different manifestations of academic misconduct will be defined. Eventually, a section for written assignments will be considered to have an overview on learners' productions in relation to academic integrity in the age of Gen-AI tools.

Chapter Three will outline the research methodology used to investigate the effects of Gen-AI tools on academic integrity of EFL learners while producing their written assignments. It will detail the research paradigm, approach and design, covering participant selection criteria, methods for collecting data, and analysis procedures for determining the

effect of Gen-AI tools on learners' written productions. The purpose of this chapter is therefore to demonstrate the validity and reliability of the research findings with a defined methodological framework.

Chapter Four will be focusing on the fieldwork carried out during the practical part of study and its subsequent data analysis. This chapter will offer the data acquired from participants in a systematic manner, including both qualitative and quantitative conclusions about the use of Gen-AI tools in EFL situations. The chapter will also evaluate the findings in light of the research objectives, questions and hypotheses outlined previously in the dissertation's proposal. At the end, this chapter will be framed as an attempt to give useful insights into how Gen-AI tools affect academic integrity among EFL learners, and how both teachers and learners of English can cope with the issue through developing strategies that promote ethicality within the EFL context at Biskra University.

#### INESTIGATING THE EFFECTS OF GENERATIVE AI TOOLS

# **Chapter One: Generative AI Tools in Higher Education: An Overview**

Introduction	28
1.1 Artificial Intelligence	28
1.1.1 Definitions of Artificial Intelligence	29
1.1.2 Early foundations of Artificial Intelligence	30
1.1.3 Historical Evolution of AI in Higher Education	32
1.1.3.1 Computer-Assisted Instruction	33
1.1.3.2 Intelligent Tutoring Systems	35
1.1.3.3 E-Learning Platforms	36
1.2 Generative AI	38
1.2.1 Definitions of Generative AI	39
1.2.2 Mechanisms of Generative AI	39
1.2.2.1 Variational Autoencoders	40
1.2.2.2 Generative Adversarial Network	41
1.2.2.3 Transformer	41
1.2.3 Generative AI Tools in Higher Education	42
<b>1.2.3.1</b> ChatGPT	42
1.2.3.2 Deepseek	44
1.2.4 Benefits of Generative AI on Learner Learning	44
1.2.4.1 Personalized Learning	45
1.2.4.2 Promoting Creativity	46
1.2.5 Limitations of Using Generative AI	46
1.2.5.1 Technical Limitations	47
1.2.5.2 Impact on Learning Processes	48
1.2.5.3 Threats to Academic Integrity	48

#### INESTIGATING THE EFFECTS OF GENERATIVE AI TOOLS

Conclusion4	49
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#### Chapter One: Generative AI Tools in Higher Education: An Overview

#### Introduction

Gen-AI tools are not mere implements; they can be partners in knowledge production and dissemination. To understand better this conceptualisation, this chapter is intended to present some cardinal definitions and historical contributions of AI to Higher Education. It also aims to explicate the emergence and the rationale behind the integration of Gen-AI into contemporary educational practices, illustrate some of its working mechanisms, and outline some of its applications, pointing out to some of their advantages as well as some of their shortcomings.

#### 1.1 Artificial Intelligence

The use and adoption of AI in assorted academic grounds witnessed a marked increase. Over the several past years, different departments of educational institutions have began to recognize and acknowledge the efficacy of technology in leading the teaching and learning pathways (Chen et al., 2020). With its possibly matured application, AI was one to be embedded in a spectrum of education-related practices.

To give a confirmatory investigation regarding the earlier articulations, Treve (2024), pursuing a Mixed-Methods Approach, asserted that such an application of AI had a potential, especially in online learning, for improving learners' engagement level, creativity, and experimentation. Based upon their findings, "the creation of AI tools is a net positive, but not without fault and bias" (p, 67). That is, incorporating AI into educational activities is a double-edged case which could provide desirable outcomes, yet has limitations. Overall, what can be comprehended is that the inclusion of AI into Higher Education systems is a reflection to the broader trend of technological advancements that today's global society is experiencing, and probably indicates an accumulated trust put upon intelligent systems for enhancing educational determinations.

Given the opening overview, this section seeks to investigate the contributions of AI to Higher Education, illustrating how its continuing evolution determines the ways in which educational institutions operate and how it is changing the very nature of education itself.

#### 1.1.1 Definitions of Artificial Intelligence

As Albert Einstein once said "the important thing is not to stop questioning. Curiosity has its reason for existence" (Life, 1955, p.64). At its core, AI is a result of humankind's insatiable curiosity and efforts to repeat itself in machinery devices. Reasoned within a wide-angle purview, AI refers to the interdisciplinary field that endeavours to create and develop intelligent entities (Russell et al., 2010). Therefore, AI reflects the scientific purpose to systematically understand and to duplicate human intelligence in the physical object. Be that as it may, it is necessary to have a clear view of what constitutes intelligence and what makes a machine intelligent.

As McCarthy (2007), the first who put-upon the expression of artificial intelligence, defined it as "the science and engineering of making intelligent machines, especially intelligent computer programs" ("Basic Questions"). The wording used in this particular sense is somewhat broad in terms of application. To argue, intelligence can be materialised in different ways. The way it is in humans can be distinct from that in animals or machines. That is, the demonstration of intelligence can vary based on its holder, a creature or a physic, and the context within which it is considered. Grounded on this, having a clear and precise meaning for the term intelligent is challenging to be determined the same as conceiving a definition for AI that is free from human-related attributes. Simply fit, the main challenge is to recognize what qualities that a computer initiative could embody to be seen as intelligent.

As a matter of fact, hundreds of definitions exist, yet none of them is remarkably agreed upon by the AI community. At an early point, numerous scholars from diverse disciplinary backgrounds, such as philosophy, computer science, and mathematics, have

resisted and opposed to be bounded by a monolithic definition of AI in a struggle to eliminate ambiguity and mitigate the vagueness associated with the aforementioned term. In this connection, a series of alternative frames of reference were proposed, yet brought about more controversy and debates.

Definitions of AI advanced by researchers typically are towards a twofold focus; some of them are focusing on reproducing the cognitive aspects of humans, while the others are centering on the roles of AI systems that are supposed to display in practice. From a computational standpoint, Kurzweil (2005) regarded AI as being linked to the ability of non-biological beings to engage in activities that ordinarily would have required human ability, such as visual perception and language recognition. Distinctively, Russell and Norvig (2022) identified AI as "programs that perceive the environment through sensors and act upon it by affecting their world through actuators" (p.54). Differently said, they believe that AI is about designing intelligent performers that interact with their surroundings. Thus, for a system to be deemed intelligent, it must have the potential for behavioural change and adaptability following its intended design goals and perceptions.

To put it concisely, arriving at a single, thorough, and comprehensive definition of AI seems to be elusive from the available literature. Thereby, it would be convenient to form a balanced stance in the present study, where AI stands for a field of emerging technologies that approximate human cognition and skills, such as perceiving, reasoning, learning and acting in an autonomous manner. In the broadest sense, AI may encompass the various research theories, methods and their applications, all of which are directed at simulating and augmenting human intelligence.

#### 1.1.2 Early Foundations of Artificial Intelligence

AI has a multifaceted contextualization that can be grasped and elucidated in a variety of ways depending on one's angle, and this occurs due to the way it has evolved over time, from an idea to an independent area of research, which, in turn, makes the boundaries between its heterogeneous roots not so distinguished. In the light of this, its early foundations are typified by a series of theoretical contributions and practical search that deep-rooted the fundamentals for the resulting evolution of the field.

Although the different manifestations of AI as understood nowadays can not be acknowledged nor existed until decades later, its historical origins can be found in first philosophers' inquiries in the nineteenth century, if not earlier. Aspects, such as the mind, intelligence, action, and knowledge, probably served as an inspiration for further consideration by thinkers and scientists. Following this, Descartes triggered an ongoing debate on the nature of mind and substance once they introduced the Dualism of mind and body. To put it another way, Descartes at the time questioned the feasibility of the human intellect being a production of a physical brain, stating that the mind and body might be distinct and separate entities (Antoine-Mahut, 2020; Maidansky, 2022). Subsequently, their arguments released the mind from the biological limits, paralleled discussions on AI, and urged several intellectuals to consider the key issue of whether a mechanical system can ever exhibit a human-like thinking, regardless of the human physiology (Bennett, 2024).

One can identify the genesis of AI in some exploratory and practical undertakings. Alan Turing, a British mathematician and computer scientist, broached the long-familiar question of intelligent machines through their work of "Computing Machinery and Intelligence" (Russell & Norvig, 2022). In their promise, they developed a test through which they set a criterion for answering the question. For the main part, Turing self-confessed that the subject of whether machines like computers could be intelligent was a fairly vague one, and for that, having a decent consideration was perplexing and complex. Accordingly, they re-framed the question, shifted the focus, and opted for an alternative, a sort of thought experiment called the "Imitation Game." In this game, a machine, a human, and a human

evaluator would take part. The human evaluator regularly must engage in a written, natural language conversation with the other two participants, tasked with naming which can be which (Turing, 1950).

Based on the proposed game, Turing (1950) claimed that any simple machine could be considered to think only if it can copy the patterns of a natural conversation so accurately and convincingly that a human judge would not have any reason to distinguish it from some other human being. Principally, Turing's claims are based on how would humans determine intelligence founded in written communication skills. As indicated by Russell and Norvig (2022), Turing's work was vital in the development of AI since it outlined some standards for creating thinking machines, yet others discredited its practicality for some constraints related to the imitation, the subjectivity of the human judge, and other different aspects.

Moreover, the full term of artificial intelligence was not invented until 1956 by John McCarthy, a renowned AI-scholar and lecturer at the college of Dartmouth. With their colleagues, they brought together several leading American researchers to attend the "Summer Research Project on Artificial Intelligence." Therein, they could present and address their visions and contributions (Russell & Norvig, 2022). Leading this, they set the discipline's birth and agenda. As most of the literature suggests, the Dartmouth Conference was the turning point that pronounced the official recognition and establishment of AI as both a scientific term and a field of research, and helped to contract the parameters for forthcoming research initiatives and collaborative ventures for the domain of AI.

#### 1.1.3 Historical Evolution of AI in Higher Education

The manifold trials to embrace AI in the tertiary education testified something of a renaissance in past decades, with the launching of Computer-Assisted Instruction (Henceforth, CAI) ushering in one of the earliest applications of AI in the field. Explicitly, the opening chapters towards the inclusion of AI are instituted by CAI as a part of

Information and Communication Technology (Henceforth, ICT). The latter can be outlined, in simple terms, as the strategic implementation of technology-based modes of communication in the quotidian classroom (Singh, 2021). Within which, teachers are deemed to be essential actors in the day-to-day use of ICT, tasked with preparing learners for the contemporary digital dimension.

#### 1.1.3.1 Computer-Assisted Instruction

The approval of CAI in Higher Education represents a crucial transition in pedagogical practices owing to technological progress and evolving educational paradigms and methodologies at the time. Early CAI systems, which emerged from the mainframe computing during the 1960's and 1970's, gave a rise to today's AI-driven educational technologies.

The arrival of CAI was a deliberate response to the collective need for flexible educational alternatives. Therefore, first CAI systems were planned to cater to learners' needs, offering interactive and self-paced learning experience so that learners autonomously achieve their learning objectives. As reported by Roll and Wylie (2016), the use of these systems depicted the first engagement with computing technology in education, seeking to emulate the role of a human instructor as if it was a connected classroom. In other words, they are intended to delivering a structured content, assessing learners' performance, and providing an immediate feedback, which are features that settled them apart from earlier teaching-learning methods.

At the beginnings, a project called PLATO at the University of Illinois was reasoned as a defining factor in the development of Computer-Assisted Language Learning (Henceforth, CALL) (Marty, 1981). Donald Bitzer, the creator of PLATO, noted "technology was just on the edge of being able to do some of these things if we used it creatively" (The Grainger College of Engineering, 2020). That is, the computer-based education endorses new

found ways of learning that might not be possible before. At first, the given software was only available for learners enrolled in universities. However, subsequently, with accumulated accessibility of personal computers, a flow in the use of CALL programs occurred (Marty, 1981), allowing for automated instruction models that differ from those of traditional classroom orientation.

To explain their workings, CAI systems often make use of programmed or scripted way of instruction. The latter can be supplied in terms of chunks, through which the learning material could be divided into more units to be delivered. Apart from this, these systems had a potential for improving learners' engagement by embedding multimedia elements, such as visual and audio aids (Dap-og & Orongan, 2022). Overall, CAI was effective in teaching subjects that required repetitive practice, such as mathematics and language learning (Chevalère et al., 2021). Therefore, one can comprehend that they may be more suitable for those learners with preferences of rote learning through practice and drills.

Although CAI systems promised a wide range of opportunities for augmenting learning, they exhibited several challenges at the time. To elaborate, first generation of CAI packages were based on digital computer with interfaces considered as primitive due to limited adaptability, minimal interactivity, and lack of contextualized understanding (Cosmann, 1996). What is noticeable in the literature is that CAI systems were often intolerant and unable to meet the different needs of learners. Agrawal and Srivastava (2019), as well, observed that the main limitation was their non-accomplishment to provide individualized assistance for learners beyond the pre-programmed lessons and exercises, which often impeded the potency to cope with complex learning scenarios. To condense, these initial efforts are somehow similar to the working of automated calculations, that lack specifications like the sophistication and suitability needed to make pedagogical processes unfold smoothly.

Regarding this period, some ethnographic studies from the 1970's onward such as those of Blomeyer (1989) and Steenbergen-Hu and Cooper (2014) pronounced that these systems displayed a sort of systemic impediments. To detail, irregular resource distribution as well as institutional inattentiveness urged researchers and policymakers to view CAI as a supplementary aid, rather than a substitution for conventional instruction. That is, these systems can be viewed as an aspiration for a futuristic goal for offering hybrid models that could balance the automation of computers with the guidance of human teachers.

To sum up, educational technology, a frontier that is expanding, plays a crucial role in reconstructing the nature of teaching and learning. The meaning is that CAI represents a founding stage in the historical development of AI in Higher Education. While its performance was limited at this period of time, CAI systems, according to today's view, pioneer the emergence of more matured forms of technologies that are still transforming education.

#### 1.1.3.2 Intelligent Tutoring Systems

Following the era of CAI, Intelligent Tutoring Systems (Henceforth, ITS) actualize significant advancements in the emergence of AI in Higher Education. Between the 1980's and 1990's, ITS systems were materialized to serve the purpose of a human tutor, an attribute that CAI failed to be qualified by previously.

ITS came forth as a consequence to inherent limitations in CAI systems. To define, learning is the actively pursued process of seeking betterment in some aspect of one's life. Therefore, both the learner and the teacher need to engage in a back-and-forth dialogue to reach a desired outcome, and to learn means to endure a mental and emotional state of change (Biesta, et. al., 2011). Complementary to this, ITS were computerised as a learning software that used AI in order to provide a real-time feedback or instruction, and a remedial adaptability based on learner's psychological frame, present knowledge, and learning

preferences, in instances that may not require a human tutoring intervention (Ma et al., 2014). To summarize in a few words, their potentiality could offer new approaches of dynamic learning.

From the outset, they brought about a set of benefits that could enhance the overall experience of learning. ITS systems through their capability in diagnosing misconceptions or misunderstandings upheld by learners and then modifying the instruction to fill the specific gaps in their knowledge (VanLehn, 2006) were widely adopted and integrated. That being so, Ma et al., (2014) elaborated on their workings. The core components of these systems covered a set of models, a domain model, a learner model, and a pedagogical model, which all put together in order to create and convey individualized content. That is, ITS reach the exemplification of how machine tutors could be knowledgeable about the subject matter, aware of the learners' needs, and skilled at providing instruction.

Despite their benefits, they displayed some challenges during this period of time. Luckin et al. (2016) argued that elaborating more ITS systems for education required more substantial resources like expertise in AI, pedagogy, and software engineering in addition to concerns about data privacy and algorithmic bias. However, they were widely used in academic disciplines where problem-solving and critical thinking could be of a requisite such as in mathematics (Koedinger et al., 2013).

To sum up, this stage in history marks a pivotal progress in the development of AI in Higher Education. This occurs by moving in a continuum from basic delivery of content towards self-directed tutoring. Building on the groundwork set by CAI, ITS might change learning in terms of engagement, autonomy, and outcomes.

#### 1.1.3.3 E-Learning Platforms

The development of technology and with it the internet, the globe would become an accessible facility that supports knowledge and, correspondingly, learning would no longer

be limited by a distance, a location or a physical existence. E-learning, which began gaining grounds in the late of 1990's and early 2000's, was a consequent extension to the AI technological advancements, adapted from the existing foundations placed by ITS.

The term e-learning was coined to refer to the advantage of electronic mediums in obtaining knowledge, or simply the use of technologies when accessing educational curriculum outside the classroom setting (Jethro, Adewumi, & Thomas, 2012). Therefore, it included a wide range of learning experiences, including online courses, virtual classrooms, as well as mobile applications (Lin et al., 2023). Different from the period of ITS systems, which often used direct and individual interaction with learners, e-learning platforms could present a more flexible learning occurrence. That is, these platforms may integrate AI applications to ameliorate and to facilitate both asynchronous and synchronous learning, that aid learners access their expected content at their convenience.

Initial e-learning platforms used AI for several functions, including tailored content, learners' tracking, and adaptive feedback mechanisms, in a larger scale when compared to ITS. To evidence, scholars like Duffy and Cunningham (1996) and Reeves (2000) argued that e-learning presented an opportunity to modify education and make it more accessible and somehow inclusive to all learners. Further, advancements in Machine Learning (Henceforth, ML) and Natural Language Processing (Henceforth, NLP) began to influence and digitize the traditional classroom. Platforms like Moodle, Blackboard, and later, more sophisticated Learning Management Systems (Henceforth, LMS), were designed as AI-powered tools that could provide personalized learning paths, auto-grading systems, and virtual assistants in order to guide learners in their courses.

Despite this progress, challenges took place. Some platforms such as Moodle were enabled for the delivery of content, but lacked adaptability features. Infrastructure gaps, "incomplete coverage" of digital resources, as well as faculty staff training hindered a

possibility for equitable access (Aishwarya Suraj Ray, 2024; Amelia & Suranto, 2025). As Amelia and Suranto (2025) asserted, LMS offered a high level of accessibility to learning materials, yet there could be technical problems related to server disruption or user unfamiliarity. Subsequently, the COVID-19 pandemic prompted its adoption, revealing both its potentials and limitations. By way of illustration, while Moodle may provide some access to learners in distant places, the quality they could demonstrate may vary significantly across different regions (Jabbar Alkubaisi et al., 2021).

To distill the essential points on this era, it represents a critical occurrence in the development of Higher Education. Investing in technologies such as ML and NLP would help e-learning-based inventions to alter the way knowledge can be disseminated and consumed, thereby making current classrooms more flexible, inclusive, and learner-focused.

#### 1.2 Generative AI

The arrival of various AI technologies precipitates a multitude of changes, with one such a consequence being the increased demand for Gen-AI tools. The latter, occupying a notable presence in Higher Education, can be perceived as a source of both fundamental opportunities and significant challenges.

Such innovations, which facilitate content creation by means of sophisticated algorithms, acquired epochal popularity across academic institutions worldwide. Gen-AI tools such as ChatGPT, DeepSeek, and others are now being used to assist language learners in a wide range of tasks, encompassing conducting research and written assignments. Nevertheless, this adoption could furnish continuous debates on its appropriateness, ethical use, academic integrity, as well as the role of teachers and learners (Chan & Hu, 2023). Therefore, institutions might be undertaking steps towards balancing the positive potentials of Gen-AI to boost its efficiency with the requirement to address its ethical concerns.

#### 1.2.1 Definitions of Generative AI

The availability of large amounts of data, known as big data, paralleled the outgrowth of AI systems that are able to learn and adapt to new challenges. In a means or another, it reinforces today's Gen-AI. Considering this factor in view, familiarity with AI-specific lexicon is of a necessity.

In order to comprehensively grasp the construct of Gen-AI, it is analytically fitting to detach the term generative and define it first. Its root verb is "to generate," bearing the same meaning as "to create by means of a defined process: produce" or "to procreate," as found in Merriam-Webster dictionary. To expand its scope to this particular context of study, it may denote the act of endowing novel content through a process of synthesising from large quantities of information. As previously defined, AI encompasses the several methods used by machines to resemble human abilities such as logical reasoning, planning, and decision-making (Lapata, 2023). Ergo, it includes various sub-fields, each with its own techniques such as ML and NLP (Dwivedi et al., 2023). Synthetically, Gen-AI is an AI with a particular ability to create. while AI can idenify re-occurring patterns from large datasets, Gen-AI can create new data from existing ones.

To show a stand, Gen-AI represents a subset of AI with a particular focus on creating models able to generate new production which could be texts, images, videos, or even music. However, the present study acknowledges and addresses only one type of generators which is text generators.

#### 1.2.2 Mechanisms of Generative AI

From a technical perspective, Gen-AI uses ML models, more specifically deep learning models and neural networks, in order to simulate human-like learning and decision-making processing (Lim et al., 2023). These models encode relationships within large

amounts of data to use them at first in understanding user's prompt, which can be a request or a question, and then to produce relevant responses.

As posited by Goodfellow et al., (2014), a leading researcher in this domain, Gen-AI is constituted not by a single logical relation, but by a type of ML models engineered to produce new accumulations of data based on patterns and structures deduced from existent ones. These models are capable of explicitly estimating the probability distribution as well as generating new samples that bear a resemblance to the original data (Chan & Hu, 2023). That is, the design of the model is intended to both understand and identify inherent patterns or distributions within a specified sequence of data. Once these pattern-recognition mechanisms are completed and mastered, a given model is in a position to engender new data with similar characteristics.

To underline, a "Generative Model" is an expression suggested by the researchers of the present study to refer to the various techniques that constitute a certain Gen-AI. To explain, a generative model, unbounded by naming its particular techniques, is trained on a diverse sources of data across the internet, and it has the potential to statistically identify, predict, and then replicate the frequent patterns in datasets. That being so, this model produces outputs that can copy human-created content based on its inherent capabilities of predictability, such as predicting which words are frequently used in a sequence with certain words. A generative model therefore is an algorithmic representation of a data-generating distribution, learned through some corpus training.

# 1.2.2.1 Variational Autoencoders

A key mechanism in Gen-AI is Variational Auto-Encoders (Henceforth, VAEs), which focuses on learning compressed representations of data in a latent space as well as generating new data to mimic the distribution in datasets training. Plainly, it is a type of probabilistic graphical model. VAEs consist of an encoder that relates input data like images

or texts to a possible space or an attribute, and a decoder that re-constructs the data from it (Chan & Hu, 2023; Kingma & Welling, 2022). Broadly expressed, VAEs can generate new content that aligns with the patterns learned during the phase of training.

#### 1.2.2.2 Generative Adversarial Network

Another mechanism in Gen-AI is adversarial training, as known by Generative Adversarial Networks (Henceforth, GANs) which is consisted of two neural networks, a generator and a discriminator. The generator one creates samples based on syntheses, while the discriminator one evaluates their authenticity by identifying which one is more likely to be real and which one is generated data (Goodfellow et al., 2014). Through this kind of circled training or competition between the two, the generator may ameliorate its ability to produce more sound-believable outputs that can "fool" the discriminator. Therefore, this continuous interaction plays a major role in refining the quality of the generated content over time.

#### 1.2.2.3 Transformer

To articulate it straightforwardly, transformers represent a type of models introduced in the paper of "Attention is All You Need" of Vaswani et al., (2017), which modernized the field of NLP. Different from the traditional networks, these transformers use a mechanism called "self-attention" in order to process the input data simultaneously, and this makes them efficient in the presence of large datasets (Hashana et al., 2023). That is, transformers gain their strength from being able to process whole sequence of words all at once in a prompt, not one after another.

Models like OpenAI's Generative Pre-trained Transformer (Henceforth, GPT) primarily relies on the transformer architecture in order to generate coherent and contextually relevant responses and make the process streamlined for many tasks such as completing texts, summarizing, translating, and even creative writing (Ray, 2023). Differently explained,

"Generative" stands for mimicking human responses based on statistics, "Pre-trained" corresponds the large data used. In this case, the present study may propose an example. Given the sentence "the sky is...," a generative model may learn to finish the sentence with the word "blue" as the next word to be calculated and predicted in this sequence. Repeatedly mentioned, it learns statistically based on probabilities. As for "Transformer," it conveys the neural network architecture used, processing words in relation to all other words in a sentence in order to leverage context-aware and meaningful outputs via the previously explained mechanism of attention.

To add, another feature of transformers can be its capability to be "fine-tuned." In specific tasks, they can be adjusted to produce highly specialized content aligned with user's preferences (Ray, 2023). Alternatively elucidated, fine-tuning can be achieved by training the model using Supervised Learning and Reinforcement Learning from Human Feedback (Henceforth, RLHF) (Albadarin et al., 2024; Ouyang et al., 2022). Therefore, it involves human trainers giving explicit instructions, comments, and ratings for Gen-AI outputs to help and guide the model meeting user's expectations of conversational exchange and contributions. As a closing statement, transformers symbolise the characteristic that enabled Gen-AI tools to remodel the field of AI.

# 1.2.3 Generative AI Tools in Higher Education

As Gen-AI tools such as ChatGPT and DeepSeek are re-orienting the practices of academia, a clear understanding of their particular pros and cons becomes a requirement. Therefore, the present section would pave the way for how could these emerging tools have implications for learning, teaching, and ethical engagements.

# 1.2.3.1 ChatGPT

ChatGPT, developed by the company of OpenAI, is a sophisticated NLP model based on the GPT architecture. Since its official launching on November 30,2022, ChatGPT gained

a widespread attention, especially for its adoption in Higher Education. To add, it belongs to the family of GPT models, which emerged with the accomplishment of GPT-1 in 2018. Over time, GPT models became more advanced, with GPT-2 released in 2019 and GPT-3 in 2020. Each emerging model of these had more parameters and improved language processing capabilities. Currently, it is settled on GPT-3.5 and GPT-4, disciplined on larger datasets, with enhanced features (Wu et al., 2023).

After having a brief record of its family launching, it is necessary to articulate its definition. Fundamentally, it defines itself as follows:

ChatGPT is a large language model trained by OpenAI. It is designed to generate human-like text based on a given prompt or context. It can be used for a variety of natural language processing tasks, such as text completion, conversation generation, and language translation (As cited in Baidoo-Anu & Ansah, 2023).

Following this account, ChatGPT is a virtual intelligent chatbot which displays human-like responses to a wide range of text-based inputs. It is also trained on an extensive collection of digital corpus, including books, articles, and websites, allowing it to understand user's input and to bring forth outputs accordingly (Crawford et al., 2023) and maintain coherent and contextualized conversations that could delve into a multiplicity of topical areas (Wu et al., 2023). That is, its self-generated patterns help unfolding interactions with users, irrespective of their field of expertise (Sakirin & Ben Said, 2023).

With an estimation of 120 million monthly active users in the first three months of its public availability, ChatGPT exceeded other applications with an approximation of 13 million daily access (Meyer et al., 2023; Rudolph et al., 2023). This remarkable achievement can be attributed to the specific characteristics including the user-friendly interface it has offered. Therefore, ChatGPT can be a useful online wizard for having an all-encompassing understanding of varied and complex issues using plain and understandable language. As a

whole, ChatGPT represents an AI materialisation that contemporary territory education is witnessing, restating the entailment of how how could humans interact with technology.

#### 1.2.3.2 DeepSeek

In the late of December, a new-found competing model to OpenAI's GPT-4 was released: DeepSeek-V3. This Chinese contribution to Gen-AI acquired its hype only in early 2025 after approximately two months of its launch. Moreover, it invested on about \$5.6 million (DeepSeek-AI et al., 2025), one-fiftieth the cost of other similar models. Then, on January 20, the company unveiled DeepSeek-R1, a new set of reasoning models that achieve comparable performance to OpenAI's o1 model.

DeepSeek, the recent one, uses modern Gen-AI techniques, including a Mixture of Experts (Henceforth, MoE) architecture and RLHF, to produce high-quality outputs. As Mercer et al. (2025) stated, DeepSeek's innovative use of MoE, an enhanced neural network architecture, allows it to boost computation resources while also maintaining competitive performance with current leading Gen-AI models like ChatGPT. That is, this level of efficiency makes DeepSeek a cost-effective alternative in the Gen-AI field.

Principally, DeepSeek was intended to prioritize undertakings that are technical and somehow analytical such as coding, and mathematical problem-solving (Jahin et al., 2025). Still, it can be adopted for writing tasks due to its ability to generate relevant content. By means of evidence, a study by Aydın et al. (2025) compared DeepSeek with other Gen-AI models, such as ChatGPT, and found that DeepSeek excels in producing high-quality academic content with semantic similarity to original texts. Overall, the existing literature recognizes the potentiality of DeepSeek in modernizing current AI-based practices.

# 1.2.4 Benefits of Generative AI on Learner Learning

Gen-AI is a changing power in Higher Education. Its varying tools offer a wide range of advantages for its users such as personalized learning and encouraging creativity.

Therefore, as institutions continue to explore and adopt these technologies, they have the opportunity to expand or delimit the educational experience for learners and teachers alike based on their preferences.

# 1.2.4.1 Personalized Learning

Large-scale implementations of personalized learning were past times constrained by major technological limitations. However, today's Gen-AI represents a step in the right direction in terms of automating several features in personalized learning. To expound with specificity, the latter's quality is deeply rooted in educational theory. Confucius's principle of teaching learners based on their aptitude as well as John Dewey's advocacy to cope with the various individual differences settle this stage for more flexible, learner-centered instruction (Wei et al., 2025).

What is remarkable throughout the literature is that Gen-AI tools excel at facilitating and delivering personalized content. As per Crawford et al. (2023), heightened stress levels and peer pressure among university learners may lead to a contributing environment for the use of such tools. As a recommendation, these tools can compensate for learning opportunities as they adjust content to individual learners' needs.

A powerful application of Gen-AI is its ability to support adaptive learning strategies, as a part of personalised learning. Adaptive learning involves customizing instructive content and methods based on individual learner profiles, including their strengths, weaknesses, and preferences. Gen-AI tools can accordingly intensify adaptive learning by automating personalized question prompts and feedback mechanisms. They can be used in a position to bring forth Socratic-style questions that guide learners, for example, during their problem-solving processes. As researchers observed, Gen-AI "can simulate the process of Socratic questioning by automatically generating targeted questions based on learners' responses and performance, prompting them to engage in deeper thinking and analysis" (Wei et al., 2025,

p.4). Thus, they deepen learners' understanding of the subject matter or the material, enhance their engagement level, and encourage them to improve their high-order thinking abilities.

To furnish a validation, a thematic analysis on ChatGPT use revealed its role in providing comprehensive responses to topic-related questions, particularly for learners who need quick refreshers or struggling with complex theories (Fuchs & Aguilos, 2023). Likewise, this kind of assistance may be accompanied by generating tailor-made study materials, quizzes, or more detailed explanations for the sake of making learning more accessible and effective for different needs of learners (Alasadi & Baiz, 2023). Lee (2024) also evidenced through their investigation the ability of ChatGPT to stimulate interactive engagement beyond supplied textbook pedagogy. These tools therefore help learners simplify complex subjects and boost autonomous learning.

To sum up, Gen-AI tools can act as on-demand tutors. They could take the role of a human instructor when it comes to providing additional learning opportunities, helping learners to independently clarify and understand complex concepts, and providing adaptive learning strategies. This judgement thusly aligns with the findings that such tools reduce dependency on instructor availability.

