People's Democratic Republic of Algeria

Ministry of Higher Education and Scientific Research

8 MAY 1945 UNIVERSITY / GUELMA
FACULTY OF LETTERS AND LANGUAGES
DEPARTMENT OF LETTERS & ENGLISH LANGUAGE

جامعة 8 ماي 1945/ قالمة كلية الآداب و اللغات قسم الآداب و اللغة الإنجليزية



Option: Linguistics

EXPLORING TEACHERS' AND STUDENTS' ATTITUDES TOWARDS THE ROLE OF USING ARTIFICIAL INTELLIGENCE TOOLS IN ENHANCING EFL STUDENTS' LINGUISTIC CREATIVITY

Case of EFL Teachers and Students at the University of 8 Mai 1945-Guelma

A Dissertation Submitted to the Department of Letters and English Language in Partial Fulfillment of the Requirements for the Degree of Master in Language and Culture

BOARD OF EXAMINERS

Chairman: Mrs. CHERIET Meryem (M.A.A)

University of 8 May 1945-

Guelma

Examiner: Mr. CHETTIBI Mohammed Walid (M. A. A) University of 8 May 1945-

Guelma

Supervisor: Mrs. CHEKKAT Ilhem (M. A. A)

University of 8 May 1945-

Guelma

Submitted by: Supervised by:

HAFIDI Tassabih Nor Elhouda Mrs. CHEKKAT Ilhem

KEMOUGUETTE Aya

June 2025

DEDICATION

In the Name of Allah, Most Merciful, Most Compassionate

I dedicate this work to

My loving Mother

My supportive Father

My sisters, my emotional support, Soumia and Ines

My dear brothers, Abd Errahmen, Ahmed Amine, and Chems Eddine

To my adorable nephews and nieces, Ahmed, Sidra, Lamis, Oubayd, and Raghad

To Aya'h

To Ace and Ash

To my extended family and to my friends

To those I love

And to the innocent souls of Palestine

Hafidi Tassabih Nor Elhouda

DEDICATION

In the Name of Allah, the Most Gracious, the Most Merciful

I dedicate this humble academic work to every soul in **Palestine** whom we failed to rescue, to

every man, woman, and child suffering and desperately fighting to survive, dreaming of a

brighter future.

To me, myself, and I for the patience, discipline, and hard work I devoted to reach this day and this degree.

To my number one lover, my lovely mama Noui Djamila.

To my dear mom, Mehdeb Souad, or as I call her "Sou"

To my aunt, who is more like my spiritual mother, Mehdeb Keltoum

To my kind-hearted younger sister, Kemouguette Soundes

To my beautiful younger sister, Kemouguette Hanane

To my little gentleman, my brother **Kemouguette Mohammed Fares**

To my father, Kemouguette Souhil

To my dearest friend and sister, Benharoun Maria, and my lovely friends, Ourthani Rayane,

Zouaidia Aya, and Echaoui Assala.

To the sweet friend I made along the graduation journey, my colleague **Hafidi Tassabih**.

To all of my dear university friends, colleagues, and teachers.

Kemouguette Aya

ACKNOWLEDGMENTS

First and foremost, we thank Almighty Allah for granting us the strength, patience, and knowledge to complete this thesis

Our profound appreciation goes to our supervisor, Mrs. CHEKKAT Ilhem, for the crucial guidance and efforts she devoted during the preparation of this thesis.

We are grateful to the jury members, Mr. CHETTIBI Mohammed and Mrs. CHERIET

Meryem, for accepting to evaluate our work.

Our sincere gratitude goes to many other teachers at the University who helped us along the journey of bringing this thesis to life.

- Dr. BESKRI Yamina for her insightful advice
- Ms. HUEGHUEG Farah for her vital assistance
- Mr. KHEBBAB Houssem Eddine for the time and efforts he devoted to aid us

 Finally, special thanks go to every EFL Teacher and student at the Department of English,

 who agreed to be a part of this research by answering our questionnaires.

ABSTRACT

In the field of language learning, the impact of Artificial Intelligence (AI) on various linguistic phenomena is a relevant focus, since the learning systems are displaying signs of AI integration. This latter has made teaching and learning contexts question its impact on language learners' Linguistic Creativity (LC); hence, it is high time to discuss the route of possible influence AI has on it. Therefore, this research aims to explore EFL teachers' and students' attitudes towards the role of AI in enhancing English as a Foreign Language (EFL) students' Linguistic Creativity. In this respect, a combination of qualitative and quantitative method was employed where two questionnaires were administered to EFL teachers and students at Guelma University for the academic year 2024/2025, to collect quantitative and qualitative data. Consequently, the analyzed results reveal that EFL teachers and students hold positive attitudes towards the use of AI to enhance EFL students' LC, provided that they follow ethical and moderate use. To ensure the latter, EFL departments need to integrate a course within their curriculum dedicated to teaching AI literacy.

Key words: Artificial Intelligence, English as a foreign language, Linguistic Creativity, Teachers' and students' attitudes.