# 1.2.4.2 Promoting Creativity

Contrary to concerns about violating originality standards, Gen-AI acts as a catalyst for creativity in various ways within the field of Higher Education. Learners may use these tools to investigate interdisciplinary ideas, bring forth research topics, and polish their writing styles (Razmerita, 2024). Some faculties reported that AI-generated simulations and case studies would enrich classroom discussions through helping learners to analyze hypothetical scripts and apply theoretical knowledge in classroom setting (Bae et al., 2024).

While Gen-AI shows promise, learners' attitudes may vary. A focus-group research study revealed that learners with higher AI-literacy viewed these tools as collaborative

assistants, whereas those with limited understanding verbalized their fear (Marrone et al., 2022). Despite concerns, they might believe that these tools could not be the same as human creativity. This primarily stresses the irreplaceable value of human cognition.

In brief, as teachers navigate this shift in different educational practices in Higher Education, there should be an articulation for fostering an environment where AI-based tools support the assorted learning experiences.

## 1.2.5 Limitations of Using Generative AI

In spite of its considerable potential, it is necessary to address possible limitations in order to fully understand the role of Gen-AI tools and influence on academic matters. These limitations could include technical challenges, disclosing learning processes, and academic integrity issues.

#### 1.2.5.1 Technical Limitations

Gen-AI tools frequently produce plausible but factually incorrect or non-sensical outputs called "hallucinations." These errors therefore are particularly problematic in technical fields where inaccuracies could lead to serious misunderstandings (Ogunleye et al., 2024). For example, ChatGPT may generate incorrect or flawed explanations that require careful validation by users (Scholl & Kiesler, 2024). A lack in transparency in AI decision-making further complicates trust in its outputs (Michel-Villarreal et al., 2023).

Moreover, Gen-AI tools often reproduce biases that are already present in the training data. Their outputs consequently could under-represent some minority perspectives or may imply or even reinforce harmful stereotypes. For example, AI-generated content may perpetuate gender, racial, or cultural biases. It would affect the inclusivity of educational materials (Britland, n.d.). In disciplines like healthcare and law, such biases could propagate misinformation or unethical recommendations if unchecked.

Moving forward, AI research and development should focus on addressing these issues through innovative solutions that maximise the functionalities of these tools and help learners consider their learning practices.

# 1.2.5.2 Impact on Learning Processes

Over-reliance on Gen-AI may hinder the development of critical thinking skills of learners. Some studies such as of Lee et al., (2025) suggested that learners may show a superficial engagement with materials when Gen-AI could provide ready answers and reduce learners' perceived efforts for critical thinking. Gonsalves (2024) also emphasized that the frequent use of these tools could make learners prioritize product over process and reduce opportunities for learning through trial and error. That being so, these tools could undermine the required intellectual engagement for assessments.

# 1.2.5.3 Threats to Academic Integrity

The challenges posed by Gen-AI tools are not simply technical; they can be fundamentally ethical. They could threaten to compromise academic integrity by facilitating unethical behaviors. Several studies such as of Michel-Villarreal et al., (2023) and Ogunleye et al., (2024) indicated that these tools present challenges to academic integrity since they can be used to automatize written assignments, essays, and research papers, and this, in turn, could raise concerns about the genuineness of learners' contributions. Similarly, Bittle and El-Gayar (2025) asserted that AI-generated content can be misused when it comes to assessments because it can not be traced easily. As a "ghost" written production, it may complicate detection for teachers and raise authorship concerns. Summarily, whatever academic misconduct of learners, it violates the conventional standards of academic integrity and urges them to deviate from the learning process.

#### Conclusion

The present chapter reviewed AI as both a concept and a field of research, and outlined its evolution throughout the years as it shaped Higher Education. After that, the discussion turned to Gen-AI, with a particular reference to its four mechanisms. Subsequently, the chapter was concerned with two of the most popular tools of Gen-AI. They were intended to be contextualised within Higher Education as a basal measure for understanding their possible educational outcomes. As these innovations, ChatGPT and DeepSeek, touch upon the frontiers of personalised learning and creativity, universities could be confronted with a compass of challenges that targets technical restrictions, learning processes, and most importantly, academic integrity. Synthetically, this chapter cautioned against a passive reliance on Gen-AI and emphasised the importance of human touch in cultivating an ethical reasoning and an effective learning.

Progressing from this investigative promise, the following chapter will tackle the second variable, academic integrity, with an aim for providing a comprehensive account on its six core values in relation to Higher Education. Then, shifting to possible manifestations of academic misconduct. Moving forward from this review, outlining how could written assignments of EFL learners reflect an effective learning process and abidance to academic integrity.

# Chapter Two: Academic Integrity of Higher Education in the Era of Generative AI Tools

Introduction	51
2.1 Academic integrity	51
2.1.1 Definitions of Academic Integrity	52
2.1.2 Core Values of Academic Integrity	56
<b>2.1.2.1</b> Honesty	57
<b>2.1.2.2</b> Fairness	59
<b>2.1.2.3</b> Trust	61
<b>2.1.2.4</b> Respect	65
2.1.2.5 Responsibility	68
<b>2.1.2.6</b> Courage	71
2.2 Academic Misconduct	73
2.2.1 Plagiarism	75
2.2.1.1 Traditional Means of Plagiarism	76
2.2.1.2 Digital Plagiarism	77
<b>2.2.1.3</b> AI-giarism	77
2.2.2 Contract Cheating	79
2.2.2.1 Commercial Outsourcing	80
2.2.2.2 Collusion	81
2.3 Written Assignments in Upholding Academic Integrity	82
2.3.1 Definitions	82
2.3.2 Written Assignments as an Assessment of Learner's Learning	84
2.3.4 Expectations of Original Productions	85
	0.7

# Chapter Two: Academic Integrity of Higher Education in the Era of Generative Artificial Intelligence Tools: Reviewing the Fundamentals

#### Introduction

Drawing on some philosophical insights, religious frameworks, and multi-national literature, this chapter is intended to provide a review on the fundamentals of academic integrity as a cornerstone of educational practices. It will also elaborate on some common academic misconducts that could be facilitated by the increasing integration of Gen-AI tools into Higher Education, and will definitely conclude with learners' productions as a means to demonstrate and secure core values of honesty and responsibility.

# 2.1 Academic integrity

Each generation of technologies for text production and content dissemination is typically accompanied by a new fit of ethical considerations about authenticity, authorship and textual incorporation. Point in time, researchers have argued that the very notion of the copyright arose with the introduction of printing press, when the unlimited distribution of low-priced texts challenged the English publishing industry (Rose, 1998). By the end of the twentieth century, concurrent with the arrival of the Internet, there was a related displacement of interest from producing texts to text producers and reproducers. At this juncture, some figures remarked that while writers and poets borrowed from others, it was the quality of the text that mattered (Eliot, 1920). In contrast, today's discussions about texts' borrowing in relation to academic integrity focus on the individual who is committing the borrowing. That is, the focus is on the morality and behaviour of the person who borrows.

The democratising influence of the rise and proliferation of the Internet has complexified the intertextuality practices in often contradictory ways. With words, ideas, and information available at the click of a button to any Internet-connected writer, the circulation

of intellectual knowledge increases. Not to mention, the emergence of Gen-AI tools that has engendered a crisis of definition and practice in academic integrity. Conventional, ethical frameworks that praise originality, authorship, and prohibitions against plagiarism, are gradually becoming constrained as AI-produced texts mislead academicians when it comes to human and algorithmically-synthesised contributions.

The integration of Gen-AI into Higher Education is not merely a technological displacement or reaction to current societal trends but also a pedagogical one. Using Gen-AI to guide learning based on each learner's needs would help them stay involved. Yet, this means that educational institutions need to rethink of the way they teach and assess their learners. Therefore, the focus is shifting toward building digital literacy among learners and faculty staff to ensure they can evaluate AI-generated outputs critically and encourage the use of these tools ethically and effectively for academic growth.

# 2.1.1 Definitions of Academic Integrity

Academic integrity, in its current formalized form, has its genesis in past educational ethics and institutional practices that evolved and elaborated over centuries. While grounded in classic scholarly traditions that valued honesty and intellectual faithfulness, its modern contours have arisen out of distinct historical phases patterned on academic trends, and key contributions of academicians.

The antecedents of academic integrity can be glimpsed in the eighteenth-century US Academic Codes of Honour, where learners themselves regulated their behaviour through idealized beliefs of duty, pride and character (Gallant, 2008). These codes prioritized individual reputation over institutional control or policing, and framed integrity as an individuated virtue rather than a system-oriented standard. To clarify further, academic integrity was linked purely to the status and superficial appearance of an individual's upright

character. Whatever acts of academic wrongdoing were committed in order to protect one's good name and image at the time were accepted as a necessary means to an end. However, during the second half of the 19th century, universities began to institutionalize integrity as institutional reputation gained currency (Gallant, 2008). That is, accountability was devolved from individuals' reputation to the name of their academic community, when academics were expected to teach and pursue original research.

As this brief record might suggest, the term academic integrity is a fairly recent one, with the first documented use being in William Bowers's dissertation of 1964 (Jamieson & Moore Howard, 2019), and entered the consciousness with Donald McCabe's research that led to the initiation of the International Center for Academic Integrity (Henceforth, ICAI) (Aronson, 2024; Gallant & Rettinger, 2022). Since then, it gained a widespread use, and presented a birth of contemporary research agendas and practice of academic integrity. McCabe's writings also were a stimulus to further empirical research of others, and distinguished academic integrity as a moral virtue and a procedural criteria, which nowadays includes honesty in research and scholarship, proper attribution of ideas, and avoidance of unfair advantages.

Early definitions of the concept focus on a narrow rule-keeping, but contemporary interpretations are more concerned with the pure morality in the search for truth, as proposed by Aronson (2024), "uncorrupted moral virtue in relation to truth, uprightness, honesty, and sincerity in the pursuit of research, education, and scholarship" (p.2). This progression, as well, mirrors arguments around whether textual errors such as unintentional plagiarism are ethical lapses or pedagogical failures. Nonetheless, updated codes, such as of the European Charter for Researchers, at present embed integrity within broader research ethics (European Commission, 2005), which enshrines a set of principles that define roles, responsibilities and rights of parties and supports excellence in research and innovation across Europe.

The conception of academic integrity is particularly problematic, as it is vulnerable to differing interpretations, and after having a brief record of academic integrity, a definition of which is particularized to the context of the present study is needed. Correspondingly, as its name suggests, it is related to the community of academia, therein it governs and regulates the conduct of scholarship, research, and education. Meanwhile, "integrity" is one which is decidedly challenging to be delimited in this particular context, and this is proved by the difficulty in finding synonyms or equivalents that bear its connotation to the full. The commonly held substitutes to the aforementioned term are soundness, honor, and trustfulness, yet they can be in use only in very specific cases.

In English language, integrity is frequently reserved as a synonym for honesty. However, by meaning, it conveys elements that extend beyond this proximate implication (Macfarlane et al., 2014). Addedly, most of the current definitions in standard dictionaries embrace the view of wholeness or assimilating disparate parts to make one genuine self, which was supported in its Latin beginnings, "integritās" from "integr-, integer" meaning "entire" or "complete," as accepted in Merriam-Webster Dictionary. That is, integrity is a word that cannot not be easily assigned or traduced across languages, due to the lack of an exact equivalent in other languages.

Preferably, academic integrity can be more comprehensible when it has real-life quality or an actual use than if it is in terms of its ideas. Although it is, as an expression, often mentioned throughout the existing literature, its definition, the extent of its application, and how it can be measured or encouraged remain a subject of considerable debate (Jamieson & Moore Howard, 2019). However, it can be encased, in the present review, as the act of conveying ethics within academic contexts.

There is no uncertainty that any educational initiation frames and declares what constitutes academic integrity within the confines of its policies and system. That is, each

institution supervisors the manner through which academic integrity is viewed, conveyed, and embedded within its educational practices (Bretag et al., 2011). In doing so, it manages the conventional three-component construction of academic practice which are teaching-learning, research and service.

Academic integrity provides a structure wherein a collection of qualities serves as a central pillar. Some available contemporary scholarship precised academic integrity as "a set of ethical ideals and values that guide the behavior of individuals in academic and educational settings" (Ganguly & Pandey, 2024, p.28). The provided definition extends to cover "trustworthiness, fairness, and a commitment to upholding the highest standards of ethical conduct in the quest for knowledge, learning, and research" (Ganguly & Pandey, 2024, p.28). Some other scholars argued that academic integrity could be understood to function as "the cornerstone of an individual's moral character and their approach to scholarly endeavors" (Petrushanko et al., 2024, p.243). This orientation punctuates that academic integrity is not just an accumulation of institutional norms, but is a contemplation of and an expression of some personal moral evolution. Therefore, it mirrors the moral quality that learners arrive with to institutions of Higher Education, and the letter is required to ameliorate for them over the span of their academic years and beyond.

To resume, academic integrity symbolizes the underlying ethical values and professional standards, and more than that, it enforces engagements adjacent to preserving individuals' intellects, and adhering to ethical research practices. Therefore, safeguarding academic integrity can be a matter of compliance with institutional policies and legal requirements, but, what is more, it considers ethical motives.

## 2.1.2 Core Values of Academic Integrity

After going through a set of definitions of academic integrity, one might still questioning about its constituents. It lies at the heart of ethical scholarship, serving the moral grasp that guides invention, dissemination, and evaluation of knowledge in systems of education worldwide. As delineated by Vlasenko et al., (2024), "the values of academic integrity are the moral guideline that reveals the latest ethical demands of society and regulates the educational and scientific activities of all participants in the educational process" (p.785). In other words, the academic globe is continuously re-evaluating, and accordingly, accommodating the ethical imperatives adjacent to society's preferences in order to handle emerging challenges and to corroborate its relevance and reliability. Therefore, assuring the being and abidance of academic integrity fits as a dynamic operation that encompasses multiple values.

By definition, academic integrity is referred to as the basis and reference point of Higher Education where it puts more emphasis on conducts that are courageously a consequence of values of honesty, fairness, trust, respect, and responsibility in the intellectual line of work (International Center for Academic Integrity, 2021). Absent these morals, the efforts of teachers, learners, and researchers could be, alike, rendered devoid of value and credibility.

#### 2.1.2.1 Honesty

Honesty is a first and primal component of integrity. It is the base which other values of integrity rest upon (Bretag, 2013). It occupies the midpoint between personal ethics and the standards of an educational institution. It thusly mandates a truthful representation of one's product as well as proper citation of others' efforts. Bretag (2016) argued that honesty underpins the intellectual rigor while the academic misconduct corrupts the knowledge production.

Religious literature offers multiple conceptualizations of honesty. conceptualizations, in turn, convey ethical frameworks. In often Islamic ethicalities, honesty at its purest and most basic level is "the correspondence between speech, action, and intention and purpose" (Fazeli, 2018, p.17). Beyond plainly speaking the truth, this wholelife view embraces the consistency of one's expressed values and actions with their unsaid intentions. The Islamic mystical research further presented a fairly in-depth analysis and description of honesty as being the "foundation and basis of other virtues" with regard to some other aspects (Fazeli, 2018, p.17). Such a differentiation suggests that the most virtuousness may not be accomplishable without a solid grounding in honesty, and that honesty is not a mere one virtue among many, but a prerequisite for ethical maturity. Furthermore, this perspective furnishes a particularly elaborate understanding of dishonesty. In particular, it recognizes self-deception as a distinguishable manifestation of dishonesty that justifies additional attentiveness. All-embracing, the focus of this perspective is on the agreement between one's thinking, wording, and deeds, and provides a well-rounded and somewhat cross-cultural framework for the study of honesty.

Moreover, some profound historical roots of honesty can be found in early philosophical interrogative sentences and dialogues. In the Socratic lineage, for example, honesty was a identified as a fundamental feature of the "elenchus," an inquiry-based method

that relied upon intellectual honesty of participants. Applied by Socrates, their interlocutors were challenged to question their personal beliefs (Fiore, 2020). That is, the Socratic account views honesty not just as a matter of speaking the truth, but as a genuine-mindedness to examining one's own ignorance and former conceptions.

Nevertheless, modern-day philosophical research into what constitutes honesty is expanded from its classical foundations. For instance, research inspired by Confucianism contributed to the current understanding of honesty, particularly in the linguistic context of AI alignment (Yang et al., 2023). Honesty as a virtue requires not only having a truthful communication but also an appropriate mention of one's limitations, which is a principle that meaningfully can be translated to both human and artificial agents. Thence, ensuring the authenticity of all pieces of a given work or even a simple task is a communicative commitment to honesty; this could be done by assigning any material used in the process of producing the final product, or simply acknowledging one's limitations and mistakes without improvising.

As noted in discussions on academic integrity, honesty is a noble human value. It underpins academic writing, particularly in accurate presentation of data and citation patterns, through which an author proves their academic skillfulness and believability (Panjaitan et al., 2024). In plain language, what appoints an honest submission is being pure, sound, and ethical on how to produce the entire academic work. Thus, honesty is the linchpin of academic integrity, involving a dedication to truthfulness and transparency in all academic endeavors.

Notwithstanding, the traditional conceptions of honesty are being apposed by some newfound challenges as AI is introduced into different academic processes. For example, some recent scholarship lined that "AI-driven text generators, automated proofreading services, and intelligent editing tools now permeate nearly every phase of academic writing,

from conceptualization to publication" (Sriram, 2025, p.59). These technologies therefore necessitate a change-based activeness in order to define what characterizes an honest attribution because the boundaries between original and assisted work are becoming lacking.

Additionally, the ethical construct of AI in academic writing details concerns such as: Plagiarism and authorship disputes, accuracy and reliability of AI outputs, the necessity for clear disclosure of AI involvement, the potential erosion of critical thinking skills, inherent biases in AI-generated content, and privacy concerns related to online platforms (Sriram, 2025, p.59).

Given these problems, technological expansion requires current conceptions of honesty to evolve in order to account for the new forms of potential misrepresentation.

From the perspective of the researchers of the present research study, honesty is polar in upbringing an environment where learners and teachers have open conversations about academic work, and inspires learners to learn from their mistakes and to understand the standing of ethical behavior in academia. Consequently, it is fair to say that honesty is about pursuing truthfulness and legitimacy in whatever academic effort, whether in research, writing, or assessment. In such cases, it supports the principle that one's production, whether it be a research composition, an examination, or even a collaborative work, it should be original and genuinely correspond each individual's comprehension, involvement, and skills.

#### 2.1.2.2 *Fairness*

Socially speaking, harmonious societies, where individuals are regarded and dealt with respect and dignity, are built on the cornerstone of fairness. In this, Hooker (2005) sought fairness as an appropriate impartiality, and linked it to consistency, equality, and justice. They also argued that fairness is not merely about equal treatment, but also about recognizing the needs and circumstances of others. Correspondingly, fairness is a

consequence of the just and impartial decisions and actions. In different wording, fairness is a principle of justice that reinforces equality and demonstrates a distribution of opportunities and resources that benefits even the least advantaged members in a given society (Duff et al., 2024; Rawls, 2003). To add, philosophers like Aristotle previously contributed to this present-day discourse (Hardie, 1980), when they described the notion of fairness as a proportional or a relative justice in cases where individuals receive the outcomes that match their actions or contributions.

From a psychological view, fairness somehow is also linked to the conceptuality of equity and justice. Adams' Equity Theory (1965), for example, speculated that individuals measure fairness based on their expected balance between an input which can be their effort or skill, and an output which can be rewards or recognition compared to others. Accordingly, the nature of fairness can be perceived subjectively based on perceptions, which may vary depending on the different experiences and expectations of each individual (Duff et al., 2024). As a result, this subjectivity in judgment on fairness may influence individual's willingness to perform, their level of satisfaction, and the nature of their interpersonal relationships.

When it comes to the purely academic context, fairness pertains to consistency, equitable treatment, and impartiality (International Center for Academic Integrity, 2021). The value of fairness in this particular context implies that all individuals, engaged in the process of education and research, should be treated fairly and without bias (Macfarlane et al., 2014). Likewise, Bretag et al., (2011) corroborated the importance of fairness in their expression "fairness, integrity, and rigor are given priority in teaching" (p.1). That is, fairness in the classroom becomes evident through transparent grading criteria, unbiased assessment practices, and an inclusive learning environment where all learners' voices are heard and respected, and this chiefly means securing that recognition, assessment, and evaluation are based on virtue, without discrimination or bias.

Pursuing that, fairness in academic integrity accords learners' motivation and engagement in genuine learning and ethical practices. When involved in a fair process, learners might recognize the importance of academic integrity as a means of assuring that they are assessed and awarded fairly on the basis of their genuine knowledge, skills and performance. That is, perceptions of fairness in assessments and grading may have effects on learners' attitudinal beliefs about learning and their willingness to adhere to ethical standards (Resurreccion, 2012). Similarly, assessments that are integrity-driven also provide teachers with a firm measure of each learner's understanding in order to provide the needed assistance and guidance for future betterment.

As the current study, fairness is conceived as a moral imperative and a pragmatic necessity that is rooted in differing frameworks that prioritize equitable opportunities and outcomes. Complementary to this, when it comes to academic integrity and Higher Education, fairness involves ensuring that all learners have equal opportunities in order to succeed without resorting to unethical practices. Thus, a fair environment occurs when there is a level playing field which provides all learners with equal possibleness to proceed in the learning process, and this includes enforcing policies that foreclose cheating, plagiarism, or other forms of academic misconduct.

#### 2.1.2.3 Trust

Academic integrity, which is in essence linked to trust, ensures that the attainment of knowledge takes place in an ethical way; it creates fairness and equity for learners while enriching their university pedagogy (Miles et al., 2022). Therefore, it reinforces a collective social trust in relation to tertiary education. Added to this, trust is a corollary of honesty; it is augmented on the belief in honesty, competency, and benevolence of institutions with their members. That is, academic integrity relies on a grasp of trust, through which members of the

academic community can have assurance in the dependability and genuineness of the work being produced (Fishman, 2014), and this also aligns with the view of Newton (2018) who posited that trust between learners, teachers, and institutions facilitates resource sharing and mentorship.

Along the same line, trust is perceived as a sort of moral duty or obligation that is a cardinal aspect in the social contract between the members of academia (Baier, 1986). Some scholars like Callahan (2004) have discussed that any possible violations or irregularities regarding the value of trust can decrease the credibility of the institution or probably erode the public certainty in the potentiality of the educational system.

When it comes to trust as an organizational behavior, it is recognized as what boosts the effectiveness and efficiency of academic institutions (Dirks & Ferrin, 2001). Scholarly inquiry such as of Miles et al., (2022) conveyed that strict standards of disciplinary integrity could nurture the relationship of trust between educational institutions and society at large. That is, trust is seen as an integrity marker and a compliance accelerator in whatever educational practices. Related studies such as of Mayer and Gavin (2005) also showed that when learners and faculty members trust their institution as a whole, they are more likely to pursue ethical practices, follow the policies, and have a contribution to the overall performance and success of the organization.

Some educational literature indicated that an important element of learners' learning and their academic achievement could be their conveyed trust. Identical research, such as of Bryk and Schneider (2002) and Tschannen-Moran (2004), demonstrated through their findings that when learners trust their teachers, they are more likely to engage in a deeper learning continuum, search for help when needed, and take some instances of intellectual risks, all of which are deemed as a consequence of academic integrity maintenance.

Addedly to what was conveyed previously, trust can be viewed as a culturally-mediated. Mayer et al., (1995), for example, foregrounded trust as a social feature that promotes environments of collaborations, where academic occurrence can flourish. Trust consequently is a basal for maintaining relationships among learners, faculty, and institutions, and it ensures that interactions take place with shared regard and confidence. A supporting discourse to this would be that of multinational health-care models which identified trust as made from cultural bond, where unsettled groups often favor home-country providers due to common values or language with disregard to whatsoever geographical separation (Metersky et al., 2024). This proves that trust is culturally-dependant, not a universally applied.

Some considerable sociological research set trust as a primal component part of social capital, which is constitutional for the running of educational institutions. Social capital is cited as "the connections among individuals' social networks and the norms of reciprocity and trustworthiness that arise from them" (Putnam, 2000, p.19). Equally, researchers recognized that the high levels of trust among learners, teachers, and administrators encourage a sense of community, boost open communication, and alleviate the exchanging of knowledge as well as resources (Tschannen-Moran & Hoy, 2000), all of which are crucial for compliance with academic integrity.

Trust can be also evident as a pedagogic outcome of role modeling in the context of Higher Education. Research surveying 360 Iranian postgraduate EFL learners found that social trust, as a subgroup of social capital, had a positive impact on their academic performance in relation to both coursework achievement as well as research performance (Moradi Abbasabady & Razeghi, 2024). More significantly, the findings conveyed that building rapport, strengthening intimate relationships, and fostering trust at university settings could result in higher academic achievements. That is, it points to trust as a form of social currency that heightens educational outcomes.

Chinese EFL learners in Higher Education similarly benefited from social support structures that promoted trust. Fu (2023) showed that support from teachers and peers in the classroom assisted against learning burnout, and that academic buoyancy both mediated and moderated this relationship. Marking the differential importance of trusting relationships for populations of vulnerable learners, the study uncovers that social support-structures are peculiarly advantageous for learners with limited English proficiency.

A key part of a constructive interaction is the mutual trust between learners and their teachers. In being so, a Guiding Resource for recognizing "teacher-initiated 'trust moves" in classroom settings offers some possible practicalities in building trust with learners (Felten et al., 2023, p.1). The investigation communicated that trust is largely recognized for its standing in Higher Education teaching and learning, yet it was systematically explored in the literature, particularly for learners from historically eliminated or marginalized groups. Put differently, relationships of trust that encourage learning, belonging, and success are what fundamentally assign the quality of classroom interactions. Whether these engagements take a face-to-face or virtual form, they demand intentional trust-building strategies on the part of teachers.

From a psychological angle, trust can be defined as "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party" (Mayer et al., 1995, p.712). In this sense, it seems to regard an inherent factor of risk-taking and reliance on the trustworthiness of others, which is in particular invaluable in academic environments where learners and faculty must pursue collaborative learning and research. There are also a number of different terms used interchangeably with trust such as cooperation, confidence, and predictability, and this can be a source of

confusion about the nature of trust (Mayer et al., 1995). In the present study, however, these terms are excluded.

From an academic orientation, trust is a multi-dimensional concept that varies considerably with respect to the particular context and situation within which is built-in. It was suggested by some sources like of Hall and McQuay (2010) that trust may have significance in environments that are factored by risk, vulnerability, uncertainty, and confidence. To elaborate, there was traditionally a kind of distinction made between two divisions of trust. The underlying one is trust itself, which can be seen as human-centered and subjective. That is, trust can be understood as the act of someone putting their trust in an object, irrespective of whether the trust is well justified or otherwise (Hall & McQuay, 2010). Trust, therefore, originates from a person or a human-centered perspective.

The other division is trustworthiness, which can be conceived as the hardware and/or software-centered and objective. It could be comprehended as the certainty that a given system will work as it is hoped-for in spite of some environmental disturbances, user and operator mistakes, attacks from adversaries, or flaws in its design and its implementation. While the first is stated as the act, the second is believed as the conviction (Hall & McQuay, 2010). In current environment where academicians find themselves gradually in need to technological instrumentalities that necessitate both the human trust and the technical trustworthiness, this distinction would be especially relevant.

## 2.1.2.4 Respect

Respect is a multifaceted and a context-determined term that varies across philosophical, social, and academic lines. At its core, it involves acknowledging the inherent worth of an individual or a group, but its manifestations and interpretations could range depending on the context of purpose.

In Aristotelian ethics, respect is elaborately attached to the construct of an individualistic worth, referred to as "axia." It was oriented with regard to its opposite, named "contempt." The moral, ideal example of Aristotle, the "megalopsychos," brought about a particular grasp of respect since it prioritized the virtue over the external goods as a reference point to assert one's worth. This visioned representation of respect shows a kind of dislike toward "people who claim superiority on the wrong grounds (their external prosperity and social status)" (Mantzouranis, 2023, p.207) while honoring those people who embody the genuine virtuousness. The megalopsychos also "rejects the self-image these people claim for themselves and refuses to grant them the appraisal respect they are accustomed to receiving, and think they deserve" (Mantzouranis, 2023, p.207). Thence, genuine respect, in Aristotelian terms, is rarely given as what one would expect, instead it is attained through having a true virtuous character and is selectively acknowledged or bestowed based on the moral evaluation.

The Stanford Encyclopedia of Philosophy defined respect as a responsive or adaptable relationship between a given subject and object, which requires attention, deference, and recognition of inherent value. To explain, Immanuel Kant's moralistic philosophy advocated that respect can not be conditional, but rooted in the human autonomy, where individuals could be treated as ends in themselves instead of means to an end (Dillon, 2022). The provided view is known as a part of deontological ethics which contrasts with the utilitarian or appraisal-based respect, which may condition respect on perceived worthiness or communal effort (Subramani & Biller-Andorno, 2022).

Respect is often divided into a behavioral manifestation, which is simply about abidance and following the norms, and an attitudinal acknowledgment, which is valuing others' self-regard. For occurrence, professional respect requires both outward behaviors such as listening to the other party, and internal attitudes like valuing their dignity and

autonomy (Beach et al., 2007; Spagnoletti & Arnold, 2007). Similarly, Darwall (1977) distinguished between the two kinds of respect and brought about a dichotomy illustrated the dual nature of respect; one can be attained while the other one can be imposed. The first is an appraisal respect which unfolds selectively based on one's merits in the eye of others and how people would valuate their qualities, achievements, or character. The second is a recognition respect, which is the inherent worth of personhood as being a morality actor i.e., it is owed to all people by virtue of their humanity and it is the basal entitlement that all persons own.

Interpersonally, respect is not static; it evolves through interactions. Dillon (2022) framed this idea, voicing respect as a way of attention that could necessitate constant consideration, reflection, and adaptation to the needs of others. It aligns with the orientation that respect in educational settings needs active engagement, such as modeling respectful behaviors for beginners or undergraduate learners.

Academically speaking, respect is of a paramount for intellectual properties, diverse perspectives, and the achievements of others. As expressed by Gallant (2008), respect for individuals, for their persuasion, and for the integrity of the academic program may be the essence of academic integrity. It fosters an environment that is characterized by mutual understanding as well as appreciation, where one's ideas can be freely discussed or negotiated. Bretag (2013), in this, detailed that respect can be about accrediting the work of others, upholding their rights, and treating them with dignity. Universities Australia accordingly adopted this formulation, integrating respect as a cornerstone of their Academic Integrity Best Practice Principles (Gallant & Rettinger, 2022). Therefore, they position respect as a basal ingredient of academic integrity rather than an optional or peripheral measure, and convey that when absent this value, actual academic integrity cannot exist.

Respect in academia extends to teacher-learner and peer interactions. When teachers mistreat learners, they endorse a cycle of disrespect, deliberately simulate unprofessional behavior and continuing the incivility (Beach et al., 2007; Spagnoletti & Arnold, 2007). Conversely, respectful mentorship such as valuing learners' autonomy and providing a constructive feedback would enhance the ethical development and reduce the academic misconduct (Cutri et al., 2021).

To put it directly, a consistent inclusion of respect in the early, foundational stages in a given context tells its importance in the educational ethics. Correspondingly, respect can be a discrete action, but it is must be an ongoing commitment that attributes all facets of academic behavior and content.