LIST OF ACRONYMS

AC: Affective Computing

AESs: Automatic Evaluation Systems

AI: Artificial Intelligence

AIL: Artificial Intelligence Literacy

ANI: Artificial Narrow Intelligence

ATSs: Affective Tutoring Systems

CB: Conceptual Blending

CL: Cognitive Linguistics

EFL: English as a Foreign Language

FC: Figurative Creativity

GG: Generative Grammar

HLEG: High-Level Expert Group

ITSs: Intelligent Tutoring Systems

IVE: Intelligent Virtual Environment

LC: Linguistic Creativity

LI: Lexical Innovations

NMTs: Neural Machine Translation Tools

SC: Syntactic Creativity

TEFL: Teaching English as a Foreign Language

UBL: Usage-Based Linguistics

UG: Universal Grammar

VR: Virtual Reality

LIST OF TABLES

- **Table 3.1.** Teachers' Definitions of LC
- **Table 3.2.** Teachers' Justifications for Whether LC and Linguistic Competence Mean the Same Concept
- Table 3.3. Teachers' Explanations for Their Rating of Students' LC
- Table 3.4. Teachers' Frequency of AI Integration in Their Teaching Courses
- **Table 3.5.** Teachers' Justifications for Their Perceptions Towards AI's Capacity to Foster Students' Ability to Produce Original and Creative Language
- Table 3.6. Teachers' Justifications for AI's Ability to Challenge Students' LC
- **Table 3.7.** Teachers' Justifications for the Relation Between Students' Overreliance on AI and Their Low LC
- Table 3.8. Students' Studying Experience of English Language
- **Table 3.9.** Students' Level in English Language Mastery
- Table 3.10. Students' Frequency of Using English in Their Daily Life
- **Table 3.11.** Students' Definitions of the Term "Linguistic Creativity"
- **Table 3.12.** Students' Justifications for Whether LC and Linguistic Competence Mean the Same Concept
- Table 3.13. Students' Frequency of Using AI Tools While Learning
- Table 3.14. Students' Justifications for AI's Ability to Enhance Their EFL Performance
- Table 3.15. Challenges Faced by Students Since Using AI

LIST OF FIGURES

- **Figure 1.1.** The 4P Model (Rhodes, 1961)
- **Figure 1.2.** The 4C Model of Creativity
- Figure 1.3. Figures of Speech
- Figure 2.1. Duolingo
- Figure 2.2.ChatGPT
- Figure 2.3. Grammarly
- Figure 2.4. Google Translate
- Figure 2.5.Quillbot

LIST OF CHARTS

- Chart 3.1. Number of Years Teachers have been Teaching English at the University
- Chart 3.2. Teachers' Field of Specialization
- Chart 3.3. Teachers' Perceptions on Whether LC Means Linguistic Competence
- Chart 3.4. Creative Skills that Teachers Usually Integrate into Their Teaching
- Chart 3.5. Teachers' Perceptions Towards EFL Students' LC
- Chart 3.6. Teachers' Perceptions Towards the Importance of LC in EFL Education
- Chart 3.7. Teachers' Assessment of Their Students' LC
- Chart 3.8. Teachers' Relied on Criteria for Assessing Their Students' LC
- Chart 3.9. Teachers' Encouragement for Their Students' LC through Constructive Feedback
- **Chart 3.10.** Teachers' Familiarity with AI Tools
- Chart 3.11. Teachers' Perceptions Towards Their Level of Qualification in Using AI Tools
- Chart 3.12. AI Applications that Teachers Rely on The Most
- **Chart 3.13.** Teachers' Degree of Agreement or Disagreement with Different Claims on AI Technology
- **Chart 3.14.** Teachers' Perceptions Towards AI's Capacity to Foster Students' Ability to Produce Original and Creative Language
- Chart 3.15. Teachers' Perceptions Concerning the Possibility of AI to Challenge Students' LC
- **Chart 3.16.** Teachers' Perceptions Towards the Relation Between Students' Overreliance on AI and Their Low LC
- **Chart 3.17.** Teachers' Perceptions Towards the Path that Students Usually Follow When Using AI-generated Answers
- Chart 3.18. Students' Familiarity with the Concept of "Linguistic Creativity"
- Chart 3.19. Students' Perceptions on Whether LC Means Linguistic Competence

- **Chart 3.20.** Students' Self-Perceptions as Being Creative EFL Learners
- Chart 3.21. Creative Skills Which Students Usually Engage in
- Chart 3.22. Activities That Inspire EFL Students' LC
- Chart 3.23. Factors That Challenge Students' LC
- Chart 3.24. Learners' Reflection on their LC
- Chart 3.25. Students' Criteria for Assessing Their LC
- **Chart 3.26.** Language Learning Tools that Students Usually Use for Developing Their English Language Proficiency
- Chart 3.27. Students' Level of Familiarity with AI Tools
- Chart 3.28. AI Tools Mostly Used by Students
- Chart 3.29. Students' Purposes Behind Using AI Tools in EFL Learning
- Chart 3.30. Students' Perceptions Towards AI's Ability to Replicate Human Intelligence
- Chart 3.31. Learners' Perceptions Towards AI's Ability to Enhance Their EFL Performance
- Chart 3.32. AI's Impact on EFL Learners' LC
- Chart 3.33. Students' Creative Skills that AI Helped Improve
- Chart 3.34. Students' Perceptions on Whether They Have Faced Challenges Since Using AI
- **Chart 3.36.** Students' Level of Following the Ethical Guidelines Governing the Use of AI Tools
- Chart 3.37. Students' Attitudes When Using AI-Generated Answers

CONTENTS

DEDICATION	I
ACKNOWLEDGMENTS	II
ABSTRACT	IV
LIST OF ACRONYMS	V
LIST OF TABLES	VI
LIST OF FIGURES	VII
LIST OF CHARTS	VIII
CONTENTS	X
GENERAL INTRODUCTION	
1. Statement of the Problem	1
2. Aims of the Study	1
3. Research Questions	1
4. Research Methodology	1
5. Structure of the Dissertation	2
CHAPTER ONE: LINGUISTIC CREATIVITY IN THE CONTEXT OF EFL	
Introduction	4
1.1 Defining Linguistic Creativity in the EFL Context	4
1.1.1 Linguistic Creativity	4
1.1.2 General Concepts of Linguistic Creativity	7
1.1.3 Linguistic Creativity for EFL Learners	8
1.2 Theoretical Perspectives and Mechanisms Behind Linguistic Creativity	8
1.2.1 Generative Grammar	8
1.2.2 Cognitive Linguistics	9
1.2.3 Usage-based Linguistics	10

1.2.4 Contextual Aspects		11
1.3 Manifestations of Linguistic C	reativity in English	11
1.3.1 Lexical Creativity		12
1.3.2 Figurative Creativity		12
1.3.3 Syntactic Creativity		13
1.3.4 Pragmatic and Discourse	Creativity	14
1.4 Significance of Linguistic Crea	ativity for EFL Learners	15
1.5 Challenges in Teaching and As	ssessing Linguistic Creativity	16
1.6 Approaches for Fostering EFL	Students' Linguistic Creativity	18
Conclusion		20
CHAPTER TWO: ARTIFICIAI	L INTELLIGENCE IN THE CONTEXT OF EFL	
Introduction		21
2.1 Defining Artificial Intelligenc	e in the EFL Context	21
2.2 Key Applications of AI in EF	L Settings	22
2.1.1 AI for Personalized Lea	arning and Language Practice	23
2.1.2 AI for Automated Asse	essment and Feedback	24
2.1.3 AI for Language Suppo	ort and Comprehension	25
2.1.4 AI for Immersive Learn	ning Experiences	26
2.3 Potential Benefits of AI in the	EFL Classroom	27
2.4 Potential Challenges and Limit	cations of AI	28
2.5 The Imperative of AI Literacy	in EFL	30
2.6 The Role of AI in Fostering EI	FL Students' Linguistic Creativity	32
Conclusion		33

CHAPTER THREE: THE EFFECT OF AI ON EFL STUDENTS' LINGUISTIC

CREATIVITY ENHANCEMENT

Introduc	tion	34
3.1 Rese	arch Methodology and Design	34
3.1.1	Research Method	34
3.1.2	Research Population and Sample	34
3.1	.2.1 Teachers' Population and Sample	34
3.1	.2.2 Students' Population and Sample	35
3.1.3	Data Gathering Tools	35
3.2 Teac	hers' Questionnaire	35
3.2.1	Description of the Questionnaire	35
3.2.2	Administration of the Questionnaire	37
3.2.3	Questionnaire's Interpretation and Data Analysis	37
3.2.4	Summary of the Results and Findings from the Questionnaire	58
3.3 Stude	ents' Questionnaire	60
3.3.1	Description of the Questionnaire	60
3.3.2	Administration of the Questionnaire	62
3.3.3	Questionnaire's Interpretation and Data Analysis	63
3.3.4	Summary of the Results and Findings from the Questionnaire	85
Conclusi	on	88
GENER	AL CONCLUSION	
1. Pedag	gogical Implications	89
2. Limit	ations of the Study	90
3. Recor	mmendations for Further Research	91
REFI	ERENCES	

APPENDICES

APPENDIX I: TEACHERS' QUESTIONNAIRE

APPENDIX II: STUDENTS' QUESTIONNAIRE

FRENCH SUMMARY

ARABIC SUMMARY

GENERAL INTRODUCTION

1. Statement of the Problem

The concept of creativity is one major aspects of language mastery. In accordance, literature written on the concept of linguistic creativity reflects the importance it holds for human uniqueness. According to Chomsky (2006), LC is the "human essence', the distinctive qualities of mind that are, so far as we know, unique to man" (p.88). This idea is put in a critical position due to the technological advancements of AI. In this regard, EFL learners' use of AI could either inspire or hinder their LC. This study, conducted at the University of 08 Mai 1945, Guelma, seeks to explore EFL teachers' and students' attitudes towards the role of using AI tools in enhancing EFL learners' linguistic creativity.

2. Aims of the Study

The current study aims to:

- Explore teachers' and students' perceptions towards the use and integration of AI tools in EFL settings.
- 2. Identify the relationship between students' use of AI tools and their level of LC.

3. Research Questions

The influence of AI use on EFL students' LC is a controversial topic. Thus, the present study intends to explore EFL teachers' and students' perspectives to answer the following questions:

- 1. What are EFL teachers' and students' perceptions towards the use of AI tools and their integration in EFL settings?
- 2. What is the relationship between students' use of AI tools and their level of LC?

4. Research Methodology

This research employs a combination of qualitative and quantitative method. This method has been selected because it allows for an objective and accurate description of a

population, situation, or phenomenon by systematically collecting both numerical and qualitative data. The latter aligns with the study's aim of exploring teachers' and students' perceptions and attitudes towards the role of AI in enhancing students' LC.