# 2.1.2.5 Responsibility

Through an academic consciousness, responsibility is circumscribed as the trueness and obligation to act in a way that aligns with the accepted norms of a society, and that are regarded as satisfactory in the persuasion of relevant ethical standards. According to the dictionary of Merriam-Webster, responsibility equates the "moral, legal, or mental accountability." In a parallel modality, the Cambridge Dictionary listed responsibility as the duty to be in charge of something or someone, and clarifying its role as being in a position of governance and supervision. From this, it can be comprehended that responsibility might be a mechanism of regulation within some deterministic frameworks, which consequences in limiting individual's autonomy, while at the same time, it may alleviate the maintenance of social order.

To add, some ethical theories frame responsibility as a response to an alterity, where moral obligations arise from encounters with "the Other." Derrida's philosophical doctrine on responsibility, as an example, was not intended to suggest superiority of individualism.

Rather, it proposed that authentic accountability can emerge through a radical openness to difference or sociability (Hidalgo, 2024).

It is possibly fair to utter that some contemporary scholarships are searching for how the idea of responsibility can be developed in professional contexts. One of the ways in which responsibility is said to manifest itself in such contexts is through adherence to the relevant disciplinary norms, quality standards and ethical codes. That is, it pertains to defending truthfulness, transparency, and answerability for knowledge creation and publication. As an example, Calhoun, through their social guiding particularity, stressed the importance of collective accountability in academic practices, where individuals must be "standing before others and with others" in order to protect the shared intellectual values (Mejía & Garcés-Flórez, 2025, p.3). This bears some similarity to MacIntyre's belief of such practices as being socially embedded activities and requiring commitment to some internal goods like learning and growth (Mejía & Garcés-Flórez, 2025).

As characterized earlier, responsibility in academic integrity is concerned with one's accountability for their choices, actions and outcomes, both in their own work and in their interactions with others. As a recurring theme in the academic literature, it requires individuals to take ownership of their academic production while also adhering to ethical guidelines, contributing to the advancement of knowledge, and reporting violations whenever observed (Bretag & Mahmud, 2014; Fishman, 2014; Kuhn, 2012). On this basis, the responsibility for maintaining academic integrity can be seen as an interdependent stewardship between learners and their teachers.

Still, there is some argumentation on which side would have the primary part of responsibility, learners or teachers. While learners often believing it rests upon them, teachers tend to divide it between themselves and learners. To provide some empirical evidence for this, Zhang et al., (2020) surveyed 1,500 college learners in China in order to

track their sense of responsibility in some aspects, and detected individual responsibility (average score 3.29/5), team responsibility (3.62/5), and social responsibility (3.72/5) as a part of learners' academic roles. To explain, learners associated their meaning of responsibility with personal psychological qualities like super-excellence, wisdom, and bravery, showing that there is a kind of internalization of accountability for their intended goals. In this case, learners view themselves as the direct agents in achieving their success, with individual responsibility being a critical predictor of their actions.

Contrarily, Gourvennec et al., (2024) used a mixed-methods study in Norwegian cotaught literacy classes to elucidate how a shared responsibility between teachers could influence outcomes of their learners. The main percent of responsibility lied in the collaborative efforts between teachers; however, the interview revealed that high-performing classrooms encouraged teachers to delegate some responsibility to learners, such as making them participating in planning, self-assessment, and problem-solving tasks. That is, teachers and learners together can own the learning process.

The ICAI's six core values framed integrity as a non-negotiable duty to oneself and others (Brickhill et al., 2024; Mejía & Garcés-Flórez, 2025). To explicate, ethical responsibility extends beyond compliance to rules; it demands active engagement in saving the integrity of academic practices, such as resisting societal pressing that menace the quality of education. While, legally, responsibility is codified through the policies of institutions and codes of conduct which address academic misconduct, Universities like UC Berkeley, for instance, outlined the consequences of academic violations, and stated that actions that end to having unfair academic advantage must be enforceable through penalties such as grade reductions or expulsion (Academic Integrity | Center for Teaching & Learning, n.d.).

To conclude, responsibility as a core value of academic integrity passes a mere compliance to promoted rules; it requires consistent accountability for one's actions, commitment to maintaining ethical standards, and transparency in terms of decision-making.

#### 2.1.2.6 Courage

Courage, often overlooked but still polar, involves one's willingness to defend what is right, even in the face of hardship or temptations. According to Jagiello-Rusilowski (2017), integrity for learners appears to be purposeful and learnable in terms of being accountable to oneself and others for taking specific moral decisions, rather than in the sense of studying or being aware of moral principles and the instances in which they are violated. This is in itself is personifying the act of being courageous, whether it be resisting fearsome threats or, if necessary, resisting each other. To acknowledge a mistake and to be open-eyed that it may cause dissatisfaction or hurt to others mean to show a level of courage that is comparable to having the power to articulate concerns about some perceived injustices in activities of an administration or an authority.

Through the lens of philosophical theorizing, courage is positioned as a moral virtue fundamental to ethical decision-making. Aristotle's virtue ethics, for example, represented courage as the "Golden Mean" between two extremes of recklessness and cowardice, where one ensues a firmness of purpose to act in conjunction with their values serving one's authenticity, and unimpeded by challenges. To lend credence, MacIntyre's conception of courage also involved following the "Internal goods" of intellectual and collective endeavors like seeking the truth and spreading knowledge, justified even when external pressures could jeopardize these quests. "To be courageous is to be someone on whom reliance can be placed" (MacIntyre, 2007, p.123), and accordingly, courage is of the essence, not manifestly

as a part of individual's character, but also as the quality needed to preserve the characteristic of social unity and community.

Throughout academic scholarship, courage can be said, from dual lenses, a moral virtue and as a behavioral consequence against hardship. Yogerst (2017) analyzed superhero films and identified courage as one of the five essential virtues, with humility, righteous indignation, sacrifice, and perseverance, that characterized the hero's character and profile. Such accounts placed courage not as unconditional braveness but as an intended choice to foreground one's ethicalities in spite of potential risks, which is a repetitive subject in comparative analyses of textual accumulation. Therefore, Santilli et al., (2017) put into practice some related analyses like Latent Semantic Analysis and Latent Dirichlet Allocation to 1199 definitions of courage. These definitions so were classified into different themes, including taking an action disregarding one's fear, having a moral belief, and being a part of social responsibility.

Psychological research detailed courage as a sort of circular interaction and influence between emotional construct, goal determination, and probably risk taking. As indicated by Miron (2019), the Theory of Planned Behaviour, which is often applied in nursing education studies, integrated courage as a learned behavior influenced by common attitudinal norms seen in peer's integrity, and perceived behavioral control in institutional activity.

In the absence of legislation that expressly precises courage, regulative bodies implicitly demand courageous observance and compliance with rules. To explicate, the case of Mohd Zain et al., (2021) in Malaysia, which placed statutes encourage academicians to reports any suspected misconduct or concerns they have, and to do so even when faced by some kind of negative consequence or reprisal. At the core, these legislative acts viewed adherence to rules an ethical act. That is, courage is performative, and it is realized only by doing. In a similar vein, Ukrainian reforms in education, as stated by Kuzmenko (2021),

projected a relation between academic integrity and what is termed "courageous transparency," where a fabrication of data in research is fairly seen as a legal and moral failing. To shorten, it seems that these two examples display how could legal texts codify courage as a procedural requirement, which is a combination of ethical and legal commands.

The ICAI defined it as the engagement to questioning unethical behaviors despite personal or professional hazards. Therefore, courage is a proactive virtue, rather than passive compliance. Yet, courage defies a remarkable definition or explanation, rising instead as a mixture of context-determined virtues.

In general, courage connects between individual ethics and joint ethics, whether through social perception, psychological risk, or legal abidance. Within the context of academic integrity, courage is an imperative that requires institutions to furnish environments where challenging misconducts can be both safe and validated.

#### 2.2 Academic Misconduct

At the heart of Higher Education, a commitment to standards of education and research privileges a premium on conscientious academic endeavour and a fair regard for the efforts and contributions of others. On the contrary, academic misconduct is central and disruptive issue for universities, which are places where learners are supposedly going to be prepared to deal with diverse needs of research and academic matters. Withal, learners' access to modern-day technologies, such as Gen-AI tools has increased the ways by which learners can achieve the goal of misconduct.

To begin with the term dishonesty, we urge to use the term academic misconduct rather than academic dishonesty to maintain the public eye on the behavior rather than implying a moral intent beneath that behavior. Addedly, academic integrity and its opposite of misconduct, among university learners, are the focal point in this subdivision; this is not to

suggest that academic integrity only pertains to learners, rather to draw some attention to the extensive body of research that investigates learners' misconduct.

Academic misconduct, also noted as integrity violation, covers whatever quest of a learner, or learners in a group undertaking, that consequences in a false interpretation or evaluation of their work, or intends to unfairly get an academic profit, in cases where learners must have been aware of the misconduct or should have had knowledge by a reasonable means. Recent perspectives consider "deliberate actions such as cheating in an exam, copying from another candidate, submitting coursework where the majority is generated by artificial intelligence software, or widespread plagiarism with the intent to deceive" (Barnes, 2024, p.2). What is noticeable, is that current definitions of academic misconduct are altered to include AI-related aspects.

Conventionally, academic misconduct was associated primarily with plagiarism. However, the advent of Gen-AI has broadened the scope of academic misconduct; the boundaries between authentic and derivative content become more difficult to identify. The majority of educational institutions prohibit the use of Gen-AI tools while some may permit their use under certain conditions. On this basis, academic misconduct includes the use of whatever AI tools in creating or refining academic material, without expressed approval from relevant parties, without proper attribution and without clear understanding of the content produced. This applies to intentional deception as well as inattentive implementation of AI tools in assessment matters (City StGeorge's University of London, 2024; Academic Misconduct - University of Southern Queensland, 2023).

Several behaviors that are contrary to academic integrity can be involved under this umbrella term, such as plagiarism and contract cheating. However, only these two manifestations will be dealt with in the present study.

## 2.2.1 Plagiarism

Plagiarism is reasoned as a violation of academic integrity, and its presence has historically been problematic for the institutions of Higher education. With the increased number of plagiarism cases, it becomes a prevailing topic for discussions in meetings of internal university bodies, and in media channels as well.

It is the persuasion of a significant number of authors that the most appropriate way to reduce plagiarism is to be embedded within pedagogical practices, such as adding courses into the curriculum that deliver subjects such as ethics, morality, or literacy (Kilis, 2019). Some presenters otherwise advocate for an institutional direction that emphasizes a necessity for a joint responsibility between the members of educational institutions, assisted with some external quality agencies (MacDonald & Carroll, 2006). However, before searching for solutions, it is befitting to elucidate what specifies plagiarism so that collaborative efforts can be made in order to eliminate this issue.

Academic literature broadly limits plagiarism to the incorporation of others' intellectual property into one's own output without permission or mention, which, in turn, brings about "legal and ethical problems for learners and faculty" (Shahabuddin, 2009, p.1). In the same regard, legal scholars in the European Union context lined a lacking of universal or a generally agreed upon legal definition of plagiary, but assumed that current consensus address plagiarism as an "unscientific, unethical, and dishonest conduct" (Lazíková & Rumanovská, 2024, p.639).

The University of Toronto's Code of Behaviour on Academic Matters documented that referring to others' any intellectual material in any one's own academic examination or term paper or any other form of academic work is not allowed, and more importantly it is an offensive activeness to academicians. This perspective is also consisted with the wider ethical considerations which condemn plagiarism as a literary stealing from existing sources.

Relatedly, scholars made a rational distinction between intentional and unintentional plagiarism. While intentional plagiarism is done for a certain purpose, unintentional plagiarism often stems from having poor academic writing or misinterpreting the patterns of citation. In any case, ethical theories, such as of deontology, discourse that plagiarism is inherently a wrong doing regardless of its intention or potential advantages (Granitz & Loewy, 2007), and mainly because it breaches the academic principles of performing truthfully and responsibly.

Due to technological advancements, plagiarism varies in its ways of execution, from being a manually-based appropriation of text to being done via digital or AI means, and these shifts, in turn, question the conventional interpretations and ways of plagiarism. That is, the type of plagiarism is currently influenced more by the tools used to commit it than the way a text is misused. It is also a thought-provoking to note, throughout the literature, that plagiarism is classified into its typical five types of global, verbatim, paraphrased, patchwork, and self-plagiarism. Notwithstanding, the present study of research is intended to offer a different orientation, namely that of traditional, digital, and AI-giarism.

## 2.2.1.1 Traditional Means of Plagiarism

Premised upon a perspective that considers the traditional dimensions of academic misconduct, plagiarism refers to "the theft of words, ideas, and representations" (Geraldi, 2021, p.1), which stresses the unauthorized owning of ideas, findings, and contributions without acknowledging the conduct of others. Namely, the traditional forms of plagiarism are rooted in the unattributed use of others' initiations which predate digital technology, but its patterns remain universal in academia.

## 2.2.1.2 Digital Plagiarism

Despite the reality that plagiarism is an educational phenomenon that is an everpresent one, its manifestations are not static, but continuously evolve in accordance with the new emerging technologies. What is noticeable in the literature is that the evolution of information technology has led to the creation of new methods to commit digital plagiarism, and engagements in digital plagiarism could outnumber the traditional means of plagiarism (Stephens et al., 2007).

Once narrowly characterized as the unacknowledged copying of another's effort, plagiarism encompasses digital content recycling, facilitated by internet approachability and digital tools. As for the reason, it is fair to state that digital plagiarism is a byproduct of the widespread of technologies and online sources. Since learners have an online access to an extremely large amount of resources, they can easily search, and copy and paste information neglecting giving a just credit or an accurate referencing (Ahmad & Fauzi, 2024). Furthermore, what simplifies it is the distance effect of technology. This effect reduces the guilt feelings associated with plagiarism, and therefore learners rationalize this digital shortcut as a pragmatic (Roe, 2022). Consequently, it might be difficult to be detected or to severalize between original and plagiarized efforts.

# 2.2.1.3 *AI-giarism*

The seasoned advancements in Gen-AI tools, in essence, changed the conceptions of authorship. Scholars are often debating on whether a machine-generated content requires new plagiarism frameworks. While some researchers posit that creativity now embraces the use of AI platforms to pen collaboratively and to craft a text in a creative way, others claim that the unacknowledgement of AI-generated texts is a form of plagiarism (Malik et al., 2024).

The unethical use of AI output, often termed as AI-giarism. Universities broadly defined it as submitting AI-generated content, such as essays, research summaries, or data analyses, without disclosure to the AI's contribution. The University of Oxford states:

Presenting work or ideas from another source as your own, with or without consent of the original author, by incorporating it into your work without full acknowledgement. All published and unpublished material, whether in manuscript, printed or electronic form, is covered under this definition, as is the use of material generated wholly or in part through use of artificial intelligence (Plagiarism | University of Oxford, 2025).

That is, it expressly includes AI-generated outputs under their definition of plagiarism, through which it requires a full identification of AI's involvement unless it was permitted and approved for assessments. Similarly, San José State University's Academic Integrity Policy accounted that any academic work submitted to fulfill an academic requirement and is produced by AI, it is not considered a learner's original effort, regardless of the tool put-upon. These policies therefore detail the ethical pressing to separate between human and machinegenerated contributions, even when AI outputs are syntactically original.

Nevertheless, Reisman (2005) observed that discussions about plagiarism must account for varying levels of academic experience, where undergraduate learners might lack adequate comprehension and awareness of citation criterion compared to graduate learners or established authors. Not to ignore, current technologies play a major role in shifting and probably adding more ethical challenges to institutions and in reconsidering the originality standards in an era where undergraduates already struggle with basic plagiarism concepts (Mbutho & Hutchings, 2021).

To sum, providing a proper citation in academic writing is the paired version of plagiarism, and for the purpose of the current research study, plagiarism is settled as the act

of promoting words or content of others or AI-powered tools as one's new and original creation without due credit, whether it occurs intentionally or unintentionally.

# 2.2.2 Contract Cheating

Contract cheating is a permeative signifier of academic misconduct that emerged as a critical challenge for the institutions of Higher Education. Its implications could project multiple academic breaches, disputing the integrity of learning systems and depreciating the hard work of those committed learners.

To define, cheating applies to any intentional misbehave that flouts the academic integrity with the purpose of gaining an unfair academic benefit over peers, probably through the usefulness of unauthorized materials or resources of assistance (Ullah, 2020). That said, contract cheating is remarkably recognized as arranging and communicating one's assessments to some third parties without authorization, and more importantly, it is comprising an array of behaviors where learners present other's produced assignments, exams, or projects as their own creation for the hope of gaining better grades. Addedly, it is different from accidental academic misconducts like plagiarism, which may regard unintended thievery of ideas. Contract cheating is inherently deliberate and planned decision, as learners submit a work that is entirely done by others (Draper & Boland, 2024; Slater, 2023).

Contract cheating is further expanded in its compass as scholars cope with its multifaceted nature. At first, it was coined by Clarke and Lancaster (2006) to refer to the practice of presenting a credited work by learners who outsourced their academic assignment to third parties in return for payment. Later, this definition was enlarged to embrace non-commercial dealings, such as assistance from peers, family, or academic staff (Liyanagamage et al., 2025; Mtshweni, 2024). Awdry (2021) also broadened its scope by adding transactions

which may involve bartering or reciprocal favors, instead of financial compensations depending on the complexity of motivations behind such behaviors.

Contract cheating was officially outlined by the Tertiary Education Quality and Standards Agency as the enactment of learners delegating their assessments to an external party, be it a for-profit helper, a sitting or former learner, a member of their family or someone they know. It would also include unpermitted use of file sharing situations, as well as the switching an assessment to another person like arranging for others to sit examination. Fundamentally, it does not always relate to monetary exchange; assignments may be obtained through favors, credits with commercial services, or peer collaboration.

Repeatable to what has been mentioned, contract cheating manifests in diverse forms, often classified by the nature of the service and the parties involved. It covers a variety of practices, from overt commercial transactions to socially and/or artificial embedded collaborations, each challenging traditional academic parameters.

# 2.2.2.1 Commercial Outsourcing

According to Curtis (2024), commercial outsourcing occurs when learners engage in a paid acquisition of a tailor-made academic work, often with online providers or moneymaking entities, such as essay mills, tutoring services, or freelance platforms. In this happening, individual efforts of learners might be circumvented and not being given its full consideration, especially when purchasing pre-written essays, hiring someone to complete assignments, or using services that market themselves as valid tutoring while supplying ready-made productions (Clarke and Lancaster, 2006). This kind of practices is a part of the broader commodification of education, where academic tasks may be treated as services that can be bought and sold. To sum up, commercial outsourcing is about purchasing made-to-

order academic work from some online services, which often publicize themselves as a plagiarism-free assistance in order to exploit learner vulnerabilities.

#### 2.2.2.2 Collusion

Collusion is a specific manifestation of academic misconduct that occurs when individuals collaborate without permission to produce an academic work intended for assessment and that is submitted as independent work. Academically speaking, collusion is outlined as learners working together in ways that disobey the rule of autonomous learning and assessment. Bretag et al. (2019) detailed that collusion can take various forms, including sharing responses to questions, co-writing assignments meant to be accomplished separately, and allowing others to edit or improve one's work on the far side of acceptable limits. In the main, collusion mirrors the unauthorized collaboration such as swapping assignments with peers. While most of the academic discourse encourages collectively writing or sharing specific content for graded work, this kind of doing represents a misconduct. For instance, dividing research tasks among peers and combining results for individual submissions, even if edited or paraphrased, is a collusion. This differs from group assignments, which are explicitly permitted. However, according to Rettinger and Kramer (2009), learners may rationalize that collusion as a less severe than other forms of academic misconduct, such as plagiarism.

As a whole, collusion is a non-commercial outsourcing, where learners enroll friends, family, or classmates to complete one's assignments intended for individual submission, often thought of as a teamwork but it violates the institutional integrity policies.

## 2.3 Written Assignments in Upholding Academic Integrity

To acknowledge the crucial role of academic integrity in preserving the credibility of educational institutions is of a necessity, the same as to recognise the necessity for ensuring that learners' works genuinely reflect their own learning process especially when it comes to written assignments and their assessment.

Being a tool for assessing learners' knowledge and skills, written assignments represent a means of instilling academic integrity. Practically speaking, academic integrity prompts learners to embrace and go through the process of learning and discovery rather than centering much on grades or results. The Council of Writing Program Administrators provided its perspective, referring to it as a process through which learners, teachers, and administrators follow the established norms of ethics in the quest of knowledge, as to any written work. It can be interpreted that learners are required to engage critically with their subject matter, develop their independent thought processes, and adhere to the values of honesty and responsibility through the act of producing an original, written work.

This section aims to briefly illustrate how could written assignments of EFL learners be an indicative of their honesty and responsibility. Content covered in this division therefore could be the importance of written assignments as an instrumentality to assess learners' learning process, and the expectations of producing an original work.

#### 2.3.1 Definitions

The first thing that one should consider before delving into how could written assignments be a mark of maintaining academic integrity is to grasp what does an "assignment" refer to. In doing so, the dictionary of Merriam-Webster provided a frame in which it can "a specified task or amount of work assigned or undertaken as if assigned by authority." That is, assignments are purposefully projected by teachers, the authority, in order

for learners to achieve certain learning outcomes. Pursuing this, assignments are not arbitrary; they consider certain pedagogical goals. In an alignment with the letter, assignments can be manifested differently "depending on course type, student level, remedial/consolidation/extra work needed by learners, in order to achieve their potential" (Cismas, 2010, p. 193). That is, they are not uniformed; they can be differentiated or tailored to help learners accomplish expected outcomes and address their unique areas of strength, developmental path, or gaps.

The common usefulness for assignments is to demonstrate learners' personal efforts regarding what they are learning. Conveyed by Cismas (2010), "an assignment is any type of work students have to complete in their own time, outside class, in order to fulfill the course objectives" (p, 193). Said differently, assignments are purposeful, independent work that makes a connection between classroom's instruction and learners' mastery of the course objectives; they are not optional or mere busywork, but integral, structured opportunities for learners to develop their skills and maintain their learning.

To acknowledge, assignments may vary considerably. Having insights from the work of Brent and Felder (1992), "assignments may be in-class or take home, convergent or openended, done by individuals or pairs or teams of students, taking periods of time from one minute to an entire semester" (p. 43). Taking into account these alternatives, not all assignments may have the same vulnerability to Gen-AI misuse. For example, take-home, open-ended, long-term assignments, which are often accomplished with distanced supervision from teacher's side, could be the most common assignments at risk of unethical use. Therefore, in the lawsuit of the present study, assignments that are done outside the classroom lie at the core of the investigation.

# 2.3.2 Written Assignments as an Assessment of Learner's Learning

Decidedly, the process of writing holds an evidential importance. As claimed by Hyland (2003), "writing is a way of sharing personal meanings and writing courses emphasize the power of the individual to construct his or her own view on a topic" (p. 9). Their words support two crucial persuasions. The first conveys that through writing, learners bring about their inner thoughts, interpretations, and voices meanwhile the second relates writing courses to spaces where learners are encouraged, for example via assignments, to have a stand and authorship over ideas and opinions, following a definite set of academic conventions like providing evidence or citations. All-embracing, writing serves as an empowerment that fosters agency and personal meaning-making act in learners' academic dimension.

Given the above-mentioned introductory remarks, written assignments play a crucial role in assessing learners' learning, serving as both a window into their understanding and a program for skill development. Asserted by Brent and Felder (1992), "the process of writing and learning are fundamentally and powerfully linked" (p. 43). Reworded, writing cannot be a mere method for recording knowledge; it can be an active, integral part of the learning process itself. Hence, engaging in the process of research, analysis, and articulation of ideas and information allows learners to demonstrate their understanding of the subject matter or material, proficiency in communication, and other related aspects.

Yet the endeavour of the present study is toward the written production of learners as an authentic proof for learning. On the ground of Cismas (2010),

Assignments are generally submitted for a grade and can serve as proof of the current level of student knowledge and of further improvement areas, which is why written versions are most popular, as writing demands careful thinking and planning, synthesis, personal input in ideas and analyses (p. 193).

The preference for written submissions stems from the belief that writing requires demonstration of critical thinking abilities, synthesis of information, and personal engagement with arguments and ideas. Written productions, therefore, are a reflection of academic competence and cognitive abilities at a specific phase in learners' learning journey. Otherwise stated, written answers are the most relevant aspect for assessment. Taken as a whole, what enters into consideration in the context of the present study is written assignments, learners' productions in terms of quality more than it is about the stages of writing itself.

## 2.3.4 Expectations of Original Productions

Academic integrity manifests universally to all forms of academic works as a framework with non-negotiable expectations mainly grounded in honest efforts and responsibility. As reported in the UCI Academic Senate Policy on Academic Integrity:

Academic integrity applies to electronic and print media. It may involve text, images, and/or ideas for any course work, exercise, or submission, in draft or final form. All Students are expected to complete a course in compliance with the Instructor's standards. No Student shall engage in any activity that involves receiving or attempting to receive a grade by means other than honest effort or aid another who is attempting to do so.

Consistent with these parameters, academic integrity is the backbone of a meaningful education, not just a convention but a commitment to lifelong ethical learning. By demanding honest efforts, crediting others' contributions, and rejecting collusion, teachers and learners could reserve the worth of academic achievements.

Primarily, originality reflects independent thought process and ability to synthesize information. Thereby, the expectation of original work and proper citation practices in

written assignments are fundamental to academic integrity. As espoused by Brown et al., (2019),

Examples of academic integrity include the citation and accreditation of original sources of information and others' research findings in assignments, the accurate reporting of research findings and acknowledging collaboration on assignments or respecting requirements to complete assessment tasks independently (p.19).

These tangible examples can be alternatively explained. Citations matter because they prevent plagiarism, which is the act of stealing credits from original creators and probably misleads readers about the genesis of thoughts. Accurate dissemination of information helps safeguarding others' data and findings from misinterpretations which could undermine the reliability of their research. Unaccredited assistance may also give some students unfair advantages. Finally, assessments measure individualistic mastery or competency while outsourcing or copying peers may invalidate teachers' systems for grading. To articulate a standpoint, academic integrity cannot be about restricting one's creativity, rather it is about ensuring that learners' achievements mirror genuine learning efforts.

Following the terminological explication proposed in Merriam-Webster dictionary, "as if assigned by authority" implies a contract between teachers and their learners through which learners are expected to produce a work given a touch of autonomy and ethicality while teachers are supposed to assess learners' efforts and originality. Moving to the example of a "homework assignment," it is a subset that emphasizes the expectation of independent work outside of the classroom. When linking this to Gen-AI tools, these tools disturb the assumption that assignments mirror learner-generated efforts. When finished with the help of such tools, the line between an assisted work and misrepresentation of learners' input becomes lacking. Consequently, it urges the interrogation that in case a learner submitting AI-generated text as their own, would it remain identified as a written assignment

"undertaken" by the learner or otherwise. Accumulatively, Gen-AI tools may complicate two main aspects, undermining originality of learners' works, and shifting the authority from the teacher to the Gen-AI, from the designer to the one which could produce it.

## Conclusion

Grounded in theories of morals and situated learning, the current chapter discussed academic integrity, its core values, and common academic misconducts. Following this discussion, a section on the role of written assignments in upholding academic integrity was elaborated on, as a production that must reflects learners' honesty and responsibility.

The subsequent chapter now turns to methodology with the aim of grounding the present study with methodological frameworks and choices for conducting.

# INESTIGATING THE EFFECTS OF GENERATIVE AI TOOLS

# **Chapter Three: The Methodology for this Study**

Introduction	89
3.1 Research Methodology: Theoretical Background, Choices and Rationale	89
3.1.1 Research Paradigm	90
3.1.2 Reseach Approach	95
3.1.3 Research Design	97
<b>3.1.4</b> Data Collection Methods	98
<b>3.1.4.1</b> Interview	99
3.1.4.1.1 Structure and Aim	99
<b>3.1.4.1.2</b> Validation	101
<b>3.1.4.1.2</b> Piloting	101
3.1.4.2 Questionnaire	102
3.1.4.2.1 Structure and Aim	103
<b>3.1.4.2.2</b> Validation	104
<b>3.1.4.2.3</b> Piloting	105
3.1.5 Data Collection Procedures	105
3.1.6 Data Analysis Procedures	105
<b>3.1.7</b> Population, Sample, and Sampling Technique	106
Conclusion	106

# **Chapter Three: The Methodology for this Study**

#### Introduction

This chapter is intended to provide a justification for the opted for methodological elements, as well as to demonstrate their alignment with the nature of current research problem and its research objectives and questions. Addedly, the rationale behind choosing each peculiar research element is fairly presented from a critical lens, wherein each methodological determination is contextualized within relevant theoretical accounts and previous methodology-based investigations. Suitably, a transparent presentation speaks for the credibility and reliability of the adopted research's plan of action while conveying its inherent limitations and boundaries.

## 3.1 Research Methodology: Theoretical Background, Choices and Rationale

When conceived from a holistic perspective, methodology is staged as a vertically-integrated undertaking. Fundamentally, it is a top-bottom process (Hoadjli, personal communication, 2024), following a conceptual-to-applied sequence. Therefore, selecting and executing specific methodological considerations ought to be predicted upon the nature of the research problem, the overarching research objectives and questions, as well as the theoretical frameworks which mirror the researchers' beliefs and worldview.

Guiding these introductory statements, Saunders et al., (2007) proposed a similar way of thinking about research methodology that is maybe connatural to the way of stratifying the layers of an onion. Building upon this original reason, they justify the manifestation that in order to secure a bound between theory and practice, it is necessary to remove the layers that go from philosophical stances to data collection methods. It could be said that this metaphor brings to light the systematic and hierarchical nature of methodological planning, where each level has the purpose of informing subsequent levels and achieving consistency between abstract principles and their applications.

It has also been observed on reading a significant sum of publications that there are some terms used alternatively to suggest the same methodological dimension, and there is consequently a necessity to delimit their meaning. Accordant with Creswell and Creswell (2023), research is a field with its own terminology, and it is of the essence to understand the key terms used in a given research. On this base, the present study of research communicates a framing in which research paradigm, research approach, research design, and research methods are distinct terms that respectively qualify a flow lead from the broader plan of research to the narrowed room of its methods.

## 3.1.1 Research Paradigm

Once a specific research problem is considered and a eligible area of investigation is identified, the pursuing step is to determine the most suitable methodology for conducting the study. That is, the researchers' methodology is contingent on their perception of the problem and the manner in which it can be investigated so that they yield credible results for themselves and their peers in their domain of expertise.

Notedly, the way in which researchers construe the world is influenced by their experiences, which in turn stipulate their ideological dedication in their respective research fields. If an understanding is to be arrived at, then it seems reasonable to refer to the paradigmatic perspective, which could be determined as a starting point for any research initiative (Creswell & Creswell, 2023; Guba, 1990). Consequently, a definition for the term should be articulated before progressing this query.

As illustrated in the lexicon of Merriam-Webster, the linguistic unit "paradigm" is derived from the Greek verb "paradeiknynai," which translates as "to show side by side." Yet, it is lexically utilized to express the meaning of an "example" or a "pattern." To be more precise in its use, there is some controversy over what is required for an example to meet the

criteria of a paradigm. While some maintain that it should be a typical example, others title that it must reflect an ideal example to be followed.

To demarcate, a paradigm in research constructs "the basic belief system" that ushers research investigations (Guba, 1990, p.18). Ergo, this system relates to a set of collaborative understandings or agreements on how a research problem should be perceived and addressed in a given research area. These basic, philosophical expectations and values of a researcher could stem from differing sources such as specific disciplinary involvement, institutional resources, supervisor's preferences, or one's past research experiences (Creswell & Creswell, 2023; Hoadjli, 2019). Overall, they emphasize what a researcher believes to be most primary in conducting a study.

To define differently, paradigms prescribe "the philosophical stance informing the methodology and thus providing a context for the process and grounding its logic and criteria" (Crotty, 1998, p.3). That is, a paradigm is not a simple methodological deciding but a philosophical positioning that outlines how researchers would regard truth, cogency, and the aim of inquiry. Similarly, it can be seen as the "world view that guides the investigation, not only in choices of method but in ontologically and epistemologically fundamental ways" (Saunders et al., 2007, p.100). Simply uttered, paradigms are a result of a collective engagement to pursue specific theoretical frameworks, methodologies, and standards when it comes to validating knowledge.

From an alternative vantage ground, paradigms are "universally recognized scientific achievements that for a time provide model problems and solutions to a community of practitioners" (Kuhn, 1994, p.8). In this entailment, each paradigm offers associated assumptions. Nonetheless, the expression "for a time" expresses a peculiar message. That is, the assumptions are instrumental in setting the parameters of how a research methodology should be conducted, as they season a supporting structure for the scientific community to

work accordingly until some evidence is published to challenge the followed paradigm so that a period of reflection and change can be initiated. In short, paradigms are both a source of wholeness as well as a potential impediment to innovation, especially when there is a shift in the scientific consensus.

Expanding upon what has been mentioned, current methodological conducts are altered and determined by some resistance between some paradigmatic traditions such as of those of Positivism and Constructivsm. According to Creswell and Creswell (2023), Positivist Paradigm projects a set of conventions that condition reality and objectivity requirements, pursuing the scientific method or conducting the scientific research. That is, it is a reductionist in its nature; when it comes to its usefulness, it calculates ideas into numbers to be tested, such as the variables that inform hypotheses and research questions.

Inconsistent with Positivism, others espouse a different view, following Constructivism. The latter emerged probably based on the works of philosophers such as Immanuel Kant, who argued, a point in time, that knowledge may not be necessarily absorbed in a passive way, quite it can be actively facilitated by interpersonal interactions and cultural circumstances. As manifested in Vygotsky's (1978) saying, "every function in the child's cultural development appears twice: first, on the social level, and later, on the individual level" (p, 57). In the eyes of constructivists, humans possess a desire to engage with and make sense of the creation around them, and that individuals develop meanings for their experiences in a manner that is context-dependent. Interpreted together, knowledge cannot be a non-personal entity, rather it is formed by human's perceptions and interpretations.

The two paradigms of Positivism and Constructivism provide an overall support to distinct worldviews that dictate which questions are valid and how their answers are to be pursued. Crotty (1998), for example, shared the same persuasion in their phrasing that a

"justification of our choice and particular use of methodology and methods is something that reaches into the assumptions about reality that we bring to our work. To ask about these assumptions is to ask about our theoretical perspective" (p.2). Given that, each paradigm has its own methodology, and for this, Kuhn (1994) called attention to the incommensurability of paradigms, which is the non-equivalence of paradigms. Simply, such competing frameworks cannot be easily put together to be compared, and this is mainly due to a lack of shared frame of reference as they display different standards of evaluation.

Without compromising the wholeness of existing frameworks, the before-mentioned theoretical underpinnings endow how a scholarly person would conceive their research questions, authorize knowledge, and absorb the world. Therefore, they ground themselves in a somehow determinate or rigid epistemological and ontological commitments. However, the cardinal critique regarding their orientations targets their integral tendency to assign a primacy to their purity over the relevance of their research problem or question (Patton, 2015). Researchers operating within such paradigms, for occurrence, may accommodate their inquiries to fit prescribed methods rather than having tailored methods to the specifications of their research questions.

Indeed, the two paradigms of Positivism and Constructivism have past times led methodological debates in their respective areas, but their ultimacy has been critiqued for restricting researchers' purpose to tackle some complex, multifaceted questions such as of the present study, that require more than one ontological or epistemological categorization. Rising tools such as Gen-AI necessitate the strengths of the two frameworks. Without overlooking, the issue of integrating Gen-AI tools into undergraduate education triggered intense debates on academic integrity, cognitive processes, and the nature of studious productions. In other words, Gen-AI tools represent a text-generating instrumentality which

is reckoned to channelize varied points between technical-based precision, human practices, and ethical complexity.

Scholars like Johnson and Onwuegbuzie (2004) provide a reason that relevance to a research question, rather than dedication to a singular philosophical or ideological stance, should be the base for subsequent methodological decisions and choices. In a related way of thinking, Rorty's (1999) advocacy for what works in practice challenges the researchers of the present study to embrace a view which mix methods as needed to bring forth actionable insights. It is also in keeping with Biesta's (2010) argument that a researcher must vary their research components as a consequence to the messiness of the real-world contexts where problems are rarely controlled by strict philosophical beliefs. These joint views likewise are concordant with Biesta and Burbules' (2003) central calling for a practical rationality, where each methodological choice must aim for the context-specific objectives of the investigation. Such a flexibility in reasoning would also communicate a dynamic nature, where emerging challenges may implicate some mid-study adaptations (Maxwell, 2012).

Several studies such as of Rentier (2025) revealed that learners use Gen-AI tools to facilitate writing tasks, yet at the same time express concerns around dependency and ethical issues. The issue is not merely on whether AI-generated text may nominate plagiarism but how using it could redefine learning, authorship, and academic norms. A paradigm suited to the current research inquiry must decline befitting to one of the two epistemological or ontological divides, and acknowledge that Gen-AI tools operate within a frontier of competing claims where technical efficiency encounters human values. Therefore, a paradigm that approves practical consequences allows the researchers to qualify and quantify both the usefulness of Gen-AI and its risks, without giving privilege to one pattern of evidence over another.

Based on the understanding that research is not merely an abstract intellectual exercise but a tool for addressing real-world challenges, the researchers situate the present research study within the parameters of the Pragmatist Paradigm that could unify the long-standing dichotomies of Positivism and Constructivism. with the intention to foreground multiplicity and adaptability in the current research context, the researchers believe that Pragmatism transcends the dualism of objectivity and subjectivity, as a guiding template for manifesting outcomes-based practicality.

In summation, the contemporary methodological scholarship advocates for frameworks that permit problem-solving, methodological mobility, and compounding different perspectives. Hence, the researchers adopt the worldview of Pragmatism in order to pursue inquiries that are both rigorously framed and pragmatically oriented, and ensure that their methodological determination serves their broader objective in addressing challenges that define modern-day contexts.

#### 3.1.2 Reseach Approach

A research approach is a guiding scheme that elaborates on designing and executing a research study; it explicates how the underlying underpinnings can shape each choice regarding data collection, analysis, and interpretation. For example, Creswell and Creswell (2023) describe it as "the plan or proposal to conduct research, involving the intersection of philosophy, research designs, and specific methods" (p. 39). To put it differently, methodology as a whole entity is believed to be a systematic conduct that commences with a definite description for the research problem, research aims, and research questions. These elements often constitute the high-level part or the theoretic horizons of a research approach, and at its core, the role of a research approach is to fill the gap between abstract paradigms and practical methods.

Consistent with Creswell and Creswell (2023), the full term "research approach" could be used in a synonymous usefulness to refer to "methodology." Consequently, the terms Quantitative, Qualitative, and Mixed-Methods denote the different types of research methodologies that respectively came to the academic fore at different times in history. Beginning with quantitative approach, incorporated particularly in social sciences since the late 19th century with epochal attention, yet by the end of the 20th century, qualitative research attracted more engagement, followed by the introduction of mixed methods research.

The three-fold manifestations of a research approach are less independent than what their theoretical differentiation would imply. On the face of it, these types project three distinct approaches, yet they may overlap when it comes to practice. The tendency of some studies to be more qualitative than quantitative, or vice versa, is a common occurrence (Creswell and Creswell, 2023). Yet, the researchers of the present study maintain the frame that qualitative and quantitative aspects may display a complementary role in a Mixed-Methods research, which is conceptually and methodologically settled at the midpoint of the continuum.

The Mixed-Methods Approach is of a high significance in educational research due to what it offers in terms of methodological pluralism. It combines quantitative and qualitative epitomes to tackle complex-featured research questions. Regarding this, Creswell and Plano Clark (2018) assert that this approach, compounding statistical data with the contextual, qualitative insights, has the practicality to overcome the limitations of designs that are monomethod-oriented. As a part of this, Greene et al. (1989) introduced the concept of "Complementarity," where qualitative data crystallize the mechanisms behind quantitative trends, while quantitative data contextualize the qualitative remarks within broader patterns. Thenceforward, this cooperative coupling is critical in research studies tackling dynamic variables such as learners behavior or institutional policies.

Teddlie and Tashakkori (2009) posit that mixed-methods research is particularly suited to educational settings, where phenomena such as learning outcomes, pedagogical practices, and learner experiences are varied and require both breadth and depth of analysis. For instance, Johnson and Onwuegbuzie (2004) express that a mixed-methods research enables researchers to triangulate their findings, through which they can be enhancing validity and providing a more nuanced understanding of educational issues. Besides, the effects of Gen-AI tools on the academic integrity of EFL learners present a complex, multilayered issue that necessitates a mixed-methods approach.

Quantitatively, questionnaires can offer statistical evidence of integrity failure, learners' use or other aspects. However, such data alone cannot capture the perceptions of teachers. Here, qualitative methods such as interviews display a live accumulation on how learners might place their academic advantage over originality. Furthermore, Gen-AI's effect on academic integrity is not merely behavioral but also cognitive; learners may unknowingly plagiarize due to misunderstandings about Gen-AI's role in authorship. Therefore, qualitative data can reveal these cognitive gaps, while quantitative analysis can correlate them with institutional policies.

# 3.1.3 Research Design

To initiate with a definition, "research designs are types of inquiry within qualitative, quantitative, and mixed methods approaches that provide specific direction for procedures in a research study" (Creswell and Creswell , 2018, p.49). That is, a research design provides the plan or the blueprint that researchers would follow to carry out their investigation.

As for the specific plan of execution, simply it depends. In the name of Cohen et al., (2007), "research design is governed by the notion of 'fitness' for purpose. The purposes of the research determine the methodology and design of the research" (p, 78). That is to say, a research design must be in line with the opted for research objectives simply because there is

no particular research design that can maintain the flexibility of a one-size-fits-all plan of action. Therefore, a research design is a purpose-oriented undertaking that is likely to have a custom-built strategy.

Combing tools for collecting data can be sometimes an effective way for yielding satisfactory results with non-overlapping weaknesses. On the words of Dörnyei (2007), "certain mixtures can combine different methods in such a way that their strengths aggregate, thereby making the sum greater than the parts" (p, 167). That is, deciding on, for example, an unstructured interview with a structured questionnaire can secure to a certain extent the feasibility of the results and gaining insights. Following this, the illustrations established by Cohen et al., (2018) inspire the present study to settle upon a Mixed-Methods Case Study Design.

#### 3.1.4 Data Collection Methods

Every research journey starts with a plan that frames and leads the undertaking. In this particular meaning, methodology is in its broadest sense as a blueprint of research within which the philosophic or the pragmatic thinking influences how questions can be asked, why a certain approach should be selected, and what principles are likely to steer the search for answers. However, when it comes to reaching the "why" and the "how," methods turn the plan into action and the researchers' curiosity into discovery.

After having a general understanding that the choice and use of particular methods, as well as the link between these and the desired outcomes, are all part of a broader process, which is the methodology, it is required to log its methods, which are, according to Crotty (1998, p.3), "the techniques or procedures used to gather and analyse data related to some research question or hypothesis". Therefore, this section precisely documents the proceeding protocols followed during data collection, providing step-by-step accounts of how research methods are developed, validated, piloted, and deployed within the research context.

#### 3.1.4.1 Interview

To begin with the first data collection method, the researchers make use of an unstructured interview as a first installation. Based upon the saying of Cohen et al., (2018), "the interview is a social, interpersonal encounter, not merely a data-collection exercise" (p, 506). Interviews, when not reduced as a source of data, are akin to conversational partnerships, where participants use their own language to describe their perceptions and emotions. Simply uttered, interviews represent a human interaction first and a data collection method second.

In the field of social research, Patton's (2015) reasoning of unstructured interviews as a natural conversation is of a particular relevance, yet it is somehow delimited by the researcher's role in creating and facilitating the interview situation. It empowers the researchers to engage with participants' lived experiences without the necessity of imposing some impulsive limits. About this, Kerlinger (1970) states that

Although the research purposes govern the questions asked, their content, sequence and wording are entirely in the hands of the interviewer. This does not mean, however, that the unstructured interview is a more casual affair, for in its own way it also has to be carefully planned (As cited in Cohen et al., 2018)

When interviews are not planned to follow a rigid direction, participants feel more comfortable and communicate more freely about their thoughts. Nevertheless, the degree of success achieved in unstructured interviews is predicated to a considerable extent on the interviewer's mastery of interpersonal skills and capacity to handle sensitive topics.

**3.1.4.1.1 Structure and Aim.** In an effort to attain a sound understanding of the context in which the study unfolds, the researchers opt for an unstructured interview with teachers of English at the Department of Literature and English Language of Biskra University. Through the interview, the researchers aim to understand the participants'

perceptions and insights regarding the use of Gen-AI tools by learners when it comes to producing their written assignments. For the initial aim of the study, the interview was reserved to teachers who had experience in teaching writing as a module as well as those who had experience in teaching modules that required learners to frequently submit written productions. Therefore, only five teachers, who met the criteria as well as being available in a time-frame that spans from April, 9<sup>th</sup> to the 20<sup>th</sup> of the mentioned month, are interviewed.

The questions are arranged in a gradual time-course with the intent of guiding the interview's path to align with the research objective. The interview begins with a general-purpose introduction for some background information, uncovering teachers' views on the effectiveness of such tools on learners' written assignments. In subsequent stages, questions about academic integrity, assessment practices, strategies emerged.

**Table 3.1**The structure and aim of the interview

Item (s)	Objective (s)			
1	To specify a baseline for teachers' teaching experience as well as contextualize the subsequent questions.			
2	To gain insights into teachers' attentiveness level of learners' behaviors.			
3	To bring forth an elaborated description of the genuine implications of Gen-AI tools on learners' written assignments.			
4	To unveil how teachers rationalise academic integrity in AI-influenced classrooms.			
5	To understand learners' understanding of education ethics.			
6-7	To provide pedagogical strategies for maintaining ethical and effective use of Gen-AI tools by learners when producing their written assignments, and distinguishing between ideal and feasible solutions.			
8	To invite teachers to share any comments or suggestions that may further assist in understanding or reinforcing specific aspects covered in the interview.			

**3.1.4.1.2 Validation.** The data formatting of the interview, at first, was expected to be a semi-structured one. However, it was denatured due to the multifaceted nature of the questions proposed to fit the objective of the first phase of the study. Upon considering the advisable modifications from the supervising expert on February, 5<sup>th</sup> 2025, it was decidedly to be attuned to an unstructured interview. Subsequently, the interview was validated by the help of three internal experts and an external expert.

**3.1.4.1.2 Piloting.** To begin with its characteristics, an unstructured interview can be a powerful qualitative research tool due to its presentation of raw information through the use of open-ended, conversational interactions. Still, its flexibility presents some challenges in terms of consistency, relevance, and the quality of the received data. Accordingly, the piloting phase is a trial or a first attempt for implementing the interview protocol before a complete data collection. Also, piloting is crucial for refining the proposed questions, assessing the adopted techniques for managing the interview situation, and ensuring methodological rigorousness.

Since unstructured interviews may lack a fixed structure of posing questions, piloting helps find out whether the interviewer's frequent prompts naturally encourage detailed responses. That being mentioned, Kvale and Brinkmann (2009) noted that the quality of the collected data in an interview depends considerably on the interviewer's adaptability and competence in facilitating the depth rather than controlling the outcomes. Therefore, piloting is a reference for boosting the flow and the clarity of the questions while also assessing the interviewer's skills often in terms of asking follow-up or probing questions and keeping the focus on research objectives.

The piloting phase was conducted at the Teachers' Room at the faculty building on February, 9<sup>th</sup> 2025. The interviewee, initially, expressed reservations on the opening of the oral communication while also proposed some modifications. Consequent to a review and

feedback from the supervising expert on February, 11<sup>th</sup> 2025, a decision was taken to expand the scope of the interview to compass inquiries on academic integrity, potential solutions and best practices for governing the use of Gen-AI tools by learners when producing their written assignments. These adjustments were entirely made to overcome possible, futuristic limitations in the development of the questionnaire in the final stage of the research design, and it can be backed up by the demonstration of Cohen et al., (2018):

Interviews as a research tool range from the formal interview in which set questions are asked and the answers recorded on a standardized schedule through less formal interviews in which the interviewer is free to modify the sequence of questions, change the wording, explain them or add to them, to the completely informal interview where the interviewer may have a number of key issues which she raises in conversational style instead of having a set questionnaire (p.508).

Taken together, the unstructured interview serves the initial phase of the present study owing to the flexibility it displays and promotes for the intended data gathering.

#### 3.1.4.2 Questionnaire

Questionnaires are crucial tools in educational research as they represent a systematic way of capturing data from a diversified population. As found in the dictionary of Merriam-Webster, questionnaires display "a set of questions for obtaining statistically useful or personal information from individuals." Simply uttered, a questionnaire is a tool for accumulating data in response to a series of predetermined questions or statements, with the intention of gaining insights into respondents' understandings, attitudes, or beliefs; this can done by picking from a list of options or filling in answers (McKinley & Rose, 2020). That is, this method can be useful for gathering non-observable behaviors or abstract ideas and definitions that are otherwise difficult to quantify.

The use of questionnaires could be taken as a two-way connection between the researchers and the participant, where there is a shared and developed knowledge via a medium called the online-based questionnaire. It is of the essence to acknowledge that questionnaires vary. The present study selects a structured questionnaire which, as the name suggests, gives participants a predetermined range of options or statements from which they can choose. For the purpose of this study, this type of questionnaire is used to elicit statistically relevant information from responding parties. This, in chief, makes it possible to collect and analyse quantitative data in a relatively short space of time.

**3.1.4.2.1 Structure and Aim.** In conducting research studies, questionnaires are frequently designated for gathering data, either as a main source of information or as a complementary role with other methods in mixed-method studies like in the present study of research. Notwithstanding, the value and precision of data gathered through questionnaires are dependent on the way in which they are developed, validated, and conducted.

Informed by a positivist philosophy, the present study opted for a structured questionnaire, or more precisely an attitudinal one. This questionnaire is intended as an undertaking to answer the second research question and develop a set of strategies that guide the use of Gen-AI tools by learners when producing their written assignments. In the interest of gathering precise data from the learners' standpoint, the questionnaire had four sections with close-ended questions. As for the questions and their formats, there was a mixture of options, including yes/no questions, and Likert scale. Due to time constraints, the questionnaire was created and posted online to 38 third-year students, with the assistance of Google Forms platform.

**Table 3.2**Student Questionnaire Sections and Objectives

Sections	Item	Content	Objectives
Section One	1	General Information	To identify participant's gender.
Section Two	2-3	Familiarity with Generative AI Tools	To determine how well respondents are acquainted with with Generative AI tools and how often they use these tools for their written assignments.
Section Three	4-5	Strategies to Uphold Academic Integrity while Using Generative AI Tools	To determine learners' openness to collaborative efforts with teachers to regulate the use of Gen-AI tools and identify which strategies are viewed as most/least feasible for implementation.
Section Four	6	Feedback Mechanisms	To create and optimize feedback mechanisms between learners and their teachers that facilitate a transparent reporting of AI-based assistance, yet in compliance with ethical guidelines.

3.1.4.2.2 Validation. Validity refers to the extent to which the questionnaire measures what it is supposed to measure, which is to say that the possible constraints of any questionnaire-based study must be accounted for. At the stage of designing a questionnaire for a research study, it may be a fruitful exercise for a researcher to verify any pre-existing, validated questionnaires because they could be adopted or adapted for the study. Not to mention, the use of questionnaires that have been already validated in other investigations can be a very efficient use of time and resources, especially when compared to the need to design a new questionnaire from scratch (Ranganathan & Caduff, 2023). Therefore, in order to proceed, it would be essential to secure that certain aspects are taken into consideration, such as whether the population, context, and objective of the current study are similar to those of the original questionnaire. Therefore, the developed questionnaire in the present study reflects the researchers' pure efforts due to the lack of standardized models and the

nature of the research contribution. In being so, it was validated with the help of the supervisor and an external expert.

**3.1.4.2.3 Piloting.** A questionnaire has to be valid and reliable, so any new one should be piloted on a smaller sample of respondents that is relevant to the larger population. Other than validity and reliability, piloting yields information about how long it takes to complete the questionnaire and if any questions are ambiguous or misleading and in need of rewording. Accordingly, it was piloted with the participation of 5 third-year students in a duration of a week, starting on May, 23th 2025.

#### 3.1.5 Data Collection Procedures

Starting with the interview, the first contact with teachers was verbal via email to ensure their availability and obtain their first approval. The initial communication with the participants provided a general overview on the topic of the study in general, with no mention to any details or notes. The purpose for this was to make sure that the teacher would respond spontaneously without having prepared any information beforehand, and to secure authentic reactions and insights from teachers, instead of rehearsed or scripted answers. Accordingly, interviews were conducted during a time-frame that spans from April, 9th to the 20th of the mentioned month. The five teachers were named based on the respective order of the interview. That is, teacher 1 on February 10, teacher 2 and teacher 3 on February 13, teacher 4 on February 19, and finally teacher 5 on February 25. After the compilation of this stage, the questionnaire was posted to third-year learners in a duration of 3 weeks, starting from April, 1, 2025 with the help of Google Forms.

# 3.1.6 Data Analysis Procedures

Taken into consideration that the analysis phase was initiated on May 22, 2025 in a duration of two weeks, the first step in the analysis of the unstructured interviews was the transcription phase because the interviews had an oral form. Using verbatim transcription, the

audio recordings were transcribed using MAXQDA software. Once the transcription process was completed, thematic analysis was conducted manually. The final phase of analysis, however, was about the attitudinal questionnaire. Since it was posted via Google Forms, the platform measured the frequencies and percentages of each questionnaire item. Each question, statement, and their corresponding answer were presented in a table and a pie chart or a bar graph formats displaying the calculations mentioned previously.

## 3.1.7 Population, Sample, and Sampling Technique

Considering that the researchers aim to target a population that naturally addresses the problem, a non probability purposive sampling technique is adopted. That is, the population of the current study is EFL undergraduates, with a sample of third-year students. Consistent with the before-mentioned sampling technique, a sample of 5 teachers of English who teach/have taught writing as a module or are in charge of modules that require submission of written assignments are a part of the study.

#### Conclusion

To keep it concise, in this chapter, an effort was made to justify the decisions and choices made with regard to the adopted research methodology for this study, corresponding its nature and purpose. It outlined the methodology components that foreground ethical integrity and rigour as central tenets of the research process. Aligned with Creswell's methodological contributions, this chapter consistently referenced their research paradigm, approach, design, and methods.

In the upcoming chapter, the collected data will be presented and analyzed, and conclusions will be derived.

# INESTIGATING THE EFFECTS OF GENERATIVE AI TOOLS

# **Chapter Four: Fieldwork and Data Analysis**

Introduction	108
<b>4.1.1</b> Analysis of Teachers' Unstructured Interview	108
<b>4.1.2</b> Analysis of Students' Attitudinal Questionnaire	129
<b>4.2</b> Synthesis of the findings	146
Conclusion	148
General Conclusion	149
Pedagogical Recommendations and Implications	150
Limitations of the Study and Suggestions for Future Research	153

# Chapter Four: Fieldwork and Data Analysis

#### Introduction

From the groundwork of earlier chapters, which charted the literature and outlined the methodological frameworks and plans, this chapter culminates with the application. In an effort to achieve a compendium grasp, and with the goal of creating a holistic presentation, this piece has been put together using two distinct data collection methods. Initially, unstructured interview was facilitated in a quest for gaining experiences of teachers in their raw, unfiltered nature. Ultimately, an attitudinal questionnaire was adopted in order to specify students' attitudes. Therefore, this part of the study will hopefully disseminate a multidimensional perspective on how AI-generated written assignments influence students' adherence to the principles of academic integrity.

#### 4.1 Results and Discussions

# 4.1.1 Analysis of Teachers' Unstructured Interview

As any unstructured interview, its design brings forth extensive amount of data, stimulated by the researchers' lines of inquiry. Its open-ended nature neccessitiates generating some secondary questions. Nevertheless, the analysis of this study focuses exclusively on participants' answers to primary questions in order to achieve to a balance between comprehensibility and manageability.

### Q1. How many years have you been teaching EFL?

**Table 4.1**Teachers' years of teaching EFL

Teachers	Years of teaching EFL
Teacher 1	Three years
Teacher 2	20 years
Teacher 3	Three years
Teacher 4	20 years
Teacher 5	Five years

Taken as a ground, the number of years that a teacher has been teaching or had the chance to engage with students would bear an informative image of the quality of their insights and accumulated knowledge. Therefrom, five university teachers of English were asked about their years of teaching EFL. By their answers, the sample comprises of three novice teachers with years average between 3 and 5 years, and two teachers with 20 years of service, each with their own different levels of expertise and professional accreditation.

# Q2. How informed are you /how aware are you that your students are using Gen-AI tools like ChatGPT and other similar tools?

Table 4.2

Teachers' awareness of students' use of Gen-AI tools

Teachers	Responses	
Teacher 1	"I'm very aware of that because there are some signs in their works that can enable teachers to detect whether they have used AI tools or not. So it's kind of easy to do that"	
Teacher 2	"at the very beginningI was not fully aware that students are using, especially ChatGPT for completing their assignments or for doing their tests or even examinationsI thought that, it it's like other, research engines like Google. This was two years ago, I guess. However, I, I've been told by some of my students that, GPT is now used by students to complete their assignments. NowI am fully aware that students are heavily dependent on it"	
Teacher 3	"It's based on their writings I check some words, some expressions. I sometimes compare their their level because I teach them and the way they write the words they use so I can get insights"	
Teacher 4	"I compare their emails with their recent productions are a different ways of answeringthe same for thedoing homework or kinds of homework. It is quite the opposite"	
Teacher 5	"yes, I'm aware. Uh, 100% I think the common one is ChatGPTthey are used in every course, in every assignment"	

The purpose of this question is mainly to determine teachers' awareness of students' engagement with Gen-AI tools for producing their written assignments, with an eye to elicit how they have come to spot AI-generated content.

All of the teachers confirmed their full awareness of students' use. Yet, each had realized the letter's occurrence differently. To elaborate, most of them recognized the inherent patterns in students' written submissions. For example, teacher 1 stated that they observed some repeated cues across students' written productions. However, teacher 2 was not initially aware, they have connected Gen-AI tools or more precisely the GPT to a searching engine or to the way in which Google works until they have been informed by some students that these tools have an extensive involvement in their learning process.

As for teacher 3 and 4, they relied on their experiential judgment. They shared a way of checking the authenticity of students' works, which is through comparing students' vocabulary and quality of writing. That is, they cross-check students' submissions against previous performance or their typical writing style, looking for possible inconsistencies in their choice of words or simply their way of expression. While these practices seem to be coping mechanisms and indicate teachers' alertness, they also express a somewhat reactive attitude that gives importance to detection over active guiding for ethical use. This can also imply a gap in terms of institutional reinforcement for responsible Gen-AI integrating.

While being an "integral" tool in students' learning routines is an expression used by teacher 3, it also aligns with the perspective of teacher 5. The latter acknowledged the near universality of ChatGPT, and pronounced its use in "every course" and "every assignment." Their generalization shows also a kind of broader adjustment curve in education. That is, their descriptions of how they got to knowing speaks for a lag or a delay between the rapid adoption of Gen-AI tools and teachers' awareness or understanding of their implications. On the other side of the issue, their language signals a sort of normalization in which these tools have become embedded in today's classrooms. This level of normalization raises potential risks about potential over-use, but may point to the utility of Gen-AI tools as a facilitator of learning, if guided effectively and, more importantly, ethically. When taken together, teachers' responses symbolize a picture of varying extents of awareness, detecting strategies, and a shift in attitudes concerning students' use of Gen-AI tools.

# Q3. Based on your teaching experience, how do you think the integration of these tools has influenced the quality of students written assignments?

Table 4.3

The effects of the integration of Gen-AI tools on the quality of students' written assignments

Teachers	Response sample	
Teacher 1	"() has affected the originality() they became passive and they became less attentive, uh, with grammar and the structure. They are not critical, uh, so they have been negatively influenced. "	
Teacher 2	"() highly elaborated, well-organized, () Let's say detailed, well, well argued, etc. the problem is that I already know that this is not a production of their effort() this well produced assignment is not theirs()very refined the productions () "	
Teacher 3	"the use of AI tools in a written assignments or in written activities really help students to improve the quality of their writings because they are learning, not only copy and paste. They learn more. They improve their writings"	
Teacher 4	"()some students have been affected positively. This is for those good students. Because they have already a good level and they improve their productions through the use of these tools for a linguistic support() answering some questions about general knowledge or writing essays() they have just given, uh, the topic to ChatGPT, for example. And it provided them with an outline or another possibility() a whole essay. And this can be, uh, yes, very much helpful for those good level students in doing, for example, a certain task, but they do not relay on it 100%. "	
Teacher 5	"()influenced()in a negative way. When talking about assignments, students are given opportunities to do research, to look for information()to use, uh, their personal touch in such kind of assignments, whatever the course is, or the nature of the content to be handed to the teacher()there is a positive side if we talk about it in terms of content()But the rest() does not reflect their efforts, this is for most of the students or the the majority, very few of them who use i wisely, these tools affect them positively."	

In attempt to set the parameters of the interview, this question helped narrowing down the scope of the subsequent questions by targeting the quality of students' written assignments done through Gen-AI tools.

### Students' Agency Vs. Students' Dependency

Teacher 1 and teacher 5 suggested that Gen-AI tools may have a negative impact on students' skill of writing. To explicate this more, teacher 1 remarked that students may sometimes become "Passive writers" that disregard grammatical and structural aspects of their productions. It could also mean that students prefer convenience over active engagement, which, in turn, may result in homogenized or blended submissions that lack students' personal voice. Further, teacher 5 expanded this point by confirming that the use of Gen-AI tools almost diminished individual efforts, and that AI-involvement "Does not reflect their efforts," which are compulsory to be present in students' written assignments. From their perspective, assignments are not just final productions, but academic works that are process-oriented through which students do research.

Overall, they consider these tools as being a source of support that stops students from thinking for themselves. Simply stated, the frequent use or over-dependence on these technologies misdirect students' independent thought processes and help making disengaged learners who lack authorship of their assignments and give importance to templated responses over improving their intellectual abilities.

### **Duality of Outcomes: Authenticity Vs. Superficial Quality**

Teachers 2 and 4, with almost 20 years of experience, presented a somewhat contradictory picture of the outcomes, where authenticity and superficial polish are at the center. To elaborate, teacher 2 observed that students' written assignments that are AI-generated can be more complex in nature and appear "highly elaborated, well-organized, ..detailed,..well argued." However, they can be detached and might not display individuality of students or their personal connection by saying "well produced assignment is not theirs," and this consequently prompts a question on whether these assignments

necessarily corresponds meaningful learning. In other way, it gives a room for reflection on whether the end product truly translates to effective learning process.