Accordingly, this study relies on distributing two questionnaires to two different representative samples. The first one is a teachers' sample, which consists of twenty-two (22) teachers selected randomly from a total of sixty-one (61) teachers at the Department of English, University of 08 Mai 1945-Guelma. The second one is a students' sample, which consists of three hundred and twenty (320) students chosen randomly from nine hundred and forty-six (946) EFL students from Licence and Master's degrees in the same Department. The random selection of teachers and students was to ensure the objectivity and validity of the research's findings.

5. Structure of the Dissertation

The current study features three chapters preceded by a general introduction and followed by a general conclusion. The first two chapters present the theoretical landscapes of each variable. Thereafter, the third one functions as the practical chapter.

In the general introduction, the research topic is introduced by stating the problem, aims, questions, research methodology, and the structure of the dissertation. Following that, the theoretical chapters are presented. The first chapter provides an overview of the notion of LC. First, it examines its definition in EFL contexts in addition to the different theoretical perspectives and mechanisms behind it as a concept. Second, it portrays the manifestations of LC in English. Third, it highlights LC's significance in the field. Fourth, it underscores the potential challenges in teaching and assessing it. Ultimately, it presents different approaches to foster EFL students' LC. The second chapter discusses the technology of AI. First, it defines it in EFL settings. Second, it demonstrates its key applications in the field. Third, it reflects on its potential benefits in EFL classrooms, in addition to its challenges and

limitations. Fourth, it discusses the imperative of AI literacy. The chapter ends with presenting a glimpse of the role AI plays in fostering EFL students' LC.

The third chapter serves as a field investigation that involves a description of the research method, population, sample, and data gathering tools. Fundamentally, this chapter also provides analyses and interpretations of the results. Consequently, the concluding part of the research, the general conclusion, consists of pedagogical implications, limitations of the study, in addition to recommendations for further research.

Chapter One

Linguistic Creativity in the Context of EFL

Introduction

One notion that exhibits major dominance in today's ever-evolving world is the notion of creativity. Its existence is shown to be fundamental for general human progression. Regardless of the importance it holds, this process is a hard one to define due to its complex nature. Nevertheless, in an English as a Foreign Language (EFL) classroom, creativity encourages engagement, motivation, and enhances learners' academic performance. Moreover, in such a field, creativity is evident in creative linguistic expressions, which are characterized by their novelty, appropriateness, and effectiveness. This Linguistic Creativity (LC) demonstrates the vast creative potential of human cognition and linguistic expression. This chapter offers a comprehensive overview of linguistic creativity. Beginning with an illustration of the divergent viewpoints and concepts surrounding it in an EFL setting, where it draws on the difference between native language users' LC and EFL learners' LC. Thereafter, it explores the cognitive, linguistic, and contextual mechanisms enabling it. Furthermore, it examines how LC is manifested in everyday language, from the use of puns to the use of humor, showcasing language flexibility and its endless possibilities. This chapter then illustrates the significance of LC in an EFL setting. To conclude, it sheds light on some challenges that learners face regarding their LC, and then proceeds by providing strategies that might help foster it.

1.1 Defining Linguistic Creativity in the EFL Context

1.1.1 Linguistic Creativity

Throughout history, the term creativity has undergone many definitions (Ellis, 1986). At its earliest stages, it was regarded as a divine property or an innate attribute of the "Artistic Genius" (Glaveanu & Kaufman, 2019; Ziche, 2023). Later on, a shifting view linked imagination with creativity, which led thoughts to be of a creative nature (Glăveanu, 2017a). It was not until the 20th century that studies by J.D. Guilford and Ellis Paul Torrance paved

the way for contemporary views on creativity by providing a scientific definition of the notion and making distinctions between creativity and intelligence. Furthermore, Graham Wallas (1926) added a theory, which outlines creativity as a four-stage process rather than a mere product. These views revolutionized the concept to be regarded as a procedural approach that all individuals are capable of, i.e., it can be learnt. Therefore, Creativity evolved from an attribute of special individuals to one accessible to all people.

Whether a product, a process, or a person, this notion is considered among the top 21st-century skills (Pàsztor et al., 2015). With that being said, there is no unanimous definition for the term (Alves-Oliveira et al., 2021). Nevertheless, according to the "standard definition," creativity is a reflection of novelty and value (a.k.a., effectiveness, appropriateness, etc.) (Stein, 1953). However, evaluating the criterion of value requires an outside judgment; therefore, it is subject to change (Ismayilzada et al., 2024). For that reason, researchers argued to drop it from the "standard definition" (Weisberg, 2015b). Furthermore, a new criterion was added, that is, a creative product includes the element of surprise (Boden, 2004). Consequently, the conceptualization of creativity has been regularly modified; in the academic realm, an idea is considered creative if it is both novel and useful (Runco & Jaeger, 2012), and sometimes surprising (Simonton, 2012).

In the study of academic creativity, it is essential to note that researchers classify it into different types. The first distinction is through the "Four P" (person, process, product, and press) model, which examines the factors involved in the creative process (Rhodes, 1961) (see figure 1). The second distinction is between personal or intrapersonal creativity (P-creativity), and historical or interpersonal creativity (H-creativity), the first denoting a product as creative in relation to the person's lifespan, however the latter indicates the product is novel in retrospect to the entire history (Stein, 1953). A third distinction, and the most popular one, is the "Four C" theory by Kaufman and Beghetto (2009), where they classify

creativity based on four levels of difficulty: "min-C", "little-C", "Pro-C", and "Big-C" (see figure 2).