On the other side of the issue, teacher 4 embraced the use of Gen-AI tools by students if they are used for some linguistic support" such as refining their compositions or having general knowledge for technical courses. In a thoughtful reasoning, teacher 4 also draw parallels between two behaviors of students to illustrate that the effects of these tools are context-dependent. The first being a highly-performing student that uses Gen-AI tools strategically as a source of assistance in brainstorming or outlining. The other behaviour, nevertheless, being less successful in using these tools appropriately. According to teacher 4, these tools can be "Helpful for those good level students in doing, for example, a certain task, but they do not relay on it 100%." Still, a less-achieving student who lacks adequate cognitive abilities to complete their assignment may submit the whole AI-generated output as their own intellectual contribution, which, in turn, poses a challenge to the conventional ways of measuring the quality of students' productions.

#### Generative AI as an Educational Platform

Teacher 3 and Teacher 4 are somewhat in favour of the role of Gen-AI tools as learning facilitators. They offer a cautious optimism and stress that outcomes count on how students wield the tools. To explain, teacher 3 maintained that such tools could be beneficial for students when it comes to their writing skill building, and this can be achieved via observance and practice. Students can be adopting them as an exemplary or a model to produce more structured assignments by themselves, without sacrificing autonomy. In the spirit of sharing best practice, Teacher 4 has been known to refer to the use of Gen-AI tools for brainstorming, in order to engage students at the first the stages of writing or learning in general.

Given these responses, teachers tend to place the role of Gen-AI as a secondhand instrument for skill building rather than a complete replacement for students' personal effort. When used in a way that takes into consideration all aspects of ethics, Gen-AI may add value to the learning experience in a number of ways, for instance by introducing students to more advanced ways of writing or ways of coming up with ideas.

### **Disparities in Generative AI Use**

With regard to this theme, it could be said that it refers to the varying degrees of engagement that students have with Gen-AI tools, which may be due to differences in students' skill level, personal motivation or ethical awareness. It can be seen that this variation creates a gap between students who "wisely," per teacher 5, choose to use Gen-AI tools to help them learn and those who rely on it somewhat passively. Students who exhibit high competency, according to teacher 4, often possess prior skill level or a solid foundational writing and reasoning abilities, which empower them to leverage Gen-AI tools as supplements. Meanwhile, struggling students may not have the necessary skills to critically engage with and appropriately adapt the output of Gen-AI tools, thus leading to over-reliance. To mitigate this, teachers must pursue thoughtful strategies that fit all students to use them as a tool for their growth, rather than a quick fix, and arrange ethical guideposts with opportunities for collaboration and innovation to ensure that Gen-AI is an enabler, not an impediment.

Taken in their entirety, the teachers' feedback at this level of the interview illuminates the binary role of Gen-AI tools in education: as a tool that boosts students' writing skill or jeopardizes to impair critical thinking and originality. On the one hand, there are some possible opportunities for skill development with Gen-AI tools (e.g., textual models, brainstorming guides), but on the other hand, their misapply can result in passive learning and ethical hazards, based on students' intents.

# Q4. From your perspective as a teacher, how would you define academic integrity when it comes to students producing and written assignments?

Table 4.4

Teachers' definitions of academic integrity when it comes to students' written assignments

Teachers	Years of teaching EFL	
Teacher 1	"not tending to follow the trap of plagiarism () for students, academic integrity, when they know that they need to generate their own ideas, they need to uh, be honest () and they should avoid the idea of copying answers from other sources."	
Teacher 2	"related to students originalityHow original the work is and how personal the work is. So it must come as a, a product of of a pure student effortthe integrity must also be linked to students genuine level of writingwritten on an assignment should reflect the real level of the student without the help of such tools."	
Teacher 3	"I think it is still something like experts haven't concluded yet the idea of ethical integrity Even teachers still do not know how to deal withbecause it is something recent. And when you have a new invention, you need long time to set its principles or characteristics, or how it should be integrated, how it should be used. Universities until now, still, uh, haven'tproduced some laws preventing students or guiding students in their use of AI because they still do not know how to manage the situation, how to deal with. We cannot say ethically because I told you we still need to to determine what is ethical. What is not ethical. Okay."	
Teacher 4	"It is a difficult question related to this kind of topics This can this can have a relation with, uh, originality maybe"	
Teacher 5	"if just students acknowledge everything, acknowledge any content that is taken and given credits. Because for me, I consider it as a kind of plagiarismcopying and pastingfor example, from ChatGPT, uh, or any other tool is considered similar to taking someone else's work and just, uh, give credit to yourself as you are the one who just wrote it or create it. So, there must bestrict rules about taking from, uh, ChatGPT and acknowledging."	

There was an opportunity to gain insights into how teachers compass academic integrity with regard to students' written assignments. The responses, however, indicated the incompatibility of current ethical frameworks. Between traditional plagiarism norms and the new ethics of AI, the definitions of academic integrity ranged. While some teachers, such as

teacher 1, 2, and 5, conceived Gen-AI as a citable source, others like teacher 3 and teacher 4 asserted some systemic unpreparedness to supervise its use.

#### **Traditional Definitions: Honesty and Plagiarism Avoidance**

What is noticeable is that teachers are accommodating the traditional frameworks of ethics with AI's novel challenges. Taken this as a base, it seems that teachers 1, 2, 4 and 5 are guided by conventional anti-plagiarism guidelines which emphasize honesty, originality and acknowledging sources.

Teachers' emphasis on producing original ideas is consistent with a pre-AI interpretation of authorship. Most of them equated academic integrity with students producing original assignments that show their own thinking and writing at their best. Teachers repeatedly emphasised that assignments must be the product of student's own thought processes, and that they should not be based on some external AI-references. It can be detailed by the expression of teacher 2 that an assignment should be "a product of a pure student effort" which must represent their "real level" of writing without AI-assistance.

In explicit statements, teacher 5 plagiarism to Gen-AI tools, and argued that claiming content that is AI-generated as one's own is equivalent to "taking someone else' s work." Indeed, this is an demonstration of a preservationist attitude, in which Gen-AI is treated as a source of information which, for the purpose of citation, is similar to human-authorized text. Consequently, copying outputs from these tools is considered as a plagiarism.

### **Institutional Ambiguity and Policy Gaps**

It is important to line that teachers 3 and 4 indicated an uncertainty surrounding the ethical use of Gen-AI and that in order to cope with this issue, the norms of academic integrity are still unsettled. As teacher 3 asserted, experts have not reached a conclusion on this matter. In this particular happening, Gen-AI tools are fairly regarded as a "new invention" that may demand time for exploration before establishing its guiding principles.

Additionally, the absence of "laws" on the part of the institution either to foreclose AI misconduct or to guide students can be seen as a situation that forces teachers to base their decisions on improvised judgments. Expressed differently, universities are still struggling to create their own code of ethics or at least achieve ethical AI use.

Addedly, without clear policies, ethical enforcements may become inconsistent. For instance, teachers' attitudes may vary depending on their interpretation of integrity. While some of them may penalise Gen-AI use, others may be more tolerant in cases where students show that they are able to accomplish their learning objectives. The failure to provide clear policies may not only place an additional burden on teachers, it may put students at risks of receiving mixed or conflicting expectations from different courses, which, in turn, could lead to unfair outcomes.

Based on this theme, the gap between policy and practice are pronounced. As educational institutions lag in creating AI-specific guidelines, teachers navigate ethical, gray areas on their own.

### Transparency and Ethical Accountability

It is suggested that this theme may be of interest in terms of considering the role of accountability in relation to maintaining trust in educational outcomes, particularly in the light of the increasing use of Gen-AI in the field. To maintain trust, transparency is essential. In this regard, Teacher 5 expressed the importance of students communicating the origins of any content derived from Gen-AI tools. As for teacher 3, they raised a valid significance regarding the need for clear guidelines for AI-related material, and identifying what is ethically accepted and what is not. Therefore, educational institutions must reconsider what constitutes authorship in order to include the contributions of Gen-AI while also teaching students how to document their process of learning.

Teachers' responses pointed to a critical intersection in academia where instituting integrity must be developed in parallel with Gen-AI. While existing normative frameworks provide a basis, they are not sufficiently adequate to negotiate the collaboration that Gen-AI tools would promote. To ensure that Gen-AI advances students' learning while preserving ethical ground rules, institutions have to follow a balanced and innovative strategies that involve a mixture of transparency and an up-to-date argumentation. Rather than trying to resist these tools, the solution lies in re-framing integrity as a strategic coupling between the efforts of humans and the achievements of technology.

# Q5. How do you think students are aware of the ethical implications of using these tools for their written assignments?

Table 4.5

The perceptions of teachers on their students' awareness of ethical implications of using Gen-AI tools for their written assignments

Teachers	Years of teaching EFL	
Teacher 1	" most of them are not aware. If I can say that 90% 95% of the students are not aware. We can exclude those who are truly competent,they should put efforts and theyshould not rely on AI tools. As for the rest of them. They are not aware about the long term consequences."	
Teacher 2	"I think they are fully aware that it's unethical However, okay, they probably are careless or they don't mindWhat matters for them is the score. Okay. Regardless to to the process,or how it has been Accomplishedteachers, do not differentiate between, artificialwritten assignments and human written assignments"	
Teacher 3	"they are aware and they know that this is unethical because they have an idea of plagiarismBut perhaps the absence of strict instructions prohibit not prohibiting but guiding themperhaps they are under pressure. Perhaps time is not enough. The logistics perhaps. Uh, let's say equipments are not really. Well,do not exist well, in our university"	
Teacher 4	"They are aware, but most of them do not bother um, themselves"	
Teacher 5	"Normally I think they are notwhat I notice they don't even care about what is ethical about usingChatGPT, for example, as one tool or any other toolsVery few of them are aware"	

This question seeks to uncover teachers' perceptions of students' awareness of the ethical implications of using Gen-AI tools in written assignments. Therefore, the corresponding objective is to find out whether students truly recognize the ethical boundaries when using these tools.

#### Awareness Vs. Awareness-Action

Most of the teachers including teacher 1, 2, 4 and 5 agreed on the view that students either lack awareness or ignore ethics. Teacher 2 explained that students give importance to their marks over their learning process, conceiving ethics as insignificant and a secondary to their academic success. Their behaviour therefore is referred to as an awareness-action gap through which one could recognize that the criterion of plagiarism is happening but dismiss it since such tools would offer them the opportunity to have better marks. Consequently, being ethically aware is not sufficient and in order to discourage such behaviors, institutions must prioritize students' learning efforts over the rewarded outcomes.

#### Lack of Institutional and Guidance

It may be the case that teachers 3 is referring to institutional failures as the reason or explanation for the unethical use of Gen-AI. They mentioned a number of challenges, such as a lack of clear guidelines, time restrictions, and poor resources. Also, they commented on the absence of strict instructions and spoke about the university's limited logistics. This could be perceived as an area for improvement as it unfolds situations where students might encounter ethics-based difficulties without having the guidance they would ideally receive.

## Normalization of Generative AI Dependency

Teacher 2 and Teacher 5 foregrounded the way in which the grade-based appreciation normalizes the misappropriation of Gen-AI. Teacher 2 expressed the view that, with the absence of teachers being able to name the difference between human and non-human produced piece of work, students would be likely to maintain their use of Gen-AI. Pursuing

this purpose, students rarely choose to share information about their Gen-AI use, even at times when they are familiar with the associated ethical guidelines, this per teacher 5. It seems to happen that AI-dependency is gradually having recognition within academic settings, although it can not be openly declarable.

### **Exceptionalism of High Performers**

For teacher 1 and teacher 3, a separation has being made between high achievers and the rest of students. Teacher 1 took a firm stand that only the "competent" ones who value hard work and their efforts over a shortcut from Gen-AI, whilst teacher 3 suspected that students with learning difficulties are those failing to benefit from Gen-AI as a consequence of institutional disregard. This is also due to a skills-ethics gap, where those who learn with certainty decline to have Gen-AI addiction, but others fail under the influence, being ethically passive.

Collectively, teachers consider students' ethical awareness of Gen-AI to be inconsistent. While all of them are fully aware of the implications of plagiarism, most of them are either concerned with their marks or lacking adequate guidance. Not only students' ignorance, but also systemic flaws are at the heart of current normalization of Gen-AI misuse.

# Q6. What strategies do you think should be implemented to help students use Gen-AI tools ethically and effectively when producing their written assignments?

Table 4.6

Strategies for ethical and effective use of Gen-AI tools by students for their written assignments

Teachers	Response sample	
Teacher 1	"Wecan organise workshopsto sensitise students about the fact that using AI tools in a negative way since students do care about their marks we can punish them through their mark"	
Teacher 2	"the question formulationquestions that depend on synthesis, analysis and discussionteachers should also, involve more personal questionsassess, assignments based on students personal contribution."	
Teacher 3	" experts and the ones who are interested in using AI in education are still looking for effective strategies to see the negatives, the positives and the drawbacks and recommendations we have to build or establish guidelines."	
Teacher 4	"many teachers are wondering what to do about this"	
Teacher 5		

This question reflects an attempt to identify strategies teachers suggest to ensure ethical and effective student use of Gen-AI tools in written assignments. Therefore, the researchers aim to foreground some actionable strategies to guide students balancing their use of Gen-AI tools with their ethical compliance and evaluate teachers' readiness to apply these strategies.

From disciplinary intervention to proactive instruction, teachers' responses indicate an array of strategies.

### Raising Students' Awareness through Educational Intervention

Teacher 1 supported the idea of holding workshops to educate faculty staff, teachers, and students regarding the use and misuse of Gen-AI tools. Teacher 5 also focused on AI-based classroom dialogue about ethics, and opting for a combination of remedial feedback and timeserving examples, reminders and warnings. They were also keen to normalize open-discussions through which they share their concerns about the perceived "Dangers" of Gen-AI, however, they do acknowledge that their reflections are not based on a systematic work. Teachers 1 and 3 also noted that students misuse Gen-AI tools due to the absence of guidance; workshops and constructive feedback develop competency. It can be chiefly said that teachers can somehow ensure students' awareness through integrating AI ethics into core courses to contextualize consequences.

These practices have the potentiality to equip students and faculty with active, practical skills to employ Gen-AI ethically and effectively, and to educate an appreciation of responsible engagement with innovation.

### **Institutional Guidelines**

It is important to consider the points raised by teachers 3, 4 and 5, in particular the concerns around their insufficient preparation. Teacher 3 commented that experts are still searching for suitable measures, and that there is a kind of uncertainty in the field of AI ethics due to its recent outgrowth. Similarly, teacher 4 shared that many teachers are still thinking of their options and seeking guidance on how they should proceed, especially given the varied interpretations and implementations of current and emerging enforcement measures.

Through mapping teachers' previous responses with those of this question, institutional establishments must develop at least university-wide AI policies like standardized citation code of conduct (e.g., APA style for AI-references), identify

permissible or advisable AI integration thresholds, and require student to document the tools they have used, their purposes and percentage of AI-content in their written assignments. In order for a reduced confusion and an ensured ethical alignment across courses and the department, clear, unified rules guiding the implementation of Gen-AI must be set.

### **Policy Enforcement**

In light of the actions taken by teacher 1, namely enforcing penalties in form of grade deductions, and in consideration of teacher 4 and 5's deciding to reject assignments that are for the most part AI-oriented, one might reason that a criterion for prevention has been opted for by teachers, as a measure to model the consequences of academic misconduct. Therefore, an inference can be made towards a behavioral adjustment strategy that is rooted in the principle of punishment, and accordingly students can be disciplined for their choices and for not following the expected rules. As a whole, teachers' responses serve to embody a penal-based reaction through which the consequences of students' misbehaviors are a component in ensuring that misconduct is not tolerated. However, teacher 5 somehow expressed a concern regarding blaming or punishing students through their marks because the underlying factors behind students' inclination to use Gen-AI are so far not better-known or well-discovered. According to them, neither teachers nor students can control the situation, although the penalty idea may have likely initial results.

In the short term basis, the followed strategy can be quite effective when it comes to regulating students' behaviours of learning, but one potential drawback is that it might lead to counterproductive outcomes in its long-term implementation, such negative reactions as adversary in teacher-student relationship, especially when measures that deal with deeper causes behind students' addiction to Gen-AI are lacking. It would be therefore analytical to point that a resort to punishment as a sole means of teaching ethical Gen-AI use might be

somewhat misplaced or simply have certain limitations, and that students, as a result, may opt for a more mediated or covert forms of AI-dependency.

### **Restructuring Assessments for Critical Engagement**

It is understood that teachers 2 and 4 are of the persuasion that there may be some value in considering ways in which assessment might be adapted in order to reduce dependency on AI. Teacher 2 has verbalized a preference for embedding assessment items that encourage analytical and independent thinking, while also incorporating a sense of personal reflection and interpretation through their saying that there is a need "to shift from direct, questions that depend on retrieving abilities that depend on knowledge and remembrance to more analytical synthetic." That is, in order to mitigate the misapplication of Gen-AI tools, it was recommended to consider assessment reforms within which higher-order thinking skills can be integrated, including analysis and synthesis, as well as self-reflection. Through this demeanor, students' written assignments become less vulnerable to AI-generated outputs, thereby upholding academic integrity.

Teacher 4 has also suggested promoting assignments that might benefit from personal engagement, where students can voice their own unique perspective and creativity through which "they produce something in which…there is at least a certain degree of their touch." that is, students agency and efforts are of importance.

As a conclusion, the teachers' varied strategies offer a valuable insight into a key source of complexity and the question of control as opposed to empowerment is one that is not easily answered. It is fair to say that there is a tendency to focus on the so-called negative sides of Gen-AI, such as potential risks over benefits, which could potentially result in it being perceived as something of a threat. As such, it may act as a form of discouragement for students who wish to learn more about its full potential. However, institutions may benefit from the consideration of creating AI ethics communities to harmonise their guidelines.

# Q7. How can we ensure that these strategies are applied effectively by students when using these tools in their written assignment?

Table 4.7

The efficacy of said strategies in ensuring successful use of the tools by students in their written assignments

Teachers	Response sample	
Teacher 1	"I believe that the answer for this question has direct relation to awarenessas teachers should make students aware that, uh, they do not use ChatGPT for their own benefits by trying to,explain the long term consequences Basically that's it. It's it's everything about awareness"	
Teacher 2	"I have no clue. I have no clue because it's it's an it's a new it's a new situation for usthe issue is still, under investigation.	
Teacher 3	"We cannot ensure this 100%"	
Teacher 4	"Nothing is sure. The students always needmaking them awareGuidelines. And, uh, some workshops and some seminars"	
Teacher 5	" you reject the work and you asked for something else Otherwise, I, uh, just accepting the written assignment, just make them present their work orally	

In order to achieve ethical use of Gen-AI, a two-pronged attention is required: on the one hand, educational activity to enable students, and on the other hand, enforcement to preserve standardized principles. Whereas limitations are perceived by teachers like teacher 3, actionable solutions such as oral assessments (teacher 5), workshops (teacher 4), and detections (teacher 2) are described.

#### **Awareness and Competency Building**

To begin with teachers' viewpoints, teacher 1 claimed for the importance of raising students' students awareness especially on the long-term consequences of their misuse of Gen-AI like erosion of critical thinking and dependency. The reason for their assertion is that awareness is the core of ethical behaviours. As for teacher 4, warranting the effectiveness of the opted for strategies cannot be ideally achieved, but offering guidelines and modeling them in workshops or seminars can make students aware enough to regulate their use of Gen-

AI. That is, workshops are a start but insufficient without arranged and continuous support. At the meantime, awareness is foundational and exceed basic dos and don'ts, rather it targets cognitive and behavioral dimensions of Gen-AI use, thereby educating students on this issue may develop in them intrinsic motivation to avoid misuse.

### **Detection, Accountability, and Consequences**

Detection and accountability measures are critical for enforcement. The focus of teacher 2 on identifying the patterns in use by students seems to be an alternative for the the role of AI-detection software. Through teachers' notes, detecting these repeated patterns can be somehow easy for teachers to mark, although it might be difficult in cases where students could avoid copying and pasting verbatim responses through manipulating them.

Differently, the oral assessments provided, as per teacher 5, can work to encourage and secure that students internally grasp their written productions. Being an autonomy-supportive assessment, it reduces Gen-AI reliance though referring to students' comprehension and active engagement over a well-structured submission. That is, a process-oriented education can be demonstrated via oral defence and presentation rather than a final product.

### Systemic Challenges: Ethics, Autonomy, and Policy Fluidity

It is stimulating to note the variety of orientations that students may have when it comes to teacher 2's dimension. That is, Gen-AI utilization is tune to individualistic ethics. For example, it appears that some students may place a higher value on integrity than on grades, as a personal choice or decision to maintain authorship. However, teacher 3 focused on the complexity of adaptable compliance. Teacher 3's practicality acknowledged institutional limitations in controlling autonomous decisions, whether from teachers' side or students'.

Q8. Is there anything else you would like to add about these tools and their effects on students written assignments, and the importance of maintaining academic integrity?

Table 4.8

Teachers' suggestions

Teachers	Response sample	
Teacher 1	" I'd like to say that students should be aware about the long term consequences because they believe that quick answers are more easy and they prefer to have quick answers just by askingSo they should put in mindthese tools can affect their critical abilitieswriting skill and many other consequences"	
Teacher 2	"I think we have to train our students, on on how to use, AI tools and how to, for example, to, to to generate prompts. Okay. Prompts to help them effectively use it for their own benefit. Okay. And we have also to develop our own strategies,speaking as the problem is, is novel. We are still experiencing it. We are still assessing it. Okay. In order to, () Ultimately find solutions. Okay. To cope with it."	
Teacher 3	"the items are very effective, very helpful for students, but at the same time they are dangerous"	
Teacher 4	"if the student is aware that he has to develop his all his competencies and try to, if he has a good learning strategies"	
Teacher 5	" I support the those tools I would love to say yes to technology, but no at the same time. Yes. Um, something that would, uh, kill the productivity, creativity, uh, critical thinking,"	

### **Dual Impact of Gen-AI tools**

Gen-AI tools have the potentiality to influence educational practices and change today's classroom. Nevertheless, this possibility is concomitant with multiple prospective obstacles that must be given full consideration. As particularized by teachers 1, 3, and 5, a key benefit of Gen-AI resides in its potential to augment the efficiency of activities such as brainstorming. This can be particularly advantageous in a learning environment, wherein they could modify the entree to high-quality writing models, irrespective of students' skill levels. Nonetheless, over-reliance on these tools has the danger of engendering cognitive disengagement. As was noted with regard to teacher 3's postulation of "mental laziness" as well as teacher 5's observance of decreased creativity.

### **Academic Integrity in the Age of Ambiguity**

The advent of Gen-AI has led to the disruption of conventional plagiarism frameworks, culminating in the emergence of a zone of ambiguity between collaboration and misconduct. As teacher 5 acknowledged, the presence of such tools within educational environments facilitates and supports plagiarism on account of its ability to assist students in producing content that is of a high level of quality and with minimum investment of effort. This is in contrast to teacher 2, who stresses the challenge of AI detection in at-home assignments. However, the use of the term "misuse" is particularly inappropriate in contexts such as Algeria simply because institutional inadequacy and lack in resources are key constituents contributing to the increase of this issue, as per teacher 5.

### 4.1.2 Analysis of Students' Attitudinal Ouestionnaire

In the analysis of students' questionnaire, it is accustomed to make use of descriptive statistics, tables and graphs so as to gain a comprehensive understanding of the responses given.

Table 4.9

**Section One: General Information** 

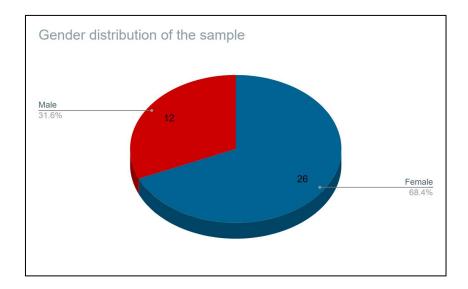
Item 1. What is your gender?

Gender distribution

Option	Number	Percentage	
Male	12	31.6%	
Female	26	68.4%	
Total	38	100%	

Figure 4.1

Gender distribution



With the aim of deepening the understandability of the population, the initial item was designed to furnish insights from the gender distribution of the sample. As summarized in Table 9 and Figure 1, it can be seen that there is an imbalance regarding the number of females and males, with the former exceeding the latter. That is, out of 38 participants (100%), 24 (68.4%) were female and the number of males was as low as 12 (31.6%). Apparently, the female participants outnumbered the male participants by almost two to one.

### Section Two: Familiarity with Gen-AI Tools

Item 2. How familiar are you with Gen-AI tools (e.g., ChatGPT, other AI similar assistants)?

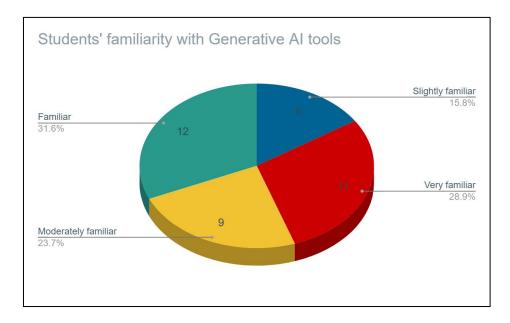
Table 4.10

Students' familiarity with Gen-AI tools

Option	Number	Percentage	
Not at all familiar	0	0%	
Slightly familiar	6	15.8%	
Moderately familiar	9	23.7%	
Familiar	12	31.6%	
Very familiar	11	28.9%	
Total	38	100%	

Figure 4.2

Students' familiarity with Gen-AI tools



With regard to the question of how familiar 38 third-year students are with Gen-AI tools. The data provides an informative overview. It appears that none of the students (0%) reported being "not at all familiar" with these tools. Also, a narrow range (6 participants, 15.8%) of participants self-identified as "slightly familiar," with the majority placing themselves in the higher familiarity categories. That is, 9 participants (23.7%) expressed that they were "moderately familiar," 12 (31.6%) were "familiar," and 11 (28.9%) were "very familiar." Cumulatively, the 84.2% of participants (32/38) indicated at least moderate familiarity, with 60.5% (23/38) in the two top choices: familiar or very familiar. Therefore, the data displays a higher selection to be fairly familiar, with zero participation from students who were entirely not familiar with such tools.

Item 3. How often do you use Gene-AI tools for your written assignments?

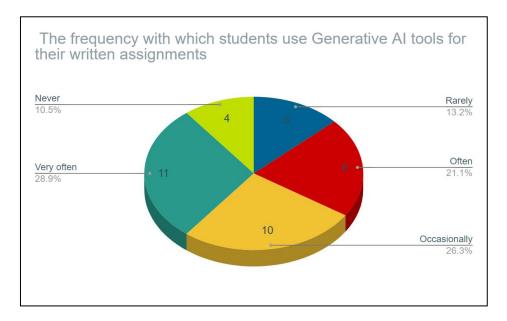
Table 4.11

The frequency of students' use of Gen-AI tools for their written assignments

Option	Number	Percentage
Never	4	10.5%
Rarely	5	13.2%
Occasionally	10	26.3%
Often	8	21.1%
Very often	11	28.9%
Total	38	100%

Figure 4.3

The frequency with which students use Generative AI tools for their written assignments



According to the illustrations above in table 13 and figure 5, it seems that students are using Gen-AI tools quite frequently for their written assignments, and that they are clearly relying on these technologies. As statistically concised, the majority of students, 28.9% (11 students), communicate their use of Gen-AI tools as "Very often," followed in a descending order by 26.3% (10 students) for "Occasionally," 21.1% (8 students) for "Often," 13.2% (5 students) for "Rarely," and 10.5% (4 students) for "Never." When linked together, the half of

the sample (50%) belong to the "Often" or "Very often" categories, and this means that these tools take a regular part in the academic routine for many students while nearly a quarter of the students (23.7%) use these tools sparingly or not at all.

Section Three: Strategies to Uphold Academic Integrity while Using Generative AI
Tools

Item 4. Do you believe that collaboration between teachers and students is essential for effective and responsible use of Generative AI?

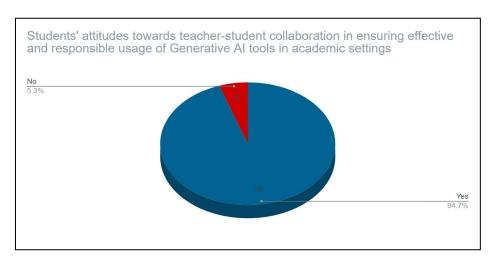
Table 4.12

Students' attitudes towards teacher-student collaboration in ensuring effective and responsible use of Generative AI tools in academic settings

Option	Number	Percentage
Yes	36	94.7%
No	2	5.3%
Total	38	100%

Figure 4.4

Students' attitudes towards teacher-student collaboration in ensuring effective and responsible use of Gen-AI tools



The majority of students (94.7%, 36 out of 38) believed that teacher-student collaboration is necessary for the ethical and responsible use of Gen-AI tools, with a minority (5.3%, 2 students) that disagreed with this position. To elaborate, the high level of agreement

is likely to be revealing students' awareness that Gen-AI use may actualize serious impediments. Addedly, it is quite relevant for students to see their teachers as a role model that advocates for ethical practices. As for the minority of objectors (5.3%, 2 students) may either assume that they can self-regulate their use of Gen-AI or probably discredit current institutional supervision. However, their minimal presence strengthens the overall suit of working in partnership.

# Item 5. Please indicate your level of agreement or disagreement with each statement by selecting the corresponding response on the scale provided.

The aim of this question serves the contribution of the present study of research for providing guiding strategies that hopefully could regulate the use of Gen-AI tools by teachers and students in the context of EFL Higher Education.

 Table 4.13

 Policy awareness and continuous learning

Statement	Strongly agree	Agree	Neutral	Disagree	<b>Strongly</b> disagree
1.Students should understand the provided policies regarding academic integrity, including guidelines on plagiarism and citation practices.	42.1%	39.5%	15.8%	0%	2.6%
2.Students should attend workshops or training sessions on the ethical uses of Generative AI tools, if available.	42.1%	36.8%	15.8%	2.6%	2.6%
3.Students should read and stay informed about the roles, benefits, and ethical concerns of Generative AI in academic contexts.	34.2%	52.6%	10.5%	0%	2.6%

It would be advisable for students to first familiarize themselves with current policies of their institutions so that they have at least some or basic understanding, and be better prepared to realize the expectations of their institutions. It is also vital to accommodate to the

new models of ethics, as set out in statements 2 and 3, and this can be best achieved if students maintain continuous topical awareness and moments of currency with latest AI-developments through attending workshops or making use of other education resources. Having these as a cornerstone keeps accidental misconduct at the very minimum and could allow students for making choices in the future that are well-informed.

Generally speaking, high degrees of agreement among students exist with respect to the importance of academic integrity and ethical conduct in the context of Gen-AI tools. Variations in their answers do, however, emerge, and these variations shed light on areas that need more attention from the part of the institutional bodies.

The majority of participating students (81.6%) articulated their emphasis on the importance of having an understanding of the policies of academic integrity, extending to plagiarism and proper citation practices. Considering these findings, it can be premised that students do appreciate these policies as being foundational to maintaining core values in their academic productions, as evidenced by their high level of agreement (42.1% strongly agree, and 39.5% agree). A proportion of them of 15.8%, however, expressed a neutral stance, a statistics that may indicate an increasing degree of indecisiveness concerning the application of existing policies to emerging trends of AI-assisted writing. In terms of the relatively secondary proof of disagreement (2.6% of respondents strongly disagreeing), a possible explanation is that it reflects the unwillingness of students to consider the enforcement of the aforementioned policy.

Statement 2, associated with the participation in workshops on the ethical use of Gen-AI, received comparatively lower levels of affirmation, with 78.9% of respondents registering their compatibility (42.1% strongly agree, 36.8% agree). Although the data signals a majority of agreement, the existence of disagreement of 5.2% (2.6% disagree and 2.6% strongly disagree) and a neutrality of 15.8% could stand for some resistance to

organized training. In this case, it is important to communicate that the seen deviation of opinions may be due to factors, including but not limited to perceived time constraints, a personal orientation for self-guided forms of AI-education, or simply a general sense of reservation about the effectiveness of the workshop. To give an example of this, one might conceive that while students may prize the practical benefits offered by Gen-AI, they, nevertheless, are unwilling to engage in any formal education for reasons that are perhaps related to a perception that such training is somewhat redundant in terms of the practices that they have already adopted. As a solution for this minority, it would be beneficial for workshops to elucidate some specific and real requirements; for instance, how to credit AI-generated content or managing AI-dependent learning styles can be their focus.

The third statement, that is concerned with remaining educated about AI's features and ethics, is identified as the most positively agreed upon (86.8%: 34.2% strongly agree, 52.6% agree). Indeed, the datum mirror the keen awareness of students about the revolutionary contributions of AI in academic matters. In this particular context, their decision to prioritize the AI literacy more than understanding the policy or attending workshops is likely to be motivated by a perspective that considers the role of technology in a contemporary era of AI.

The 10.5% neutral category and the 2.6% category of strong disapproval, on the contrary, probably imply a deficiency in terms of available resources for information, or that students may have other personal commitments that take their time and attention. Such a failure can be explained by students' misinterpretation of the expression "staying informed" as a meaning for having passive awareness. Therefore, in order to address the issue of students' disagreement, it is urgent for educational institutions to take a part in disseminating some possible, actionable content. The latter may take a form of informative case studies on

the misuse of AI, or simply guidelines for ethical integration of AI. The intent thereof is simply to facilitate a connection between what is expected and a real-world application.

If the researchers of the present study regard the answers of students as a whole, it would be terminated that students are ethically minded but still discovering their way of dealing with the two sides of AI, the way it can help and the way it can disturb what academic principles are like. The data does give some encouraging signals on students' willingness to engage with integrity guidelines despite the differences in their enthusiasm between workshops and non-workshop education. It is consequently conceived that tailored reinforcement may be advantageous for boosting students' awareness. A way to satisfy both workshop-averse students and those searching for some flexibility is possibly to consider introducing micro-learing modules on AI-ethics as part of existing courses or the Curriculum.

Table 4.14

Ethical commitment and academic honesty

Statement	Strongly agree	Agree	Neutral	Disagree	<b>Strongly</b> disagree
4.Students must be committed to honesty and personal responsibility for producing an original work.	42.1%	36.8%	18.4%	0%	2.6%
5.Students should resist the temptation to submit AI-generated content without modification or personal input because it violates academic integrity and undermines their learning process.	31.6%	42.1%	23.7%	0%	2.6%

Academic integrity is not a mere abstractionism; it is a personal promise to preserve honesty (Statement 4) and resist the pursuit of shortcuts such as submitting plagiarized AI-content (Statement 5). Therefore, fostering these principles could nurture a mindset that

attaches great importance to accountability, and encourages students to give primacy to active engagement throughout their learning over attaining academic qualifications or marks.

Most students (78.9%) come to be in agreement with the belief that honesty and personal ownership in one's academic efforts are of an ethical standing. That is, the university's devotion, in general, to academic integrity developed these values in students. Despite this, 18.4% of participants were undecided, which is likely due to mixed feelings surrounding both the use of Gen-AI tools and how the aforementioned principles can be applied in this particular context. Students might wonder if using Gen-AI for activities like brainstorming or making drafts goes against the persuasion of originality, mainly if the rules in place do not supply clear guidance for them. With a minimal objection listed (2.6%), the perceptions of students on academic imperatives may have contributed to this or it is simply an indication of variations of views on how collaborations between AI and students should be appropriated.

As for statement 5, the majority of students (73.7%) realized some concerns attached to submitting a material that has not been personally qualified. A somewhat more neutral response (23.7%) compared to the responses in statement 4 is expressed, which may point a degree of hesitation when it comes to setting the precise parameters. Some of them may struggle to pinpoint an exact meaning for the expression "modification" as it relates to their own work. That is, a challenge could be about the amount of personal input that should be integrated into the AI-content to be counted as an original work or simply a student-authored work that can be submitted. As for the 2.6% of disagreement may be due to a variety of causes, which could be a tendency to avoid the restrictions of policies.

An explanation for the results of these two statements would consider the shared ethos among students, in that honesty (Statement 4) is crucial and resistance to submissions of non-modified AI-content (Statement 5) is equally important. The slight increase in neutral

attitudes (18.4% to 23.7%), nonetheless, might show that it is sometimes easier for students to agree with general principles of ethics without necessarily applying them in the said way. Students mostly support the thought of originality, but there is a room for give-and-take regarding the specificity of how to achieve it with Gen-AI tools particularly when it comes to the extent of personal touch that is required in such submissions. Therefore, it is hoped that this gap can be filled as well as the institutional roles and responsibilities be involved. Ideally, policies would move from general-purpose encouragements like "be honest" to more specific criteria, for example, "AI-generated outputs must be modified and changed in order to include a percentage of 50% or more of original reflection." Yet, the small percentage of disagreements between the two statements (2.6%) might indicate that, on such occasions, there may be demands, such as achieving high marks or meeting the time and deadlines, that may sometimes influence students more than the ethical circumstances do.

Table 4.15

Responsible Gen-AI utilization

Statement	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
6.Students must use Generative AI tools as a linguistic support rather than a shortcut for composing written assignments.	31.6%	39.5%	26.3%	0%	2.6%
7.Students must use Generative AI tools appropriately when producing their written assignments, such as using theses tools as a starting point for outlining, brainstorming or drafting, but requiring students to produce their final work independently.	41.1%	34.2%	21.1%	0%	2.6%
8.Students must use Generative AI tools as an aid, not a replacement, for independent research, analysis, and critical thinking.	36.8%	47.4%	13.2%	0%	2.6%
9.Students must avoid copying AI-generated texts directly and presenting as their own words	39.5%	47.4%	10.5%	0%	2.6%
10.Students must create their own drafts first, based on their writing and research skills, before turning to Generative AI tools for assistance.	36.8%	50.0%	10.5%	0%	2.6%

Students emphasized the role of Gen-AI as a complement to, rather than a replacement for, their own work. Firstly, the high levels of affirmative responses about the need to avoid short-term solutions (Statement 6) and direct reproductions (Statement 9) indicate a widespread attachment to originality. Also, the neutral responses (e.g., 26.3% for Statement 6) suggest some complexity about real-life limitations, such as whether to separate AI-assisted writing from AI-over-reliance. Addedly, the orientation for the use of Gen-AI in the early phases (Statement 7) and after self-authoring (Statement 10) illustrates a preferability of structured processes in which Gen-AI improve, rather than dominates, students' contribution. As for the consistency in terms of keeping the quality of independent

analysis (Statement 8) shows awareness of students regarding the limitations of Gen-AI for promoting deeper learning.

**Table 4.16** *Transparency and citation practices* 

Statement	Strongly agree	Agree	Neutral	Disagree	<b>Strongly</b> disagree
11.Students must always acknowledge that they have used Generative AI tools, even if they were used as helping tools for outlining or paraphrasing.	28.9%	47.4%	21.1%	0%	2.6%
12.Students must cite any information, ideas, and content that is derived from Generative AI tools.	36.8%	39.5%	21.1%	0%	2.6%

It is vital to ensure that Gen-AI use is clearly attributed in order to maintain optimal transparency, and a proper citation is essential to avoid any possibility of plagiarism.

While students generally agree on the disclosure of Gen-AI implementation (Statement 11), the lower strong agreement (28.9% vs. 36.8% in statement 12) points to a preference for structured citation of contributions (Statement 12) over a general acknowledgment for secondary assistance. Also, a lack of clarity in internal policies is indicated by neutral responses (21.1% for both statements). There may be a need for students to develop skills in identifying when to credit (e.g., paraphrased AI-text) and formatting citations correctly (e.g., APA/MLA guidelines for Gen-AI). The correlation between statements 11 and 12 shows a kind of consistency on the idea that students embrace Gen-AI as a common asset that demands acknowledgement like any conventional sources.

 Table 4.17

 Collaboration and communication

Statement	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
13.Students should keep an open line of communication with their teachers about their academic work and how they are using Generative AI tools.	39.5%	42.1%	15.8%	0%	2.6%
14.In collaborative written assignments, students must promote honest academic dialogue and ensure that every member in the group is aware of how Generative AI tools are being used and attributed.	42.1%	39.5%	13.2%	2.6%	0%
15.Students should encourage responsible Generative AI use among their peers.	36.8%	42.1%	18.4%	0%	2.6%

Students gave high priority to both open communication with teachers (Statement 13) and with their peers (Statements 14 and 15), regarding transparency of information as being a key to a successful integration of ethical AI-principles. As previously settled, this corresponds to earlier specifications for clear policies.

It is notable that neutral responses primarily address issues of feasibility. Among these responses, concerns regarding the fear of judgement also deserve attention. Some students may be unwilling to discuss their use of Gen-AI with their teachers. Also, in order to ensure openness in students' collaborative assignments, both trust and transparency are required. As for the influence of peers, it is essential to encourage responsible use among colleagues. Students recognize the value of collaboration and transparency in ethical Gen-AI use but need a kind of institutional scheme to translate ideals into practice. In this case also, teachers can have a role in facilitating a change within their institutions by encouraging open

discussions and peer collaborations, which, in turn, fill the gap between students' awareness and action.

**Table 4.18**Skill development, feedback, and self evaluation

Statement	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
16.Students should actively seek guidance and feedback from their teachers on how they can improve their writing, thought processing, and research skills.	39.5%	47.4%	10.5%	0%	2.6%
17.Students must develop their academic research skills.	55.3%	28.9%	10.5%	2.6%	0%
18.Students must work on improving their paraphrasing and summarizing skills to avoid over-reliance on AI tools.	55.3%	31.6%	7.9%	2.6%	2.6%
19.Students should practice self-reflection on their written assignments to evaluate their performance and practices.	39.5%	42.1%	13.2%	0%	2.6%

It would be worth mentioning that one's reliance on Gen-AI tools might be decreased through focusing on bettering their research, summarizing, and paraphrasing as basal skills. Also, engaging in periodic contemplation and feedback can be a valuable exercise for students, thereby providing them with the possibility to analyze their improvement and ethical conduct. That is, reflection can be causative to building academic resilience over time.

In essence, students place identical weight on the necessity of skills development, the value of teacher collaboration, and the role of self-reflection in academic enterprise, particularly in the context of Gen-AI tools. Teachers' support can be a factor for positive change also.

It is encouraging to witness a high level of agreement on the importance of requesting feedback, as outlined in statement 16. Such attitudes are in arrangement with the above-named calls for transparency and effective communication in statements 13 and 15. Jointly, these answers function to strengthen the polar role played by teachers in building a meaningful connection between the use of Gen-AI and the principles of ethics. It is accepted by students that academic success is conditional on three key constituents. Firstly, foundational skills must be in place. Secondly, effective feedback is necessary. Thirdly, and perhaps most importantly, students must be well-informed about themselves.

**Section Four: Feedback Mechanisms** 

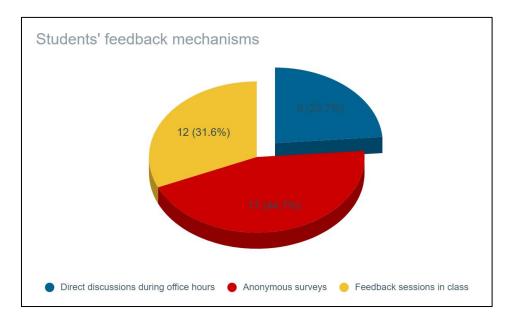
Item 6. How would you like to provide feedback to your teachers about your use of Generative AI tools in your written assignments?

Table 4.19
Students' feedback mechanisms

Option		Number	Percentage
Anonymous surveys	17		44.7%
Direct discussions during office hours	9		23.7%
Feedback sessions in class	12		31.6%
Total	38		100%

Figure 4.5

Students' feedback mechanisms



Students mostly prefer anonymous surveys (44.7%, 17 students) to be their primary method of communicating feedback to teachers about their use of Gen-AI tools in written assignments. A fairly small but noticeable group of students chose feedback sessions in class (31.6%, 12 students), and the least endorsed method is face-to-face discussions during office hours (23.7%, 9 students). What this allocation clearly expresses is students' choice for forms of communication that are non-directional, group-based or structure-oriented, avoiding one-to-one means of interaction.

The high tendency for anonymous surveys (44.7%) means that students may value their own privacy or avoid social stigma when it comes to discussing their use of Gen-AI. That is, a feedback that does not require students to acknowledge their names facilitate free-spoken sharing of challenges or misuse without the fear of being judged. As for the choice for in-class feedback sessions (31.6%), it indicates students' willingness to pursue a facilitated structure where the experiences of peers can play a role in normalizing open discussions about Gen-AI. Finally, the limited interest in in-person office-time discussions (23.7%) may be due to some personal discomfort with accountability or to a lack of certainty,

especially if students are concerned that their use of Gen-AI may be questioned as being unethical.

#### 4.2 Synthesis of the Findings

Based upon the first version of data accumulation discussed in the results section, it is hoped that this synthesis could furnish a constructive contribution, shedding more light on the extent to which Gen-AI tools could have affected the academic integrity of EFL students when producing their written assignments. As a non-experimental study, the purpose for this undertaking is to understand current educational trend for Gen-AI adoption, with a pursuance to illuminate and map qualitative insights with statistical grounds.

In the following of comprehensibility, the researchers, in this part of the study, intend to bring clarity to the firsthand findings of the work, in a conduct that respects the integrity of research process. It is also our intention to embark on a delicate investigation to set potential intersecting lines of enquiry, and by extension, to consider the presence or absence of inconsistencies that could originate from the apposition of quantitative and qualitative outcomes. Informed by the current research parameters, it is integral to refer to the research questions and hypotheses that inspired the study's design as well as the execution of the fieldwork and analysis.

Research Question 1: What are the perceptions of teachers of English at Biskra University towards using Generative AI tools by undergraduate students for producing their written assignments?

The first research question directing this study was studied through unstructured interviews with five teachers, whose perspectives uncovered a mixture between current pragmatic adaptations, concerns on ethics, and institutional challenges. Initially, the researchers hypothesized that teachers of English at Biskra University may voice some concerns with regard to the potential of Gen-AI tools to erode undergraduate's originality and

critical thinking abilities. Indeed, the hypothesis is supported by the findings. To detail, most of the participants shared the belief that a reliance on Gen-AI tools, ChatGPT being the most used one, would have a counterproductive effect on students' originality. Through the lens of a participant (Teacher 1), students became "passive writers" that submitted homogenized, prescribed assignments that lacked authorial stance and personal voice. In support of this argument, teachers asserted a decline in students' ability to engage in critical thinking, and this is mainly owing to their tendency to rely on Gen-AI in almost every task in their academic routines (Teacher 3) including tasks that require analytical and synthetic reasoning, as in the words of teacher 3 "mental laziness" and of teacher 5 "kill critical thinking abilities".

In the line of the study, the hypothesis focused on identifying potential risks; however, the interview contributors also recognized the benefits that could be settled by the use of Gen-AI tools if they were used ethically. On this, participants acknowledged the effectiveness of Gen-AI in providing a linguistic assistance for brainstorming or the initial drafting stages (Teacher 2: "Generate prompts..help them effectively..for their own benefit;" Teacher 4: "some students have been affected positively. This is for those good students because they have already a good level and they improve their productions through the use of these tools. As a linguistic support"). Nonetheless, the aforementioned advantages were mitigated by a series of cautiousness with regard to current inappropriate use, specifically within contexts where definite guidelines can be viewed as missing.

An evident gap was identified between teachers' awareness of the potential risks of the integration of these tools into students' submissions and the absence of institutional guidelines to address them. In this case, for example, teacher 3 foregrounded that experts may be yet to terminate ethical guidelines, meaning that the current responsibility would rest on teachers to interpret and behave in accordance with these complexities by themselves. In light of this gap, it is crucial to produce AI-specific policies.

Research Question 2: How can teachers and third-year students of Biskra University regulate the use of Gen-AI tools to uphold academic integrity within the EFL context?

In an effort to answer the second research question, the researchers developed the hypothesis that collaborative efforts between teachers and third-year students could help in establishing best practices that promote ethical and effective approach for using Gen-AI tools within the EFL context at Biskra University. Attitudinal questionnaire was posted to 38 third-year students for the sake of gathering two-fold strategies that mitigate the Gen-AI integration and its ethical implications. A percentage of 94.7% of students expressed that it would be advantageous for efforts to be demonstrated by both parties. Therefore, the hypothesis is confirmed.

#### Conclusion

This chapter was limited to present the findings, analyse the data gathered, and interpret the results. Thematic analysis was applied to the unstructured interview responses, while the attitudinal questionnaire was analysed using descriptive statistics. The final section was devoted to the discussion and synthesis of the results, where the two research questions were to be addressed and their associated hypotheses were confirmed.

#### **General Conclusion**

The recent proliferation of Gen-AI tools in the context of Higher Education opened the door to both innovative and ethically challenging opportunities, especially for EFL students whose educational journey in learning a foreign language demands the requirements of producing original, high-quality assignments. The present dissertation, therefore, is an attempt to investigate how these technologies overlap with students' academic integrity, both in terms of the misconduct hazard and the promise as an effective resource in language learning. In tackling these contradictions between a commitment to AI-technology and ethical responsibility, this case study contributes to existing literature through shedding light into the need to reconstruct and update the measures of integrity in an era of universal adoption of Gen-AI.

To this conclusion, the present research relied on a Mixed-Methods Approach based on the Pragmatic standpoint of the researchers. Following the researchers' orientation, a Mixed-Methods Approach entailed a fair use for the objectives of the study. Consequently, a Case Study Design was opted for as a non-experimental attempt to adequately encase the aims of the scrutiny. In line with this determination, two distinct data collection methods were implemented. In terms of the qualitative phase of the research, an unstructured interview was conducted with five teachers in order to elicit their perceptions on using Gen-AI tools by undergraduate students for producing their written assignments. As for the quantitative side, an attitudinal questionnaire was posted to 38 third-year students in order to tackle their attitudes regarding a possibility of collaborative effort with teachers to navigate their use of Gen-AI tools ethically and effectively, with an objective centralized on identifying actionable strategies to balance technological empowerment with accountability.

Key findings indicated a dual role for Gen-AI tools. However, extensive reliance on Gen-AI tools can be associated with an increased risk of accidental plagiarism, especially among students who lack training in citation and paraphrasing. Meanwhile, teachers voiced mixed persuasions. Some argued for punitive actions to prevent misuse, while others focused on reforming assessments to give priority to critical thinking and individual voice. Noticeably, the data pointed to institutional weaknesses. Students often engaged with Gen-AI tools not due to a lack of awareness, but due to the lack of clear institutional guidelines, while teachers coped with contradictory policies for the assessment of AI-influenced productions. Therefore, there must be a collective engagement from both teachers and students to ensure ethical and effective Gen-AI tools use.

## **Pedagogical Recommendations and Implications**

Settled by the main conclusions of the study, this section aims to propose a number of strategies in order to ethically and effectively regulate the use Gen-AI tools by students. Based on the overall findings of the study, the suggestions made by both students and teachers, and the consistencies between them, the below recommendations and implications for teachers and students are outlined.

#### For institutions

- Integrating compulsory modules on AI-Literacy into the curriculum, including proper citation of AI-generated content, understanding AI's limitations, and making a distinction between collaboration and misconduct.
- Establishing clear institutional policies for what is acceptable and non-acceptable use of Gen-AI in written assignments, especially when it comes to drafting assistance as opposed to generating full submissions.
- Implementing training programs for teachers, including conducting workshops or seminars in order to equip them with tips for embedding Gen-AI tools pedagogically, addressing ethical challenges in the classroom, and detecting Gen-AI misuse in written assignments of students.

- Promoting ethical awareness for students by organizing workshops on the dual-edged effects of Gen-AI tools, explaining potential academic growth and the long-term outcomes of use.
- Fostering collaborations between faculty stakeholders through which students, teachers, and administrators help in co-creating AI-policies, ensure inclusivity, and address diverse perspectives on the role of technology.
- Adapting AI-policies regularly with the help of the committees of ethics for the sake of updating pedagogical best practices with technological developments.

#### For teachers

- Considering assessment practices that encourage students' active engagement and
  higher-order cognitive abilities. These assessments should target analytical, synthesisbased skills or make use of personalized questions that require self-reflection or
  contextual analysis in an effort to reduce the willingness to copy and past AI-generated
  outputs.
- Adopting a balanced approach of enforcement that incorporate mark deduction for the highly affected written assignments by Gen-AI tools.
- Encouraging reflective and process-oriented assignments through designing multi-stage tasks like drafts, peer reviews, and self-assessment that makes students personally engaged in the writing process over final productions.
- Incorporating supportive measures such as revision opportunities and feedback sessions to encourage students' accountability.
- Establishing feedback channels for reporting ethical challenges, where students also can gain guidance on how to use Gen-AI ethically and effectively without fear of punitive repercussions.

 Encouraging students to limit AI-assistance in their written assignments in order to foster honesty and self-regulation.

#### For students

- Students should understand the provided policies regarding academic integrity, including guidelines on plagiarism and citation practices.
- Students should attend workshops or training sessions on the ethical uses of Gen-AI tools,
   if available.
- Students should read and stay informed about the roles, benefits, and ethical concerns of Gen-AI in academic contexts.
- Students must be committed to honesty and personal responsibility for producing an original work.
- Students should resist the temptation to submit AI-generated content without modification or personal input because it violates academic integrity and undermines their learning process.
- Students must use Gen-AI tools as a linguistic support rather than a shortcut for composing written assignments.
- Students must use Gen-AI tools appropriately when producing their written assignments, such as using theses tools as a starting point for outlining, brainstorming or drafting, but requiring students to produce their final work independently.
- Students must use Gen-AI tools as an aid, not a replacement, for independent research, analysis, and critical thinking.
- Students must avoid copying AI-generated texts directly and presenting as their own words
- Students must create their own drafts first, based on their writing and research skills,
   before turning to Gen-AI tools for assistance.

- Students should keep an open line of communication with their teachers about their academic work and how they are using Gen-AI tools.
- In collaborative written assignments, students must promote honest academic dialogue and ensure that every member in the group is aware of how Gen-AI tools are being used and attributed.
- Students should encourage responsible Gen-AI use among their peers.
- Students should actively seek guidance and feedback from their teachers on how they can improve their writing, thought processing, and research skills.
- Students must develop their academic research skills.
- Students must work on improving their paraphrasing and summarizing skills to avoid over-reliance on AI tools.
- Students should practice self-reflection on their written assignments to evaluate their performance and practices.

## Limitations of the Study and Suggestions for Future Research

The limitations of the study reveal major issues in managing the use of Gen-AI tools at Biskra University, particularly the lack of official policies at the institution, where students and teachers navigate ethical dilemmas without clear guidelines. Whereas teachers are aware that Gen-AI tools have the potentiality to be pedagogical assistants and at the same time could pose significant threats to academic integrity, this duality of awareness could reinforce them to apply ethical standards in an unconsistent manner and accordingly increases students' confusion regarding these standards. Furthermore, the narrow focus of this study as a case study on teachers' perspectives can disregard some Algerian teachers' cultural and linguistic contexts on Gen-AI adoption and misuse.

Accounting for the limitations mentioned earlier, the researchers would suggest future research could collaborate with educational policymakers to develop ethical guidelines and

best practices for effective and responsible Gen-AI use in Higher Education. Additionally, researching well-established international policies on Gen-AI tools in the context of Higher Education could furnish insights and models that Algerian institutions may adapt to the local settings. Expanding the compass beyond a case study could also entail future research to include different EFL institutions across Algeria to yield a larger cultural and linguistic representation.

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176

### **Appendices**

**Appendix 1: Teachers Interview Informed Consent** 

#### **Informed Consent**

Dear Participant,

I am writing to request your participation in a research study I am conducting as part of my Master's dissertation at Biskra University. This study is intended to understand the perceptions of English teachers regarding the use of Generative AI tools by students when producing their written assignments. Therefore, the findings will contribute to understanding the implications of Generative AI in educational contexts as well as inform future teaching strategies.

If you agree to participate, you will be invited to respond to questions of an unstructured interview that will last approximately 20-25 minutes. The interview will be conducted at a time and place convenient for you, or via an online platform if preferred. Your responses will be recorded for accuracy and later transcribed for analysis.

Confidentiality, privacy, and anonymity of your personal information and data gathered throughout the process of conducting this research work will be ensured. Your participation in this research investigation is voluntary, and your consent can be withdrawn at any time.

If you consent to participating in this study, please sign the attached consent form. Your cooperation will be highly appreciated.

For further questions regarding this research investigation, you are welcome to contact the researcher.

Yours sincerely,

Researcher Contact Details:
Full Name: Messaouda BOUABDALLAH
Email: mess3ouda.bouabdallah@gmail.com
Mohamed Kheider University of Biskra
Faculty of Letters and Foreign Languages
Department of Language and English Literature
I have read and clearly understood the researcher's request. I consent to volunteering as
a participant in the research investigation being undertaken by Messaouda
BOUABDALLAH
Name:
E-mail:
University:
Faculty:
Department:
Date:
Signature:

#### **Appendix 2: The Interview Questions**

#### **Teachers' interview**

- 1. How many years have you been teaching EFL?
- 2. How informed or aware are you that your students are using Generative AI tools, such as ChatGPT and other similar tools?
- 3. Based on your teaching experience, how do you think the integration of Generative AI tools has influenced the quality of students' written assignments?
- 4. From your perspective as a teacher, how would you define academic integrity when it comes to students producing written assignments?
- 5. How do you think students are aware of the ethical implications of using Generative AI tools for their written assignments?
- 6. What strategies do you think should be implemented to help students use Generative AI tools ethically and effectively when producing their written assignments?
- 7. How can we ensure that these strategies are applied effectively by students when using these tools in their written assignments?
- 8. Is there anything else you would like to add about Generative AI tools and their effects on students' written assignments and the importance of maintaining academic integrity?

# **Appendix 3: Interview Opinnionnaire**

## **OPINNIONNAIRE I**

1. Are there any repetitive questi	ons?
Yes□	No□
- If yes, please specify them.	
2. Did you find any grammar / sp	pelling mistakes in the questions?
Yes□	No□
-If yes, please notify them below	
3. Are there any irrelevant questi	ons that need to be removed?
Yes□	No□
-If yes, please provide the number	er of the question(s) below.
4.Are there any misleading quest	ions that need to be modified?
Yes□	No□
-If yes, please provide the number	er of the question(s) below.

5. Is the interview of reasonable	e length?
Yes□	No□
6. Are there any ambiguous que	estions that need to be reformulated and / or clarified?
Yes□	No□
-If yes, please indicate which qu	nestions require rewording.
	•
7. What do you think of the ord	er of the questions?
8.Are there clear transitions bet	ween different questions or topics of the interview to maintain
a smooth flow?	
Yes□	No□
-If no, please specify which q	uestions or topics could benefit from a smoother and more
natural progression.	
9.Is there appropriate allocation	of time for each question or topic of the interview to ensure
comprehensive coverage withou	nt rushing?
Yes□	No□
-If no, please indicate which qu	estions require more or less consideration.

10.If there are any questions that you believe are of close relevance to the purpose of the
interview but were not included, please write them below.

Thank you very much for your time and collaboration

181

INESTIGATING THE EFFECTS OF GENERATIVE AI TOOLS

# **Appendix 4: The Interview Validation Form**

I hereby confirm that the teachers' interview for the study conducted by Messaouda **BOUABDALLAH**, who is currently pursuing her MA dissertation at Biskra University, has been reviewed. Feedback and comments regarding both the structure and content of the interview have been provided to the researcher.

Background Information on the Expert:
Name:
University:
Present Occupation:
Degree:
Telephone Number:
Email Address:
Signed:
Researcher Contact Details:
Messaouda BOUABDALLAH
Email: mess3ouda.bouabdallah@gmail.com
Mohamed Kheider University of Biskra
Faculty of Letters and Foreign Languages
Department of Language and English Literature

INESTIGATING THE EFFECTS OF GENERATIVE AI TOOLS

183

**Appendix 5: Participant Informed Consent** 

**Students Informed Consent** 

Dear Participant,

I am conducting a research study aimed at establishing strategies for regulating the use

of Generative AI tools in Higher Education, particularly focusing on their effect on academic

integrity. As part of this study, I am inviting you to participate in a structured questionnaire

that seeks to gather insights from students like yourself. The questionnaire will take

approximately 10-15 minutes to complete and can be done at your convenience.

Confidentiality, privacy, and anonymity of your personal information and data gathered

throughout the process of conducting this research work will be ensured. Your participation

in this research project is voluntary, and your consent can be withdrawn at any time.

If you consent to participating in this study, please sign the attached consent form. Your

cooperation will be highly appreciated.

For further questions regarding this research project, you are welcome to contact the

researcher.

Yours sincerely,

Researcher Contact Details:

Full Name: Messaouda BOUABDALLAH

Email: mess3ouda.bouabdallah@gmail.com

Mohamed Kheider University of Biskra

Faculty of Letters and Foreign Languages

Department of Language and English Literature

a participant in the research project being undertaken by Messaouda BOUABDALLAH.
Name:
E-mail:
University:
Faculty:
Department:
Section:
Date:
Signature:

I have read and clearly understood the researcher's request. I consent to volunteering as

# Appendix 6: Students' Attitudinal Questionnaire

## Students' Questionnaire

Dear third-year participant,

This questionnaire is a part of a Master's investigation settled at developing collaborative strategies between teachers and students. The aim of this study is to obtain insights into the ethical use of Generative AI in educational contexts. Therefore, the findings of this questionnaire will help design effective guidelines and procedures that promote responsible AI use.

Participants can pick their choices by ticking the corresponding box ( ). By proceeding, you are giving your consent. Your responses will be treated with utmost confidentiality, ensuring that each individual response remains anonymous.

We truly appreciate your involvement in this research initiative. Thank you for your participation.

## Tick $(\checkmark)$ in the box that best describes your answer.

### **Section One: General Information**

1. What is your gender?	⊔Male	∐Female
-------------------------	-------	---------

### **Section Two: Familiarity with Generative AI Tools**

2. How	familiar	are	you	with	Generative	ΑI	tools	(e.g.,	ChatGPT,	other	ΑI	writing
assistants	s)? (Selec	t on	ly on	e)								
□ Not at	+ all famil											

Not at a	ıll fa	ımı	lıar
Slightly	fan	nilia	ar

☐ Moderately familiar

☐ Familiar

☐ Very familiar		
3. How often do you use Generative AI too	ols for your written ass	ignments? (Select only one)
□ Never		
□ Rarely		
☐ Occasionally		
☐ Often		
□ Very often		
Section Three: Strategies to Uphold A	Academic Integrity v	while Using Generative AI
Tools		
4. Do you believe that collaboration betwee	en teachers and studer	nts is essential for ethical and
responsible use of Generative AI?	□Yes	□ No
5. Please indicate your level of agreement	or disagreement with	each statement by selecting
the corresponding response on the scale pr	ovided.	