Figure 1.1.

The 4P Model (Rhodes, 1961)

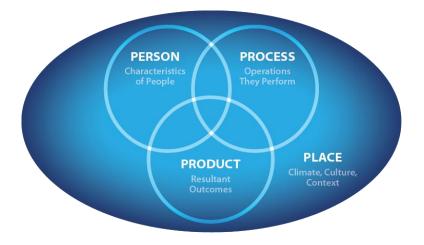


Figure 1.2.

The 4C Model of Creativity

	Brief definition	Example	Types of measures
mini-c	Novel and personally meaningful interpretation of experiences, actions and events.	Student's new and meaningful insight about how to use a strategy learned in math class to analyze data in her science fair project.	Self-assessment, micro genetic methods.
little-c	Everyday expressions of novel and task appropriate behaviors, ideas or products.	Combing left over Italian and Thai food into a new and tasty fusion of flavors that your family enjoys.	Ratings (teachers, peers, parents); psychometric tests (e.g., Torrance tests); Consensual assessment.
Pro-c	Expert expressions of novel and meaningful behaviors, ideas or products (that exceed everyday but have not attained legendary status).	A professor's psychological study that receives an award from a professional psychological association.	Consensual assessment; peer review; prizes/honors.
Big-C	Legendary novel and meaningful accomplishments, which often redirect an entire field of study or domain.	The scientific theories of Isaac Newton. The innovative social justice work of Martin Luther King, Jr.	Major prizes/honors; historiometric measures.

Source: as cited in Araki (2015).

The term "creativity" is approached differently depending on the domain, culture, or period it is in (Ismayilazada et al., 2024). What linguists classify as original, significant, and of value may not correspond to classifications of other disciplines (Hoffmann, 2019). At its broadest sense, linguistic creativity is defined as the production of novel utterances through the input of language schemas and knowledge (Hoffmann 2018a). It is possible through the innate ability of humans to create and understand an unlimited number of sentences never seen, heard, or even thought of before (Laila, 2022).

1.1.2 General Concepts of Linguistic Creativity

Noam Chomsky, in his theory of "Universal Grammar" argues that within the fixed rules of language there is an infinite possibility for creative creation, in his lecture "language and freedom" he states that "Language is a process of free creation; its laws and principles are fixed, but the manner in which the principles of generation are used is free and infinitely varied" (1970). Similarly, in his paper "Aspects of the Theory of Syntax" (1965), he associates creativity and the generative property of language, meaning, LC is only possible through the fixed set of rules of a language. However, Sampson (2016) has a different view from Chomsky's, according to him, since creativity requires deviation from rules, then, LC may also be the product of language rule deviations. In 2017, he suggests a distinction between F-creativity (fixed) and E-creativity (extending), where the former refers to Chomsky's interpretations and views on LC, i.e., productivity within language rules; however, the latter refers to linguistic innovations that go beyond the set of language rules.

Regardless of the controversies, the assessment of F-creativity and E-creativity is a complex subject (Anh et al., 2024). Linguists claim that creativity is an essential property of language (Chomsky, 1965); some even argue that it is the goal of language itself (Goldberg, 2005). Therefore, LC is mostly studied as a manifestation of everyday language use.

1.1.3 Linguistic Creativity for EFL Learners

A critical distinction that has been studied by scholars such as Deshors et al. (2016) and Ranta (2022) draw on the differences of creative language assessment, that is, the criteria of consideration for linguistically creative products vary according to the language user's proficiency level. While for native speakers and fluent English users, creativity is strictly assessed, meaning, linguistic outputs must be innovative, effective, and correct to be categorized as creative. However, for EFL learners, LC is evident in their risk-taking tendency to try new grammatical structures, lexical combinations, and generally new ways of expression. According to Ginting (2022), this risk is based on a hypothesis formulation and testing mechanism that learners develop about the rules of the foreign language. The latter indicates a positive sign of active learning and often leads to what is called "creative errors". However, for a native speaker, deviation from the norm is likely to be considered mere errors.

1.2 Theoretical Perspectives and Mechanisms Behind Linguistic Creativity

Research around LC focuses on two main aspects. Firstly, on understanding the behavioral and cognitive mechanisms enabling creative thinking, as well as determining the factors that influence and contribute to creative performance (Dandu & Pugazh, 2023). Hence, the production of a linguistically creative outcome necessitates a deeper understanding of the frameworks that enable it (Brochhagen et al., 2023).

1.2.1 Generative Grammar

Chomsky, in the study of language and creativity, theorized "Generative Grammar" (GG), which seeks to understand how humans can make infinite use of finite means, i.e., how humans create novel expressions from a fixed set of linguistic rules. In his seminal works, *Aspects of the Theory of Syntax* (1965) and *Language and Mind* (2006), he argues that the creative aspect of language stems from an internalized system of rules, that is, a set of principles that operate at a deep unconscious level which govern the structure of all natural

languages, or what he refers to as Universal Grammar (UG). The latter, according to him, is what enables humans to produce and understand novel sentences which are different from other familiar ones.

Among the tenets of GG is the rule-governed nature of linguistic creativity, Chomsky (2006) states that "the study of language structure reveals properties of mind that underlie the exercise of human mental capacities in normal activities, such as the use of language in the ordinary free and creative fashion" (p. 14). Hence, linguistic creativity is restricted by a set of grammatical rules which enable the use of normal and creative language. Therefore, LC in an essence is "figuring out how to use what you already know in order to go beyond what you currently think" (Weick, 1995, p. 15).

Furthermore, Chomsky (1965) makes a distinction between linguistic competence and linguistic performance. Where competence stands for the speakers' knowledge of the rules of a language, however, performance refers to the actual use of language, which "involves a complex interplay of many factors" (Chomsky, 1965, pp. 51-52). Consequently, the relationship between competence, performance, and creativity has been a subject of ongoing discussion and refinement.

The theory of GG provides a powerful framework for understanding the mechanisms that enable LC. However, despite its significant advancements, Chomsky (2006) suggests that the capacity of understanding LC might go beyond our comprehension. The latter idea displays an inconsistency in Chomsky's works, from addressing the human language as simply rule-bound to glorifying its ambiguous creative capacity (Drach, 1981). These inconsistencies build diverse reactions towards Chomsky's work.

1.2.2 Cognitive Linguistics

There is an abundance of literature addressing the notion of cognitive linguistics (CL), which argues that language is an innate capacity emerging from humans' cognitive abilities

(Chomsky, 1965; Pinker, 1994). Cognitive linguistics also implies that mastering a language requires a simulation of various types of thinking: critical, creative, and analytical (Council of Europe, 2007; Birgili, 2015). One major attribute of human intelligence and a domain which received significant attention in CL is LC (Guilford, 1967; Hoffmann, 2018a). The latter plays a fundamental role in explaining how human language is a product of the mind, which operates according to the rules of grammar, i.e., LC is rule-governed (Ginting, 2022). In this sense, the creative dimensions of language, such as metaphors, are viewed to be fundamentally shaped by humans' mental abilities to reason, conceptualize, and categorize (Lakoff & Johnson, 1980).

Linguistic creativity, in its various forms, is fundamentally enabled by core cognitive abilities (Coulson, 2001). The mental capacity most associated with creativity is divergent thinking (Guilford, 1967). The latter represents the spontaneous, free-flowing intellectual capacity of individuals in generating multiple connections between ideas in a short amount of time, which is believed to be the core quality of creative individuals (Hennessey & Amabile, 2010). Moreover, Divergent thinking enables the interaction of cognitive functions such as memory, perception, reasoning, and problem solving, to create what is called Conceptual Blending (CB), i.e., forming associations and categorizations between ideas and concepts which were previously unconnected (Fauconnier & Turner, 2002). In linguistics, CB is observed in constant linguistic pattern recognition and pattern extension (Pinker, 1999), an example of such ability in this field is analogy, which is defined as a cognitive mechanism that enables recognizing structural differences, and similarities between domains and using existing linguistic patterns and vocabulary to create novel ones.

1.2.3 Usage-based Linguistics

Although the principles of Usage-Based-Linguistics (UBL) contradict the eminent theories surrounding LC, such as generative grammar and universal grammar, it views

language as an abstract, isolated system that emerges from, as the name suggests, frequency of usage (Bybee, 2013). However, according to Cook (2000), the relationship between the two resides in the role of frequency in improving cognitive flexibility and therefore LC. Vygotsky (1962) among other linguists have studied the development of individuals' lexical capacities, from childhood to language evolution, through "lexical extension" and other manifestations of linguistic creativity which demonstrates a correlation between the frequency of language usage and the development of linguistic creativity (see more in Brochhagen et al, 2023).

1.2.4 Contextual Aspects

The product of LC must be, as in its definition, original, unusual, and contextually accurate (Amabile, 1982). Because language, society, and context are deeply intertwined, it is believed that language is highly influenced, in fact shaped by its context (Halliday, 1978). In that sense, Duranti (1997) goes so far as to say that words do not carry the meaning themselves; it is the context that defines it. In essence, linguistic creativity is a combination of language, knowledge, and context (Csikszentmihalyi & Sawyer, 2014). Figurative language, for instance, which is an obvious manifestation of LC, is largely associated with the connection between words, their literal meaning, and the context surrounding them (Gibbs, 1994). Furthermore, Communicative needs serve as the fuel to LC, as the latter is not believed to be the individuals' mere attempt to showcase linguistic mastery (Tomasello, 2003). Alongside cultural and social norms, which foster new ways of creation (Crystal, 2001). Consequently, Contextual factors not only impact humans' use of LC but also go beyond that surface to even shape our value system for what classifies as linguistically creative and what does not (Carter, 2015).

1.3 Manifestations of Linguistic Creativity in English

Through the operation of different mechanisms, LC is possible (Fauconnier & Turner, 2002). This is through the human mental capacity to draw similarities and connections

between different phenomena (Gentner, 1983), the flexibility and endless potential of language (Chomsky, 1965), and is driven by a human need (Carter, 2015). This creative process is evident in various linguistic phenomena.