	Strongly	Agree	Neutral	Disagree	Strongly disagree
Students should understand the provided policies					
regarding academic integrity, including guidelines on					
plagiarism and improper citation.					
Students must be committed to honesty and personal					
responsibility for producing an original work.					
Students must use Generative AI tools as a linguistic					
support rather than a shortcut for composing written					
assignments.					
Students must use Generative AI tools appropriately					
when producing their written assignments, such as					
using theses tools as a starting point for outlining,					
brainstorming or drafting, but requiring students to					
produce their final work independently.					
Students must always acknowledge that they have used					
Generative AI tools, even if they were used as helping					
tools for outlining or paraphrasing.					
Students should keep an open line of communication					
with their teachers about their academic work and how					
they are using Generative AI tools.					
Students should actively seek guidance and feedback					
from their teachers on how they can improve their					
writing, thought processing,and research skills.					
Students must cite any information, ideas, and content					
that is derived from Generative AI tools.					
Students must use Generative AI tools as an aid, not a					
replacement, for independent research, analysis, and					
critical thinking.					

The role of students	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Students must develop their academic research skills.					
Students must avoid copying AI-generated texts					
directly and presenting as their own words.					
In collaborative written assignments, students must					
promote honest academic dialogue and ensure that					
every member in the group is aware of how Generative					
AI tools are being used and attributed.					
Students must create their own drafts first, based on					
their writing and research skills, before turning to					
Generative AI tools for assistance.					
Students must work on improving their paraphrasing					
and summarizing skills to avoid over-reliance on AI					
tools.					
Students should resist the temptation to submit AI-					
generated content without modification or personal					
input because it violates academic integrity and					
undermines their learning process.					
Students should attend workshops or training sessions					
on the ethical uses of Generative AI tools, if available.					
Students should read and stay informed about the					
roles, benefits, and ethical concerns of Generative AI					
in academic contexts.					
Students should encourage responsible Generative AI					
use among their peers.					
Students should practice self-reflection on their written					
assignments to evaluate their performance and					
practices.					

6. How would you like to provide feedback to your teachers about your use of Generative AI
tools in your written assignments? (Select only one)
☐ Anonymous surveys
☐ Direct discussions during office hours
☐ Feedback sessions in class
Other (please specify)

Thank you for your time and collaboration.

### The Interview Transcripts

### Interview in the piloting phase

S1: Let's start with some introductory questions. Uh, how many years have you been teaching English as a foreign language?

S2:So, firstly, can I add a comment?

S2: Okay

**S2:** Okay. Yeah. So firstly, before you are asking me about my background information, it's better to introduce firstly your topic, your goal from your research and then you start asking the questions. Okay. I have an idea about your topic since you sent me just the title of your topic. It's about using the AI for teaching, I think. Written expression. This is what I know about your topic, but what's the goal? What are your population?

**S1:** Uh, all of these are mentioned in the consent letter you have signed. Uh, because, uh, there is an arrangement between me and my supervisor, uh, to keep things more general in the the first, uh, interaction between you and me. Uh, I clarified this in the consent letter. Uh, I said that this interview, it is to understand the perceptions of teachers about about how students are using generative AI tools for their written assignments. Okay. Uh, here we tackle many, many aspects of written assignments including the ethical considerations.

S2: Okay.

S1: Okay. Okay. (..) So so go ahead.

**S2:** Yeah. Your first question.

S1: Uh, how many years have you been teaching English as a foreign language?

**S2:** So teaching English as a foreign language, according to me, I have experience in dealing with EFL learners at secondary education for 11 years and just one year here as an official teacher here at this department, just one year and three years as a part time teacher. So we can say that I have four years as a university teacher experience, and 11 years at a high school or secondary school education.

**S1:** Okay. That's great. The next question says, how informed are you? Or how aware are you that your students are using generative AI tools like ChatGPT and other similar tools?

**S2:** I know well the style of writing of the ChatGPT and the other AI devices or tools like the keyboard. Then also the the deep well or the something like that. It's new. It's made by China. I know the style of writing and most of learners, they are always using the ChatGPT. I have asked them since I'm a writing teacher, a written module, written expression module teacher. I always suffer from this problem. When I asked them to write a piece of writing, they always use the ChatGPT even in the classroom. I try to to tell them that this is something unethical. I need your own style of writing. I need your ideas, your critical thinking. But they are what we can say. We can say addicted to using those tools. Okay. Yeah.

**S1:** The next the next question says that based on your teaching experience, how do you think the integration of these tools has influenced the quality of students written assignments? The quality.

**S2:** The quality? Yeah. How? The question is how much or the rate?

S1: How do you think the integration has influenced the quality of the students written assignments?

- **S2:** It's really influenced the quality of teaching because we as teachers, we teach them or teach learners. We can say, write writing, write how to write an academic writing, but they don't follow us as the teachers, but they rely on those means and these devices and they are not correct. And the quality is. What is bad concerning for me is they have a bad concern in writing a bad writing style. It's what too long sentences, too many commas. The same, uh, words. They are repeated. So I think that, uh, it has a bad quality for teaching, especially writing. Okay, the next question.
- S1: What effects do these tools have on students learning process and understanding of the material or the subject matter, their understanding of the topic itself?
- S2: Affect them, I mean in the way of thinking or viewing the topic. This is what you mean?
- **S1:** Yes, it affects them.
- **S2:** Maybe positively, maybe negatively. Yeah, I think the use of the ChatGPT and the other AI tools is somehow positive in changing the thinking of learners. Yeah, because they have different views and we can say open. Yeah, we can say open scale or open angle. So different angles that learners at this level or at this age, they cannot deal with those topics. Okay. We can say it's somehow brought in thinking. Then our learners. Yeah, it's something good. For me, it's something positive to enlarge our learners thinking. It's something good. Yeah. In this, the level of thinking. Yeah. But concerning the styles and the production, not just.
- **S1:** About the learning process. Are they overly dependent or dependent on these tools? Like they do not learn. Don't they engage in the learning process as it is supposed to be?
- **S2:** Not all the learners. Not all the learners, but most of them. Most of them. Their learning process is affected, is highly affected by the use of those tools. But we still have in the classrooms some of the learners, we can say excellent learners. They rely on themselves. Yeah. Not all of them.
- S1: Okay. So here you said it affected them negatively or positively, just to make everything clear.
- **S2:** For me it's negatively in terms of the production. If we keep in written Expression in the production. It's negatively, but in thinking something positively positive, in just in thinking in production. Now, um, this is.
- S1: Um, you observed any differences or changes in their critical thinking abilities and engagement level with the content? I think you have answered it a little bit, yes.
- **S2:** Somehow. Yeah, somehow. Yeah. They I have told you before that they offer them with specific skills. Thinking skills. Yeah. And specific engagement that help them to be engaged in the class in terms of topics, in terms of the themes. Yeah. But we go back to the other variable that your dependent variable which is written. Yeah, it's negatively affected. Okay.
- **S1:** The next question says um, or, um, it is about academic integrity when assessing written assignments that could have been generated or influenced by these tools. What specific issues do you face related to academic integrity?
- **S2:** Integrity?
- S1: Yes. I define it for you. May I define it for you? What? Academic integrity.
- **S2:** No, no. No problem. So here the question. Your question. Do you mean that me as a teacher, when I go, I'm going to assess my learner's work. Yes. So here I see that those learners. (..) Ethically?
- S1: Yeah.

**S2:** Correct. Ethical or it's something unethical. Yeah. This is your question.?

S1:Yes.

S2: So for me, it's something unethical because they don't depend on yourself or in themselves. Okay. Yeah.

S1: Like, um. Plagiarism? Yes.

**S2:** Um, so it's only plagiarism.

S1: Like, this information they provide you sometimes with inaccurate information or bias.

**S2:** Yes. Errors? Yeah. Errors. Uh, lack of, uh, lack of. We can say, um. Correct. As you have said, correct or reliable data also. uh, plagiarism.

**S1:** Also originality.

**S2:** Originality is many different things, especially when they use it in, uh, research. So the citations, I mean, the sources is uh, something and written production is something else, especially in research methodology. They don't give them accurate sources and accurate dates of the publications or something like that. Yes.

**S1:** The next question says, how do these ethical challenges affect your ability to assess students comprehension and involvement with the content?

**S2:** It's a big problem for me. How can I evaluate students who produced his work based on the ChatGPT and another students produced? Or we can say generate his work based on his own mental abilities? It's a really problem for me as a teacher. How can I assess both of them? But for me as a teacher, my method of assessing those topics I just to what I just to to observe, to notice, to. But we don't give them marks. We don't I don't give them marks. Just we can say remarks. Okay. Remarks. Just like what? Like try to. To rely on yourself. Try to use your own words. Try to to express your own ideas. Try to follow your style of writing something like that. I don't just remarks. I don't give them marks. Because in this, in this case, I we can say that students who are based on their learning, on their mental capacities, they suffer a lot when I comparing them with those who are using those tools. So we cannot here compare between a learner who depend on himself and a learner who use those tools. So in assessing those products, I just give them remarks. Rely on yourself, don't use those mediums, those media, etc..

**S1:** Yes. The next question says, how do you think students are aware of the ethical implications of using generative AI tools when producing their written assignments.

**S2:** I think they are not aware about the ethical considerations or the ethical issues about the use of those tools. I don't think they just they just find it as a tool that facilitate their way of learning, that's all. They don't know that it is something unethical. This is what I want. This is what I believe. Yes. Okay.

**S1:** The next question, which is critical a bit, what strategies or guidelines do you think should be implemented to ensure ethical use of generative AI tools in students written assignments.

S2: Guide.

**S1:** Yes. Guidelines or strategies.

**S2:** It means that making the ChatGPT or the AI devices possible to be used in the classroom, but with certain conditions. Yeah, we go back to the previous questions so we can use we can guide our learners. Just what? Just ta ta ta. You can say to pick out ideas. That's all ideas. It means to study or to. To read what has been written on the the those tools just to. What? To pick out ideas to generate ideas. That's all. But don't use those. The the

it's words as it is or its style of writing as it is. Just words. Read, take ideas and that's all just ideas. We don't need words and expressions. Okay.

**S1:** The last question. Is there anything else you would like to add about generative AI tools and their effects on students written assignments, and the importance of maintaining academic integrity?

S2: Okay, as a suggestion for you, I mean, it's better to integrate those tools since we are living in, uh, we can say a world which is dominated by technology. It's better to be using the AI. It's better to be integrated as a module so that to make some many things clear for learners about the ethical issues, as you have been said before. So as a module from the first year, the VA so learners, they can know what is, what are the benefits and what are the disadvantages of using those tools, not only in writing in general, in their academic life in general. So it's better to use what a charter method. So this is what what you can do with these tools. And this is what you cannot do. And using those through those guidelines, they can what they can know, what they can do and where they cannot do or what they should do and what they shouldn't do. And also, uh, it is we can say that this, those, uh, tools, they are good, but in just generating ideas, it's not generating words and expressions, that's all.

S1: Thank you for, uh, being part of my interview.

**S2:** You are welcome. So no problem.

**S3:** Yes.

#### **Interview One with Teacher One**

**S1:** Okay. This is interview number one with teacher number one. Welcome. Thank you for being a part of my interview. How many years have you been teaching English as a foreign language?

**S2:** Okay. So if you if we count my years as part time teacher, then there are three years. However, if we do not count them. So, it is officially one year as assistant professor.

**S1:** So, how informed are you? Or how aware are you that your students are using Generative AI tools like ChatGPT and other similar tools?

S2:Actually, I'm very aware of that because there are some repeated signs in their works that can enable teacher to detect whether they have used AI tools or not. So it's kind of easy to do that.

S1:Okay. Uh, how do you think the integration of these tools has influenced the quality of students written assignments?

**S2:**Okay, so, um, I believe that integrating AI tools to generate content has affected the originality. For instance, they have lost their voice and the writing style has been affected as well because they became, you know, I believe I believe that the integration of AI tools has created another issue. Now we have passive writers and actual writers as well. So, for those who use AI tools without thinking, without engaging with the content, they became passive and they became less attentive, uh, with grammar and the structure. They are not critical, uh, so they have been negatively influenced.

S1:Okay. Um, so, how do these tools have influenced students learning process and understanding of the material or the subject matter?

**S2:** Okay, it affects constraints learning process. And also as I guess, uh, their, uh, their engagement with the content has decreased because they became lazy. They now prefer and love quick answers. So, uh, for them, no need to think of the answer. No need to think of how to write and how to engage with the content. The only, the only thing that they do is that they type their question and they ask ChatGPT. And here it is. Here's the answer.

S1:Um,As a teacher, how would you define academic integrity when it comes to students producing written assignments?

**S2:**(...) Okay. (...) So I hear you are referring to the idea of not, uh, or not tending to follow the trap of plagiarism. That's it. That's the question. Mhm. Okay. (..). So for this, I believe that uh, for students, academic integrity, when they know that they need to generate their own ideas, they need to uh, be honest. Um, what else? They, uh, and they should avoid the idea of copying answers from other sources. So I guess that's it.

**S1:** Okay. (...) when assessing AI-influenced assignments, what issues do you face related to academic integrity? **S2:** Okay. So here, when it comes to the evaluation, I guess, and I believe that the most important issue that we face as teachers is our ability to detect or not detect whether these works and these are written assignments. Yeah. I'm looking for another word. Written assignment is genuinely a work. Is it an original work or not. So basically that's the main issue that we face. However, as I said previously, there are some signs that can help us as teachers to detect, especially those who are used to use to use ChatGPT to assist them, not to copy answers. So it's kind of easy to us to detect. However, with some students who are very smart when it comes to using ChatGPT and other tools, it becomes difficult. Yes that's true.

S1:Considering these changes in students way of learning and ethical issues, how do you assess these AI influenced assignments?

**S2:** Okay, so how do you assess these AI influenced assignments? Actually it's kind of difficult because nowadays it is more about detecting whether these assignments are AI generated or the kind of these assignments is AI generated or, and less uh, Or there is kind. Not kind. Uh, let me say, as I said, it is more about detecting and less about considering students abilities because, uh, since the content is AI generated. So how can we assess their abilities? It's difficult. So the assessment process has become very difficult with, uh, or with students nowadays. Uh, for me, I personally, uh, try to detect whether they have used ChatGPT. And if I found that these students have used ChatGPT for real, so their marks will be automatically affected, it will decrease. So depending on on the work, the mark uh, can be uh, specified. Okay.

**S1:** The next question says, how do you think students are aware of the ethical implications of using generative AI tools for their written assignments?

**S2:** Actually, most of them are not aware. If I can say that 90% 95% of the students are not aware. We can exclude those who are truly competent, those good students, excellent students who, uh, believe that they should put efforts and they do not they should not rely on AI tools for the rest of them. They they are not aware about the long term consequences.

S1:what strategies do you think should be implemented to help students use generative AI tools ethically and effectively when producing their written assignments?

**S2:**Okay. I personally believe that we can ask teachers and the staff of the English department. We can we can organise workshops and workshops to sensitise students about the fact that using AI tools in a negative way can, uh, cause negative effects. Uh, what else? Uh, since and the second strategy that we can use as teachers, since students do care about their marks, because I believe nowadays the only thing that they care is their marks.

They they care about it is their marks. So I believe that we can, uh, kind of punishment, we can punish them through their marks. For instance, during the first semester, I was kind of undemanding when assessing my students. However, for this semester, I told them that if I found and if I, uh, detect that you are using ChatGPT, or that you have used ChatGPT for your homework and for the hard copy. Sorry, to be more precise, I will, uh, I will include another, um, another thing, another criteria. Another criteria will be included, will be employed, which is uh. (...) It's like deducting deducting two points from, uh, the total uh, mark. For instance, if for instance, it's an example, if the hard copy is evaluated, uh, out of four, so 2 points will be deducted. After that I will start the evaluation. So I believe in this way they will be aware that they should not use AI tools in the upcoming years, inshallah. Okay. (...)

**S1:** Uh, but how can we ensure that these strategies are applied effectively by students when using these tools in their written Assignments?

**S2:** Okay, so, um, I believe that the answer for this question has direct relation to awareness. In my opinion, it has a direct relation to awareness. We should make students we as teachers should make students aware that, uh, they do not use ChatGPT for their own benefits by trying to, uh, tell them or trying to explain the long term consequences for using, uh, such, uh, AI tools and, uh, what else? (...) Basically that's it. It's it's everything about awareness. Okay.

S1: Is there anything else you would like to add about generative AI tools and their effects on students written assignments, and the importance of maintaining academic integrity? (..)

**S2:** Okay, for this question, I'd like to say that students should be aware about the long term consequences because they believe that quick answers are more easy and they prefer to have quick answers just by asking. As I mentioned previously. So they need to know that by using ChatGPT and other, uh, AI tools, let's say, uh, regularly as they are using these tools always to be, uh, to be honest. Yeah. So they should put in mind they should they should take into consideration that using these tools can affect their critical abilities. They can affect their, uh, writing skill and many other consequences.

**S1:** Okay. Thank you so much.

#### **Interview Two with Teacher Two**

S1: This is interview number two with teacher number two. Thank you for being part of my interview.

S2: My pleasure

S1:We will start with some introductory questions. How many years have you been teaching English as a foreign language?

**S2:** I've been teaching English for. (..) Let me count the years. Like, 19 years, I guess. 19 to 20 years. So by by 2026, I will have full 20 years.

**S1:** 20 years of teaching English. Must have given you a lot of insights., and how informed are you or how aware are you that your students are using generative AI tools like ChatGPT and other similar tools.

**S2:** Actually, at the very beginning. Okay. I was not fully aware that students are using, especially ChatGPT for completing their assignments or for doing their tests or even examinations. And, and I thought that, it it's like other, research engines like Google. this was two years ago, I guess. However, I, I've been told by some of my students that, GPT is now used by students to complete their assignments. Now. Okay, now, I am fully aware that students are heavily dependent on it. They use it every time I ask a question. They use it every time I give an assignment. So, I think it becomes a, like, an integral. And I'm looking for the right word. I think it's it becomes, unnecessary. Okay. Tool for their studies. Okay. Yes.

**S1:** The next question says, based on your teaching experience, how do you think the integration of these tools has influenced the quality of students written assignments? (..)

**S2:** Okay, great. Well, we have to. (...) We have to consider two things. So if if you are looking for the the product itself, okay, the product itself, there is no doubt that students written predictions become highly elaborated, well-organised, (...) Let's say detailed, well, well argued, etc. the problem is that I already know that this is not a production of their effort, okay, of their effort. So it is this well produced assignment is not theirs.I mean, there is no doubt that it becomes, as I said, very refined the productions. Okay. However, because they are not students productions. Okay. I would say that, the matter has to be researched or investigated to see, to see to see this influence, okay, to see this influence. So I cannot really decide or tell you that students written assignments become better or become worse because I, I need I need more insights into that. Okay. Yes.

S1: The next question says what effects do these tools have on students learning process and understanding of the material or the subject matter? (...)

S2: Yes. By the hell I mean ChatGPT specifically becomes, an asset. Okay. A tool that undoubtedly help students to prepare to understand the subject matter. Also to organise the materials to prepare for their assignments and presentations. Okay, I find this tool very helpful, very useful. And, As I said, we cannot deny the fact that it becomes a part of student's, daily study routine. Okay. Study routine. So instead of instead of asking students to get rid of it or not or or minimise, its use. Okay. We ask students to rationally use it. It's like to use it for probably for, for revision, for organisation, for, generating material that cannot be found elsewhere. Okay. So they use it for their own benefit. Okay. For the benefit. For me as a teacher, I don't have a problem. Okay. That my students use these, AI powered tools. Okay. Okay. There is the. We have to accept these facts. Okay. It's like the the the time when the calculator, for example, was invented. At that time, teachers of mathematics were very hesitant. Okay. They discouraged students from depending on the calculator. And they. And they prefer, for example, students to use their mental abilities to calculate mathematical equations or mathematical, processes. But now the calculator. Okay. Is widely accepted as a as a learning tool. Okay. Okay. Now for example, in our modern time, Who says or who argues against the use of using the calculator? Nobody. You see no one. So I think we have to be somehow open minded to accept these tools. Okay. But as I said, to use it rationally, rationally, so that we do not become enslaved by these tools. Okay. So we use them. We use them for our for our benefits. Okay. For our benefits. Yes. Okay.

**S1:** This is somehow related to the next question. Yes. Which is about, students critical thinking abilities and engagement level with the content. So have you observed any changes in these abilities?

**S2:** As I say, I think I need I need time to to make a decision on that. Critical thinking and these soft skills are very hard to, to, to assess. So, I might say that some students abilities have have improved in a way. Okay, in a way, but I cannot say this is due to, for example, these AI tools. It could be due to other reasons, I don't know, and I cannot over generalise my decision or my, my point of view because I don't have enough data for this. Okay. Yes. Especially to measure such, unmeasured, I think, such difficult skills to be measured, like critical thinking. Okay. Right. Critical thinking. I've never set students, for example, to, to, to in a test based purely on critical thinking. Okay. So I, I cannot again, I cannot answer, definitely this question. Okay. Yes.

S1: The next question says from your perspective as a teacher. Yes. How would you define academic integrity when it comes to students produce and written assignments, how would a typical written assignment be aligned with academic integrity?

**S2:** That's a good one. That's a good one. Academic integrity for me is related to students originality. Let's say originality. How original the work is and how personal the work is. So it must come as a, a product of of a pure student effort, okay. So the, the integrity must also be linked to students genuine level of writing. Okay. So

what is being written on an assignment on a particular assignment should reflect the real level of the student without the help of such tools. Okay. I mean, he should, or I expect that he produces the same. The same, assignment. Okay. In terms of quality. Good quality. Even without the assistance of, these AI power tools. Okay. So if the student is able to do this, to do so, I can say that he, he developed certain academic integrity. Yes. You see? Yes. You understand my point? Okay.

**S1:** The next question says when assessing AI influenced or generated assignments, what issues do you face related to academic integrity?

**S2:** The first matter is the as I said, it's the (...) It's it's the lack of students personal contribution. Okay. No, I mean, in most in most assignments that I have reviewed so far, I found that most of the assignments were 100% generated by AI tools. Okay. Which eliminates, students personal contribution. Okay. I cannot evaluate an assignment. Okay. Knowing that this student has, depend depended on, an AI. An AI tool like. (...) If I take into consideration that he, for example, used it as a, as a, a source of help, like, for example, generating a plan or, or guideline for generating certain guidelines for, for for the, the, the coherence and the cohesion of the assignment. I can accept this. It's normal. Okay. It's normal. We we all use, such tools, for example, to generate ideas. Especially if we are, You are confused. We don't have any clue of what to write or what to, to to to develop. Okay. To develop. So, the, the issues that I face related to academic integrity is the personal, the lack of personal contribution. Okay, okay. Yes.

S1: Considering these changes in student's way of learning and the ethical issues you face, how do you assess these AI influenced assignments? (..) Like when you know that these assignments are AI influenced. How would you assess it? (..)

S2: It's like I have to develop a grid. Okay. A grid of assessment. (...) And I take into consideration, as I said, the the the human touch. Okay. Of the of the assignment. So the assignment should not be artificially patterned. Okay. Patterned. As a teacher, I have this kind of intuition that this is, generated by an artificial intelligence patterned language. Okay. Patterned language. So in in assessing the students assignments, I take into consideration the the the human Language patterns. The key patterns. So the more they are there, the the better the assignment is scored. Okay. You see? Yes. Yes.

**S1:** The next question, which is easy, I think. How do you think students are aware of the ethical implications of using these tools for their written assignments?

S2: I think they are fully aware that it's unethical, for example, to submit an assignment which is fully generated by, an AI tool. However, okay, they probably they are they are careless or they don't mind if, for example, if they submit an assignment, produced in that way. What matters for them is the score. Okay. Regardless to to the process, to the process, how it was or how it has been Accomplished. Okay. Accomplished. As long as I'm. As long as I am getting good scores on on my assignments. Okay. I don't care if I. If I use ChatGPT or I use some something else. Okay. If the if teachers, do not differentiate between, artificial artificially written assignments and human written assignments. Okay. For me, students, Wouldn't mind. Okay. At all. To use ChatGPT, for instance. Okay. To write their assignments. Yes. So if, if if the grade is good. Okay.

**S1:** Okay. The next question, the two next questions are somehow related. Yeah. The first one says what? What strategies do you think should be implemented to help students use the using these tools ethically and effectively when producing their written assignments. And the next one is how we how can we ensure that these strategies are applied effectively?

**S2**: Okay. For for the strategies, I think it's it becomes necessary for, for teachers to, to change their, their mind about to change their mind concerning the, the question formulations. I mean, they have to, to, to shift from direct, questions that depend on retrieving abilities that depend on knowledge and remembrance.to more analytical synthetical. Okay. Questions? I mean, questions that depend on synthesis, analysis and discussion. In addition, teachers should also, involve more personal questions. Okay. So that they can, differentiate or they are so that they can assess, assignments based on personal students personal contribution **S1**: Yes. Yes.

S2: So how can I ensure this? Okay. I have no clue. I have no clue because it's it's an it's a new it's a new situation for us, okay? For us. Till now I'm trying to find a way how to minimise or how to rationalise the use of of AI tools. Okay. I don't know, frankly speaking. For example, in exams, the last the last exam, I found so many, answers which are obviously generated by ChatGPT. (..) How did they how did they know that is that is that most of the answers are similar in terms of structure, in terms of language patterns? Okay. So it doesn't it did not it does not need an effort from me to, to know to know this because all the answers follow similar similar patterns. Okay. Similar patterns. In exam I may suggest, for example, installing like devices in the in the classroom to which are anti let's say anti Wi-Fi or whatever. Okay. Anti internet. Okay. So in a classroom should be equipped with these devices. Okay. So students wouldn't have access to the internet if there is an access to the internet in the classroom. So I might suggest, for example, students, (...) Sweeping their phones probably. I mean, I ask a student to put his phone with another student. Okay. So, so because of the passwords, it says they could not have this access to the to the internet. So the problem is how to to cut the provision of the internet so that students will, will, will, will, seek refuge, in, in, in their abilities, okay, in their abilities. Now, if

it is an assignment at home, if it's an assignment at home, I, as I said, I. (...) I doubt I mean, I, I, I doubt that that students will, rely on their own abilities. Most of them will use it will use ChatGPT or any AI tool in. But with degrees okay. With degrees, it depends on how ethical the student is. Some students have this high sense of of ethics. Others don't have these, these ethics, okay. These study ethics. So they don't they don't even mind. Okay. To to use it. Others know they feel that, this production is not theirs. So I have to use, for example, to to use my own, my own skills. My own abilities. I think it remains a personal decision. Okay. Especially if it's a home assignment. Okay.

S1: Yes.

**S2:** This is all what I can say. Okay. As I said, um, the problem or the issue is still, under investigation. As teachers, we have not developed any effective strategies. Okay. Any effective strategies to, to, let's say to, to not to stop, but probably to minimise the use of, ChatGPT, as you know, it is even now used, for example, in, in, in academic research. Okay. In academic research, authors also use ChatGPT to, to To draft their manuscripts. Okay. Manuscripts. So, (..) It becomes obvious that students will also use it. Okay. So use it. I think it needs it needs further research like this one. Okay. To, to highlight or to even to suggest effective strategies to, to prevent students from this overreliance on, on AI tools. Okay. Yes.

S1: Is there anything else you would like to add about these tools and their effects on students written assignments, and the importance of maintaining academic integrity?

**S2:** I think we have to train our students, on on how to use, AI tools and how to, for example, to, to to generate prompts. Okay. Prompts to help them effectively use it for their own benefit. Okay. And we have also we are also, required to I would say to develop, you see, to develop our own strategies, okay. To deal with, with the, with such tools like, like, like, okay. (...) I think this is all what I, what I have to say right now. Okay. Okay. Right now, I, I think I like, I like insights into this matter. Okay. Frankly speaking. Okay. Frankly, speaking as the problem is, is novel. We are still experiencing it. We are still assessing it. Okay. In order to, (...) Ultimately find solutions. Okay. To cope with it. Okay. To cope with.

**S1:** Thank you so much.

S2: You're welcome.

#### **Interview Three with Teacher Three**

**S1:** This is interview number three with teacher number three. Welcome. Thank you for being part of my interview. Okay. We will start with some introductory questions. So, how many years have you been teaching English as a foreign language?

S2: Three years probably. I've been teaching English as a foreign language since three years.

**S1:** That's okay. Uh, how informed are you? Or how aware are you that your students are using Generative AI tools like ChatGPT and other similar tools?

**S2:** You know, it's something recent and it's a trendy phenomenon in the educational settings. So most of students use them. How am I informed? It's based on their writings.Like some, you know, I use my intuition, my cognitive intuition, my prerequisite knowledge about the AI tools. Like I check some words, some expressions. I sometimes compare their their level because I teach them and the way they write the words they use so I can get insights. You see, if they really are. I know, I know, I know when they are they use, and I can know they use it.

**S1:** Okay. The next question says, based on your teaching experience, how do you think the integration of these tools has influenced the quality of students written assignments?

**S2:** Based on my humble experience, the use of AI tools in a written assignments or in written activities really help students to improve the quality of their writings because they are learning, not only copy and paste. They learn more. They improve their writings. I wanted to say something, but I really forget. Normally it helps students to improve their writing skills. (..)

**S1:** Okay. (..) what effects do these tools have on students learning process and understanding of the material or the subject matter?

S2: I think here it depends on the stage or the level of the student. If the student is novice like, his level is very basic. He is going to always find what is ready made better than what what he must, let's say prepare. So he's going to find the AI tools very helpful. They are going to reduce time and effort here. In this case he will not learn because he will find all what is ready at the stage of, let's say, uh, perhaps not the student who whose level is quite intermediate. AI tools are going to help him because there is a foundation. There is a base upon which we can build. I think the I the use of AI tools with like a first year student has more negative things, uh, feedback or influence than a positive one.

**S1:** Okay. Is there any changes in their critical thinking?

**S2:** For sure. Look, the AI is very beneficial. It's very helpful if students use the right prompts, if they know how to use the AI and when to use the AI, and how to check and verify the AI, and how to balance between their own production and the AI production, and how to synthesise this. The AI is found to help to improve, not to do the whole work together. And we stay like without watching or controlling or checking. Okay.

**S1:** So here, from your perspective as a teacher, how would you define academic integrity when it comes to students produce and written assignments? Like what makes a typical written assignment aligned with academic integrity?

**S2**: I couldn't grasp the idea. Please reformulate the question.

S1: Okay, so academic integrity, um, it is um, can be defined in many ways. For example, being honest, uh, providing proper, uh, referencing.

**S2:** Uh, you mean the ethical considerations?

S1: Yeah.

S2: It's. I think it is still something like experts haven't, uh, let's say, concluded yet the idea of ethical integrity. Because we still do. Even teachers still do not know how to deal with I because it is something recent. And when you have a new invention, you need long time to set its principles or characteristics, or how it should be integrated, how it should be used. Universities until now, still, uh, haven't, let's say, produced some laws preventing students or guiding students in their use of AI because they still do not know how to manage the situation, how to deal. We cannot say ethically because I told you we still need to to determine what is ethical. What is not ethical. Okay.

S1: So can you mention some issues do you face related to academic integrity when assessing these AI influenced assignments?

**S2:** You know, last year I asked my students to, uh, I made, like, uh, an experiment, and I asked my students to, uh, write something using AI and without AI. And I faced a lot of issues when I was, like, correcting their assignments. We cannot say cheating, I told you, because the students always are oriented, uh, towards what is ready made. Sometimes they find that the original text is more creative, is more innovative, is a human, has its human sense. Okay. While the AI takes is like has one form. This was like a rare case, but generally the AI texts were really well formulated or well built. When I asked my students about the prompts, I mean the dialogue. This is what do you mean by prompt? They answered me in a way I understood that they know how to use AI. Always keep on saying if you know the well wealth strategy you are going to to benefit from it to a highest degree. Okay.

S1: So, um, considering these changes in students way of learning and the ethical issue, uh, how do you assess these AI influenced assignments when you are aware that this assignment is related or AI influenced, how would you assess it? (..)

**S2:** To agree on something? The use of AI today is something inevitable. I cannot like, cross their hands and say, do not use the AI. It's it's. Let's start from the beginning. We have to teach them how to use the AI. The AI is something inevitable, you know, it's like using phones. Like using computers, like using cars. We have to move on to go to something else. The thinking of the old generation, it's like the calculator. It's something inevitable. Now we have to think about strategies, how to use AI ethically, how to wear, how to be aware of I in the correct way. They did, or they invented or created AI to help us. Not to harm, not to, uh, perhaps to reduce our creativity. Okay. I always keep on saying make a balance. If I find the assignment that has been written all using AI, of course, I'm not going to to to accept it. I'm going to show, let's say, to ask the student, perhaps to give him or her touch, of course, ideas, language and so on.

**S1:** Okay. So the next question says, how do you think students are aware of the ethical implications of using these tools for their written assignments? Are they really aware.

**S2:** Of you know, they are aware and they know that this is unethical because they have an idea of plagiarism. And when you take a text from AI, it's a kind of plagiarism. But perhaps the absence of strict instructions prohibit not prohibiting but guiding them. This encouraging them especially. You know, perhaps they are under pressure. Perhaps time is not enough. The logistics perhaps. Uh, let's say equipments are not really. Well, you know, uh, we can say, uh, do not exist well, in our university. So they just take all what is written using AI, and they are happy of this. But we have always to guide them. If the student doesn't find someone to guide, to teach, to follow, of course he is going to be lost in this world.

**S1:** So the strategies. Okay, um what strategies do you think should be implemented to help students use these tools ethically and effectively when producing their written assignments? So here, um, uh, can you mention some strategies to guide these students. And then I want to, uh, to mention how can we ensure that these strategies, uh, can be applied effectively by teachers or students?

**S2:** You know, people I think now and experts and the ones who are interested in using AI in education are still looking for effective strategies. And I told you it's something new. So we need time to see the negatives, the positives and the drawbacks and recommendations and see how can we really issue effective strategies. But based on my very humble experience, I think we have to build or establish guidelines, big title or guidelines for our students to know or instructions guide them based on, of course, some ethical considerations that reflects our university. If you want protocol in their academic research or in their works, and guide them, teach them how to use the AI correctly. How to make it as, let's say, a tool that helps, not a tool that makes everything okay. We cannot ensure anything 100%

S1: So is there anything else you would like to add about these tools and their effects on students written assignments, and the importance of maintaining academic integrity?

**S2:** Simply, I'm going to say that the items are very effective, very helpful for students, but at the same time they are dangerous. Dangerous influences could be seen in the long term, especially when it comes to students or the human mind. Creativity, the human mind, invention and the human mind work. It will teach them. This is what I noticed after a long time a mental laziness. Students won't mentally think or create because they think that everything could be done easily, effectively, innovatively using the AI. I think that's all.

**S1:** Okay, thank.

S2: You so much.

#### **Interview Four with Teacher Four**

S1: This is interview number four with teacher number four. Thank you for participating in my, uh, study through this interview.

**S2:** It's a pleasure. Pleasure for me.

**S1:** We will start with some basic questions. So, how many years have you been teaching English as a foreign language?

**S2:** If I ask you to guess, I have moved from the middle school to the secondary school and then to the university. So I've been teaching in all levels with all books, the Algerian books and the Algerian programs, till I landed at the university and I about 20 years at the university.

**S1:** That's great! How informed are you? Or how aware are you that your students are using generative AI tools like ChatGPT and other similar tools?

**S2:** Oh, clear. Uh, mainly, uh, when I receive their emails. But when I compare their emails, the reality with their recent productions are a different ways of answering, um, uh, the same for the exam questions or doing homework or kinds of homework. It is quite the opposite.

**S1:** So, um, based on your teaching experience, how do you think the integration of these tools has influenced the quality of students written assignments? Like what specific aspects.

**S2:** Really, I cannot tell you much about this. Uh, because all the modules I teach are those technical ones. Generally they are technical ones. But um, in my opinion, some students have been affected positively. This is for those good students. Because they have already a good level and they improve their productions through the use of these tools. As a linguistic support. It can be used as effectively as a linguistic support. For example, uh, in answering some questions about general knowledge or writing essays. And, um, I'll give you an example. Some of my ex-students are always in contact with me. Yeah. Told me they had, um. Um, yeah. Um, tried, for example, to guess what kind of, uh, essays or topics are going to be given either in applied linguistics or in methodology. And then they have just given, uh, the topic to ChatGPT, for example. And it provided them with an outline or another possibility, a whole, uh, a whole essay. And this can be, uh, yes, very much helpful for those of good level students. Or in doing, for example, a certain task. Yeah, you can but do not relay it 100%.

**S1:** Yes. So in this regard, what effects do these tools have on their learning process, on students learning process and understanding of the material or the or the subject matter? Have they affected their understanding and learning process?

**S2:** Surely, surely. But I have no relation with them, but with those students who are doing their their research or getting ready for the doctorate contest. Yes it was. It can be very much effective.

**S1:** Yes. Okay, so, uh, what about, uh, their critical thinking abilities and engagement level with the content? Have you observed any differences or changes related to this?

**S2:** I haven't been exposed a lot to. But, uh, in my opinion, I am always talking about those students who want to develop their competencies. It can help them develop their critical thinking. And even, for example, somebody who is doing research, he cannot rely, of course, on what he can be provided by that tool. But at least this can provide him or her with a certain outline, a certain. And then the students normally has his own way of doing things. He can read or refer to the answers provided by the technological tool and then try to adapt them.

S1: Okav

**S2:** It helps them in in the first stages.

**S1:** First stages.

S2: Yes, yes. But it can be very dangerous. Yes, exactly. It can be very dangerous to the others.

**S1**: Yes. Now we will move to the academic integrity. Um, from your perspective as a teacher, how would you define academic integrity when it comes to students producing their written assignments? Like what makes a typical written assignment aligned with academic integrity? How we can say that it is ethical assignment. (...)

**S2:** It is a difficult question related to this kind of topics. (...)

S1: Some may define academic integrity as uh, providing references uh, as being honest, uh original.

S2: This can this can have a relation with, uh, originality maybe. Why not for certain students but not for others.

S1: Okay, so when assessing I influenced assignments, what issues do you face the most related to academic integrity? (...)

S2: Well, assessing, um, repeat the question.

**S1:** When assessing assignments that have been generated or influenced by these tools?

S2: Not not uh, the question I'm talking.

S1: About.

S2: Question.

**S1:** You mean the situation.

**S2:** The reality, the teacher can uh, uh, can be aware very easily, uh, about, uh, he knows the, the level of the student. So automatically. Yeah. What I do is that I always reject the work.

S1: Okay, so you keep saying what.

**S2:** Yeah. I generally reject the work. Saying that saying put a touch of yours on this. This seems to be a produced by an expert.

**S1:** How do you think that students are aware of the ethical implications of using these tools for, especially for their written assignments? Are they aware?

**S2:** They are aware, but most of them do not bother um, themselves the most important.

**S1:** So since you will give them a mark. So it is okay to do.

**S2:** Yes, yes. But in fact, I never I have never agreed about something which is, uh, which seems to be not produced by the students and which reflects the influence on the I. And this I don't tell you there. I have an example. Um, yeah. Just, uh, a very recent, uh, example. And I am always rejected. Yes. Yeah. The work. (..) He had.

**S1:** Okay. Um, so now we move to the strategies. The first question. The first question is, uh, about the strategies that you think that should be implemented to help students use these tools ethically and effectively, especially when producing their written assignments.

**S2:** As I told you, many, many teachers are wondering what to do about this, and I have told you that. Yeah, we received just a question like this. And many teachers are really, um, are wondering what to do. Uh, mainly with the with the written tasks. Should we accept, uh, what what the students are producing or should we reject? There is no consensus, if you like.

S1: Okay. So so far, uh, in your case, have you you rejected any AI influenced tasks.

**S2:** Uh, yes. When the influence. The influence is very clear sometimes. Yeah. We may we may. Here the controversial is about the amount of collaboration between the students, uh, efforts and the use of AI.

**S1:** Yes. Okay. Can this be solution like rejecting any AI influenced assignment?

**S2:** When, when um, if like there is a high influence sometimes. Sometimes when we know that certain students is a good one. If we can, if you like, accept, uh, certain kinds of influence. But it shouldn't, shouldn't be exaggerated.

S1: Okay.

**S2:** See? Yes. Um. (..) Well, uh, we will consider this as an effective strategy, rejecting those highly influenced. And trying to help them to, to to, uh, lead them, if you like.

S1: Okay.

S2: So that. Yes. So that they produce something in which, uh, there is at least a certain degree of their touch.

S1: Okay. So, um, how we how can we ensure that this strategy is applied effectively? (..)

**S2:** Nothing is sure. The students always need need workshops in anything, in any, um, they are developing their competencies in all their linguistic levels and even, um, I don't know, making them aware, by the way, um, this year, I am a member of certain committee that I. They obliged me to tell you that's true. Um, what is called the Committee of Ethics.

S1: Okay.

**S2:** Yeah. In other level of the university, you know.

S1: Okay.

**S2:** There is a there are some in all the faculties are selected. They selected one teacher from each faculty. Okay. And in reality I didn't I, I want I didn't really like to be a member there but. Ethics. And this can be one of the problems of that. An issue to be tried to be solved by that committee.

S1: Okay. So so far you are saying committee of ethics.well, they could, uh, establish, uh, guidelines.

**S2:** Guidelines. And, uh, some workshops and some seminars are going to be, uh, organised, for example, Number for those, uh, new candidates. Doctor candidates who succeeded in the last. Uh, doctor contest. But in my opinion, it is the concern of all the levels.

**S1:** Especially those who are new. The first year.

**S2:** Yes. Yeah. It's why I told you that it is not the concern only of the doctors. We don't know what to call them. PhD in our country, doctorate students. But also all those students. University students.

S1: Okay.

**S2:** In order to try to minimise the negative aspects of.

S1: Okay. So is there anything else you would like to add about these tools and their effects on students written assignments, and also the importance of maintaining academic integrity?

**S2:** Good. This can be a very much positive. Positive. Sorry if the student is aware that he has to develop his all his competencies and try to, if he has a good learning strategies.

S1: Yes. So you are saying ..

**S2:** And if he's aware of his benefits in general, this can be very effective.

**S1:** So here you are talking about those autonomous learners. Yes.

**S2:** Yes. If they have a good learning or an appropriate, let's say, an appropriate learning strategy. And they know as for example, students of English, they have to develop their linguistic, their psychological, their to many other aspects. And if I refer to the written recent assignment here, it is a catastrophe. It is really a

catastrophe. And it is an issue. Yeah, it is an issue mainly I'm talking about. Yes. Teaching in our department.

**S1:** Okay.

**S2:** We have many students could have benefited from this, but, uh, without without, uh, referring to, uh, plagiarism 100%. They could this can be very helpful in developing them themselves. Yes. Just when, uh, after the course, for example, after a certain course, the students can refer to that to the I in order to widen his or her knowledge about the content already seen in, uh. Yes.

**S1:** Yes. Thank you so much.

**S2:** You're welcome. I, I have, I have, uh, as you know, it is something new for us. And, uh, although many, many, uh, uh, many teachers all over the world are debating this. Yes, but still, Still as it is not. It is new. Let's consider it new.

**S1:** Problematic.

**S2:** Problematic? Yeah, it is problematic. But at the same time, it can be effective.

**S1:** Yes. So it depends on the.

**S2:** Students these days are writing their research. Yeah. The research. The research. Yeah. The their predictions are not theirs.

S1: Yes. And sometimes it depends on the teacher. Yeah. Yes.

**S2:** Whether whenever I see that even before the appearance. Yes. Of the I, I have always. Yeah. Uh, rejected any, any any work, which is excellent. Yes. (...) Yeah.

S1: Okay. Thank you.

S2: Oh, I hope you benefited.

#### **Interview Five with Teacher Five**

**S1:** This is interview number five with teacher number five. Thank you for being part in my investigation. Uh, we will start with some opening questions. So, how many years have you been teaching English as a foreign language?

**S2:** First of all, thank you so much for inviting me to take part in this. Yes. Uh, investigation about a very interesting topic, actually. And it's something, uh, it's novel. Yes, but it is always here and there. Okay. Uh, yes. Concerning my experience teaching English, uh, this year is considered to be my fifth year. Okay. So, yes, I'm still a novice one, if you can say, uh, starting my, uh, journey of teaching at university. Yes. Five years.

**S1:** That's great. So, how informed are you? Or how aware are you that your students are using generative AI tools like ChatGPT and other similar tools?

**S2:** Yes. For me actually, if just to to state yes I am informed enough, and I'm aware. Uh, 100%, I can say. Or more than 100%. Students, if we can say the majority or the whole, and I can approve that most of them are using these AI tools, uh, whether ChatGPT or other similar tools. But I think the common one is the is ChatGPT, as I said they are used in every course, in every assignment whenever it is given to the students to be done or to be produced and handed back to the teacher. Yes. So, uh, that's my answer for this question. Okay.

**S1:** The next question says, based on your teaching experience, how do you think the integration of these tools has influenced the quality of students written assignments?

**S2:** Yes. Uh, for sure. Yes. And I would say it, uh, and just confirm that the integration of generative AI, uh, influenced the quality of students written assignments, uh, in a negative way. When talking about assignments, students are given opportunities to do research, to look for information, uh, to use, uh, their personal touch in such kind of assignments, whatever the course is, or the nature of the content to be handed to the teacher. But, uh, the integration of the generative, I think, uh, is totally a negative one. there is a positive side if we talk about it in terms of content, it does, yes. But the rest, if we can say it does not reflect their efforts, this is for most of the students or the the majority, very few of them who use i wisely, these tools affect them positively.

**S1:** Next question. Uh, in your opinion, what effects do these tools have on students learning process and understanding of the material or the subject matter?

S2: Yes. So if we talk here about learning process, it means in general. Uh, yes. And we can if you relate it to written assignments or you if you here since you said learning process understanding the material or the subject matter I think it concerns many, many things, not only the written assignments according to your questions. I mean, um, and actually, for me, I would say that the effects also here are negative. Um, for me, there are lots I try to to like to mention some, but I can say, for example, uh, first thing is, uh, that it makes students passive. Okay. So, uh, if we talk about, for example, any, uh, any issues related to creativity, uh, as I said, including any personal touch, etc., students would be passive. Why? Because they have something to do, what they are supposed to do. Uh, of course, uh, I would say also that students, uh, here, it would make students as machines. Okay. They won't, uh, use any of their, uh. we can say they won't think. They won't use their brains. They won't use any skills they have. Whether it is something we're talking about, something written or spoken here. Generally, you said the material subject matter and the understanding. Yes, of the material. I think this also will hinder the process of understanding the material, any subject matter, whether they are using it at the moment or sometimes we have even students who are if, for example, I understand the material given, if we talk about class content given there the subject material, they may think also that this is not the moment I can rely on I later, I would for sure find everything so makes them passive. As I said, machines, they don't use their brains and they will be reluctant okay to do any activity when it comes to the written assignments. Just ready made, submitted assignments. If we talk even about writing inside class, although it is not the concern, but if we can relate it to the learning process, since this is why this one is vague, it's general. Even everything any skill taught inside their classes, you find that students. For me personally and based on my experience, I find students who are not able even to write a sentence in English. Yes, they rely even on I in writing each word existing in sentences. So for me the effects are a lot. But um, it's also a supports, as I said, uh, or it makes people idiots actually. And stupidity actually. Yes. And it is as it is a tool which is really positive. But I think that, um, it fights if we can say the expression intelligence. Okay. The fact of being intelligent. So no brain processing. Uh. Everything is ready made for you. The effect for sure. Later you won't think. And being the possibility of, uh, being smart or intelligent and being better than others in thinking is less when it comes to using the AI. So I say that it supports stupidity. Actually, this is one of the sayings that I give to students. Okay, there are a lot of effects actually, but those are the ones I have for the moments I consider importance. Later. If I remember something, I may add it. Yes. Okay.

**S1:** Abilities. So have you observed any changes in their critical thinking abilities and engagement level with the content?

**S2:** Yeah, no. Since here I have just, like, mentioned something related to intelligence and the brain and higher order thinking, uh, Uh, skills, etc.. Uh, yes, I observe the no changes actually. If you can say when it comes to their critical thinking abilities at all. Okay. The engagement level with the under engagement level with the

contents, I found that no critical thinking skills are used. No. Uh, problem solving issues? Nothing at all. On the contrary, just relying on AI. And it is the work of the AI. It's not their work. And for me, uh, this, of course, will kill all the possible abilities to be developed at the level of the, uh, the brain or the higher thinking abilities. Concerning. Why do you think this happened? As I said, yes, this happens for sure if you use another The device and you consider that device the your brain. If we can say yes for me, this is how I just like compare things. I compare it to our brains. This is what I say even to my students because they are using it a lot. They rely on it a lot. For me, critical thinking abilities develop through one's practice. Uh, if you want to be knowledgeable in something, you have to use your brain and you have to work on that. You have to practice a lot. You have to read about anything, write about anything. But unless you use your brain, using another device will kill the critical thinking abilities. And I'm not like observed very few, if I can say people, uh, if I say some changes, uh, if we can say positive changes or improvements, yes, I can, but very few you people who are working on that or they are, if we can say they are not working on that because this improves through experience, etc., but they are avoiding the I and they can just say that their critical thinking are getting higher and higher. Yes, that's my answer.

S1: Okay. So from your perspective as a teacher, how would you define academic integrity when it comes to students producing written assignments?

**S2:** Yes. If I rely on on the, uh, approximately what we have been, uh, talking about, which is related to credibility and ethics and, uh, yes, I would say here, uh, defining academic integrity when it comes to students producing written assignments, it must be using AI can be something positive, but the only thing that is needed if just students acknowledge everything, acknowledge any content that is taken and given credits. Because for me, I consider it as a kind of plagiarism. Yes. So copying and pasting okay. From uh, and for example, from ChatGPT, uh, or any other tool is considered similar to taking someone else's work and just, uh, give credit to yourself as you are the one who just wrote it or create it. So, uh, for me, yes, there must be, uh, really, uh, if we can say strict rules about taking from, uh, ChatGPT and acknowledging that that's my answer. So, so far the issues, um, about regarding academic integrity are those of plagiarism.

**S1:** Okay. So considering these changes and issues, how would you assess, uh, these AI influenced assignments, like, you are aware that this assignment is, are generated. How would you assess it?

S2: Uh, for me, and I can say in written assignments or dissertations or I can just rely on one thing. To what extent is the students are allowed to use ChatGPT? Okay. Or any other tool and to integrate that content. Uh, I make it similar, as I said, to Plagiarism and I follow the same way. I give a certain percentage, okay. I rely on it. For example, if they are allowed to include 70% and more than 70%, this is most of the time I myself do it when given assignments to students, and I check, uh, when once the assignments are submitted, of course, uh, whether this is, uh, of course, written by a human. Okay, I always check or it is AI generated and, uh, I try to it is a little bit, of course, difficult if you don't have like, anything to indicate. But you probably as a teacher and based on your experience when you read and you check, of course, the, uh, the work you will find for sure, whether it is 100%, 80%, you can just give like, uh, cannot say you predict probably if you don't have like something clear that shows you to what extent AI is used. So this is how I assess those assignments, as I said, based on to what extent AI content is there. Okay. Because we cannot deny the fact that it is there in students dissertations or written assignments. Uh, all of them, actually, we do find, uh, we do find AI contents. Okay. Uh, this is, uh, something that we cannot deny if to be much more strict with students, you are going for sure to reject all the works. You reject the assignments. They are, of course. Uh, whether thesis, it means people are not going to graduate for assignments, they won't get the grades, etc. but this is how I do. But I am not tolerant at all with the people who may use it, of course, may use 100 AI generated works or content or assignments. This is my evaluation. And if you want me just to be more like honest and for me, I still look for some people who may, uh, avoid using AI or use it in order to maybe help themselves to understand, to to use it as a guide, okay, to look for content, etc. but what to be generated later? It's by them. Okay. Humans. People. Okay. There is no harm to use AI, but if it is just like something external to help.

S1:How do you think students are aware of the ethical implications of using generative AI tools for, uh, it means if they are aware, uh, ethical implications. Ah, it means if they are allowed to use it or not, or to what extent they can use it, that's the question.

**S2:**Normally I think they are not. Because what, uh, what I notice they don't even care about what is, uh, what is ethical about using, uh, ChatGPT, for example, as one tool or any other tools. They are not aware. Very few of them, if you can say rarely who are aware. Uh, and for me, I have never like, find students who stated that this is AI generated. To be honest, none of my students during all my, uh, teaching experience, I think even people who are aware, I think that it is a little bit, maybe hard for them to to state that, uh, maybe only if, as I said, if I, they use it as, uh, something to help them. It is okay. But people who use, uh, generative AI tools, uh, for me and would never, uh, take into consideration ethical implications of that.

S1: Now we move to the strategies about using these tools. Um, what strategies do you think should be implemented to help students use these tools ethically and effectively, especially when producing their written assignments?

S2: Like strategies? And to be honest, um, I think, um, I and many, if we talk about cases, yes, of course of our case of teachers, um, we are much more most of the time blaming students on using, yes, the, uh, the AI tools instead of maybe looking for some strategies to help. Yes. And implementing, uh, that so what I can say, um, very rare that you can find a teacher who uses certain strategies, but maybe, uh, teachers can, uh, make students understand exactly what this or this or these are used for. How to use them ethically. I may even present something about AI and this is done actually for me. For example, when it is suggested in my courses, like speaking, for example, we talk a lot about artificial intelligence, and we talk about how to use anything related to AI. We talked about like we talk about the positive side, the negative side and the dangers. Okay. And I always, uh, because it's not always possible during my sessions when I is there, I try the maximum to make students understand the dangers. Okay. I don't talk a lot about the positive side, because I think it is known to them because they are using it because it's positive, for sure. But I talk a lot about that. I give pieces of advice. I don't use certain strategies to be honest, but I would love to. Yes, when it comes to written assignments, as I said, most of the teachers like blame students or they punish them instead of using other strategies to to support the use of I, of course, but in a good and ethical way. So if to say for me I don't have certain strategies, but as I said, I can just I always engage into discussions one once possible in my sessions, once the topics are related to that and once doing. Also, uh, the evaluation, for example, uh, whether uh, it's related to what is done in class or outside class, in class, I just move, I correct whether spoken or written, etc. I always find especially like while I'm teaching and writing now. When I read their productions, once I read the first two lines. Three lines. I know that this is not their work. When I read the whole also when I finish I say always. I always give the remark that this is not yours. And they just they do smile. Okay. This is their reaction. So I then I always just take them as examples and I start talking about to what extent this is really what extent is that really dangerous to them and to their progress and improvements in learning when it comes to outside assignments? This is inside, as I said, if it is a topic discussed in another course, as I said, like speaking, if it is in any other courses, when I talk a lot about methodology and ethical issues, I try a kind. They are not strategies, but those tips I use or tricks outside, I cannot say that I blame them. But yes, when I have like some, I reject some works. And uh, I give some examples to my students and I clarify that this is right, this is wrong, and this is not really accepted at all. And as I said, I refer to, uh, most of the time to the negative side and punishing students when it comes, for example, to the use of that, I cannot because it is something dominant. Uh, I cannot control it. No one can control that situation, actually, teachers or even students themselves. They cannot. They just opt for using it directly. So punishment or this is this can be, uh, can work if we can say. But for me, I don't support that. I look for other strategies in the future to help more in making the use of the I tools. Uh, effective, uh, use. Inshallah. Yeah.

**S1:** How can we ensure that these strategies are applied effectively by students when using these tools in their written assignments?

**S2:** Yes. So this is also related to the previous questions. Since I said that I don't have like those tips. If I can say I'm using not actually strategies because I believe if I have something strategic needs you really to know how to, to use, uh, certain strategies with them. How can I ensure that if I can say my tips are applied effectively? Uh, of course, inside the classes here or outside in any assignments, it's through, uh, repetitive. Okay. Uh, works like, uh, if done once. I check always, and I recheck and I find. Yes, I find some how comparing the the assignments. Yes. Comparing especially inside class more if I just compare that I know that a huge difference. The huge difference you find between the first content. The second content. Okay, here, you know, and the second content without using I is not that really good or accepted one. Uh, by the way, even in uh, if you here you talked about written assignments, but I can just deviate a little bit to talk about the tests and exams also. So you find a lot of students, like in, um, in my course of writing, uh, I know the students level. And then when I check, I know that this is not theirs, even without making sure, for example, that they use their devices during the test or the exam and you don't even need to check another one if you know the student's level. If you don't a second production, you will discover easily that there was really an AI use in the first production. So here are how to ensure, as I said, when you give something, for example, an assignment. Most of the assignments are given outside class, so they are not inside for me. That's why I'm talking a lot about inside outside. How to ensure that only if, uh, you reject the work and you asked for something else. Yes. Maybe here you will ensure that, uh, the strategies you use or the things you talked about concerning the first assignment were taken into consideration, and something else was submitted. Okay. If we talk about that, this is the way, uh, we can and most of the time ensure that I see that it is by rejection. Otherwise, I, uh, just accepting the written assignment, even if the I is there are given those strategies. If you just make them present their work orally about that, they would not for sure you will ensure that it doesn't work actually with them. Yes, that's my answer for that.

S1: Is there anything else you would like to add about creative AI tools and their effects on students written assignments, and the importance of maintaining academic integrity?

**S2:** Well, um, hopefully I just like, could provide any some information because as I told you, um, this is something that, um, we cannot get rid of. Okay. If we talk about, uh, all the assignments I have given to my students from first year to M2 students, um, I found that I is, um, their, uh, all what we have been discussing right now is there, um, I found that. Okay. If I can say, uh, if I support, for example, since you said to add about

generative AI, I, I support the those tools, new tools. I would love to say yes to technology, but no at the same time. Yes. Um, something that would, uh, kill the productivity, creativity, uh, critical thinking, um, any issues that may really help students learning? Uh, I wouldn't support it, even though. Yes. Uh, and we can say that nowadays, uh, we cannot get rid of technology generally, but like the use of ChatGPT now, um, it's an extreme use, uh, to an extent that students, uh, would ask about something that they can answer, but they use it in, in different things. Asking about everything. It is fine. Yes, you get the answers. Yes. But for me it is something that that is destroying the learning process. I wouldn't support it. Their effects on their assignments. As I said, they can submit something in just. If you can just give a deadline of two months, they can submit it in two days. Yes. It's it's like time saving, but at the same time it's not that really assignment to be submitted in two days, especially if it needs more time. Because once given the duration it is that really duration needed in that. But actually no, the importance of maintaining academic integrity. As I said, I would say that if it is just given to me as, uh, an authority, if we can say I would not permit the use of I. and we are struggling with plagiarism. I is something that supports plagiarism actually, and it helps students actually to plagiarise. Maybe I can say, but I cannot generalise is the problem with us Algerians only Arabic people in our context outside in the world we are there must be okay, we have to have statistics or things which show. But um, are we the ones who are using those tools, uh, in the wrong way? Or is it the tool itself? And yes, the dominance and the provision of content at the moment, at the instant which make us really, uh, struggle with with students like now, students learning, processing generally and written assignments specifically. So that's what I would actually add, I'm always even also inside classes. So outside classes it is hard to to to control students and to know what they are actually doing. Uh, it is hard for the teacher even using strategies to uh. And unfortunately I couldn't provide you with like, many strategies concerning that. Uh, but, uh, it is hard for teachers to control that. And, uh, once receiving the assignments, for sure, you would find that I, uh, contents. However, as I told you, I just, uh, consider it as, uh, I deal with the plagiarised works. It is similar, actually, for me. I do not consider it, uh, something positive if to state that it is an I, uh, like, uh, source or to state that and acknowledge that it is the sauce. It's okay. There is no harm. But I still stick to my point of view that I would use it to help me. But I still have a brain. I'm a human. A person who can use his language, abilities, linguistic competence. I can, it can help me generating some ideas, etc. but I am the first responsible of writing any content to be submitted. Yes, that's only my like last points and points of view if you can say hopefully, inshallah. Yeah, I just helped a little bit. As I told you, it's uh, you know, it's really a very interesting topic to talk about, but yeah. That's it. Yes. Most welcome.

S1:Thank you.

S2:Good luck. Inshallah. (...)

#### ملخص الدراسة

تلعب النزاهة الأكاديمية دورًا مهمًا في تنظيم العديد من الممارسات التعليمية بقيمها الست الأساسية المتمثلة في الأمانة، و العدالة، و الثقة، و الإحترام و المسؤولية، و الشجاعة لكن ظهور أدوات الذكاء الإصطناعي التوليدية اثار تساؤلات عدة حول نتائج استخدام هاته الأدوات على سلوكيات التعلم لدى متعلمي اللغة الإنجليزية لذلك كانت هناك حاجة ملحة لإجراء أبحاث تخص التعليم العالى بالجزائر، حيث لا تزال الأبعاد البيداغوجية و الأخلاقية لأدوات الذكاء الإصطناعي التوليدية غير مدروسة بما فيه الكفاية. تناولت الدراسة الحالية هذه الفجوة البحثية متبنية موقفًا براغماتيًا، و منهجًا مختلطًا، و تصميمَ دراسة حالة مختلطة .و بناءً عليه، الهدفان الرئيسيان للبحث هما (1) فهم وجهة نظر أساتذة اللغة الإنجليزية بجامعة بسكرة لاستخدام الطلبة لأدوات الذكاء الاصطناعي التوليدية لإنجاز واجباتهم الكتابية (2) تحديد استراتيجيات تعاونية تمكن كلا من الأساتذة و الطلبة من تنظيم استخدام هاته الأدوات بشكل فعّال و أخلاقي ضمن سياق تعلم اللغة الإنجليزية من أجل تحقيق هذه الأهداف، اختار الباحثون إجراء مقابلة أولية غير منظمة مع خمسة أساتذة، تلاه استبيان لقياس اتجاهات عينة هادفةٍ مكونة من 38 طالباً في السنة الثالثة أظهرت التحليلات الموضوعية لمقابلات الأساتذة على أن أدوات الذكاء الاصطناعي التوليدية تؤثر سلبا على أصالة واجبات الطلبة المكتوبة و انخراطهم النقدي لكن هذا لا ينفي إمكانيات هاته الأدوات من مساعدة الطلبة في حالة الاستعمال التعليمي الغعّال و الأخلاقي أظهرت كذلك الإحصائيات الوصفية المستمدة من الاستبيان دعمًا كبيرًا من جانب الطلبة 94.7) ٪ (لجهود تعاونية بين الأساتذة والطلبة لتنظيم الاستخدام في سياق تعليم اللغة الإنجليزية كلغة أجنبية تتطلب النتائج بشكل تراكمي وضع إرشادات أخلاقية واضحة وتدريباً على الذكاء الاصطناعي لتخفيف مخاطر التصرف غير السليم وقد ظهرت توصيات تأخذ بعين الاعتبار سياسات المؤسسة، وبرامج توعوية حول الذكاء الاصطناعي، واستراتيجيات عملية للاستخدام النزيه والمسؤول لأدوات الذكاء الاصطناعي التوليدية. *كلمات مفتاحية:* النزاهة الاكاديمية، الجهود التعاونية بين الاستاذ و الطالب، التفكير النقدي، المبادئ التوجيهية الاخلاقية، ادوات الذكاء الاصطناعي التوليدية، الاصالة