1.3.1 Lexical Creativity

Lexical Creativity or Lexical Innovations (LI) refers to the process of constructing new words/concepts, and new meanings from previously existing ones (Spencer, 2003b). In other words, it relies on the formation of new words not typically found in dictionaries (Algeo, 1991). These lexical innovations emerge as a response to different environmental changes and challenges (technological, cultural, social, etc.), which call for various communicative needs (Fiveable, 2024).

There is an abundance of research conducted on LI (Spencer, 2003b; Carter, 2015; Lynch, 2024, to name a few). These studies show that the creation of new lexicon takes different forms (Wuerschinger, 2021). Firstly, neologisms serve as an umbrella term for the coinage of new words or expressions which were previously inexistent, such as "selfie", "Blog", or the verb "to google"; these are examples of neologisms emerging as a reaction to technological advancements. Moreover, LI encompasses different types of word play, including blending [the mixing of two words, e.g., brunch (from breakfast and lunch), hangry (from angry and hungry), etc.], clipping [shortening of words, e.g., gym from gymnasium], and Derivations [typically by adding affixes, e.g., unfriend, pre-pandemic, etc.]. Another type of LI is semantic association or augmentation, that is, extending the meaning of existing words to cover a new concept, for instance, the usage of the word "sick" to describe something "cool" when it previously was used solely for describing illness.

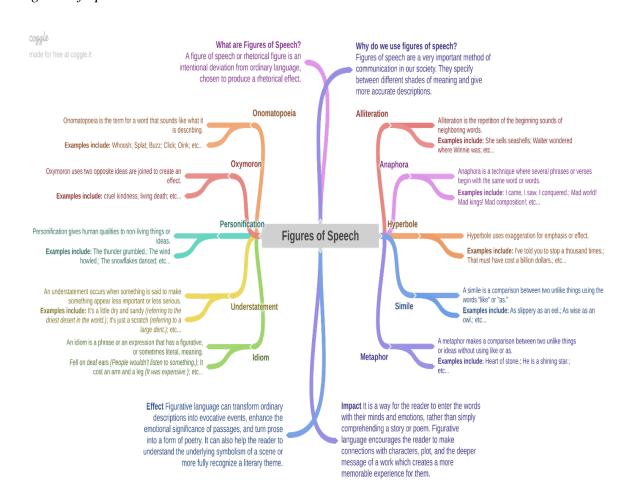
1.3.2 Figurative Creativity

Figurative Creativity (FC), i.e., a language that operates through figures of speech, is defined as the use of language to form creative expressions that go beyond the literal meaning

(Ellis, 2024). It is a powerful tool of LC allowing language to transform from its mundane referential use to a more artistic and creative way of expression (Short, 1996). Different figures of speech are constructed by the process of understanding and forming connections between rather separate aspects of language (Abrams & Harpham, 2011). Fundamental types of FL are simile, metaphor, personification, hyperbole, irony, paradox, allusion, idioms, etc.

Figure 1.3.

Figures of Speech



1.3.3 Syntactic Creativity

Creativity in language expression goes far beyond LI to encompass the syntactic level. Syntactic Creativity (SC) is defined as playing with different linguistic structures (grammar) for different effects, under a fixed framework which Chomsky (1957) labels "constructional grammar". For artistic, dramatic, and suspenseful effects, SC is evident in various phenomena

such as ellipsis (i.e., omitting sentence elements), sentence fragments (i.e., using incomplete sentences), run-on sentences (lack of appropriate punctuation, e.g., in stream of consciousness), etc. In an EFL context, SC is mostly observed through learners' "Interlanguage phenomena" (Selinker, 2009). The latter occurs when foreign language learners translate utterances from their native language to the target language while maintaining the native language's structural rules. To illustrate, the latter manifests as pluralization errors, incorrect word order transfer, incorrect usage of definite articles, and omission of necessary elements, etc. This translation results in "creative" expressions that are grammatically incorrect; however, for EFL learners, these errors count as "creative errors". The latter might count as an example of a rule challenging creativity.

1.3.4 Pragmatic and Discourse Creativity

LC and all its forms show manifestation in discourse, i.e., language in use, to achieve the necessary communicative needs of individuals (Carter, 2015). Furthermore, in Ubaydullaeva's article (2022), he explains that discourse serves as the main environment for different language innovation possibilities, in which lexical innovations and figures of speech are constructed and put to use. In addition, LC at the discourse level also manifests in novel narrative patterns (i.e., breaking traditional linear storytelling), argumentative flairs (e.g., using rhetorical questions instead of directly presenting an argument), poetic discourse (e.g., incorporating rhythm), conversational play (use of humor), code switching (e.g., linguistic blends by shifting between dialects or languages), adopting different registers (e.g., shifting the style between formal and informal to achieve appropriate creativity), etc. (Carter, 2015). Moreover, he states that "The manifestation of LC largely depends on the purposefulness of discussion" (p. 3125). Since Linguistic Creativity is about appropriateness, usefulness, and effectiveness, this entails that any creative language production must be in accordance with the context it is in.

1.4 Significance of Linguistic Creativity for EFL Learners

To be one with the creative skill is one of the most desirable characteristics of all human attributes since recent centuries (Li, 2016). Although creativity is a messy process in itself (Jones, 2016), many studies in the realm of education argue for the necessity of giving serious attention to nurturing the creative side of education due to all the advantages it offers (NACCCE, 1999). The benefits surpass solely the classroom environment as it supports students with the skills of adaptability and reasonability, which serve them in their personal lives as well as their future careers (NACCCE, 1999).

In an EFL setting, interventions aiming at fostering creativity, in general, are especially significant (Council of Europe, 2007). The latter equips foreign language learners with various types of thinking: imaginative, critical, and creative (Gumhold, 2018). With the acquisition of such skills, language learners use language as a medium for expressing their creative thoughts (EdYouFest, 2023). Moreover, a creative educational environment allows students to engage in cognitive functions such as problem solving and brainstorming, to be more critical, analytical, and predictive thinkers, which are the core foundation for any creative output (Vygotsky, 2004). In other words, creativity as a cognitive function serves as a subsequent element for developing EFL students' LC. Additionally, the frequent engagement in creative expression improves learners' cognitive functions.

As previously demonstrated, creativity fosters LC; however, research shows that the opposite is also true (British Council, n.d.). High LC in EFL students displays a domino effect on other abilities as it revives learners' engagement, confidence, motivation, etc. (Liao et al., 2018). In accordance, linguistic competence in linguistically creative learners is higher than for those who do not participate in creative expression (Kholid & Syafrizal, 2023). The latter claims illustrate that LC encourages language learning, which leads to achieving communicative competence.

LC being defined as the creative use of language for expressing sentences that are novel, valuable, and true to their context (Maley & Peachey, 2015), is emphasized to play a central role in language itself as Chomsky says "it is clear that a theory of language that neglects this creative aspect of language is only of marginal interest" (1965, p.54). Therefore, the goal of Teaching English as a Foreign Language (TEFL) should put serious interest in applying techniques that foster creative language use (Cremin, 2009). For those listed reasons, alongside many others, fostering creativity is now regarded as fundamental for an efficient learning and teaching environment. Ultimately, the arousal of creativity and LC in an EFL classroom highly depends on educators themselves (Phothongsunan, 2023). For that matter, Numerous studies are conducted regarding what strategies to employ, as discussed in another part of this research.

1.5 Challenges in Teaching and Assessing Linguistic Creativity

In the pursuit of learning and teaching English as a foreign language, EFL students and teachers encounter many challenges. In terms of linguistic creativity, these challenges manifest in a variety of forms: linguistic deficiency (Raimes, 1983), learner-related psychological barriers (Monib & Hadi, 2025), and pedagogical factors (Iswandari et al., 2017). These drawbacks significantly hinder students' ability of creative expression. Moreover, creativity in a sense is viewed as something that has more to do with art than language itself (Conti, 2015). Therefore, the latter is often marginalized by students and academic environments.

Firstly, it is an agreed-upon notion that in order to be linguistically creative, one must possess a moderate level of linguistic competence (Carter, 2015). The difficulty of free expression whilst worrying about the appropriate selection of words and correct grammar finds itself as a major problem restricting EFL students' creative language manipulation (Mourtaga, 2006). Furthermore, another challenge regarding being creative with a foreign

language is the potential interference of their native language (L1) rules or students' mental translation of ideas from L1 to a target language (Malip & Abdul Aziz, 2022). Overcoming such linguistic deficiencies sets the ground for LC; however, too much emphasis on language correctness serves as a challenge in itself (Sarkawt & Hanife, 2023).

Secondly, psychological factors contribute to the making or breaking of many facets of human life (Vergara et al., 2023). When it comes to creative language expression, these factors are of high significance (Monib & Hadi, 2025). Starting with intrinsic motivation, which is the basis of pursuing knowledge, fueled with curiosity (Oudeyer et al., 2016). This latter provokes LC; however, it is subject to suppression by the external influence of the classroom environment (Noels et al., 2000). Another psychological factor affecting LC that research has shown high interest in is students' anxiety and fear of errors. The latter disrupts EFL students' willingness to take risks and manipulate language (Rebbouh, 2016), which, in future retrospect, lowers their confidence in language use in general.

Finally, and most importantly, the challenges environmental factors pose to EFL students' LC are observed from both the academic realm and the cultural realm. On the one hand, academically, EFL environments do not emphasize enhancing LC; rather, they emphasize the correctness of language (Sarkawt & Hanife, 2023). Meaning there are insufficient opportunities for students to interact with creative language use, which suppresses students' creative abilities. furthermore, a teacher-centered approach is observed in such environments, which leads to students' uninterest in subjects and therefore low engagement in creative expressions (Baghoussi, 2021). In addition to teacher dominance, there is a lack of a pedagogical framework for developing and assessing LC (Pipes, 2023; Campbell & Rosenhan, 2023). The latter is due to factors such as the difficulty of assessing linguistic creativity (as the concept possesses no unanimous definition nor a scale of assessment), in addition to the previously mentioned focus on language correctness. On the other hand,

language and culture are deeply intertwined therefore creativity varies significantly on the cultural level, what may be considered creative to a culture might not even come close to being creative in another (Wang, 2016). To illustrate, idiomatic expressions like "break a leg" means "good luck" in English culture and is considered as a creative expression, however in Arab or other cultures the expression might come across as odd and not even close to being linguistically creative. Moreover, this variety leads to an observable distance between L1 and English, such as the lack of familiarity with idiomatic/ culturally coded expressions. Hennessey and Amabile (2010) in their research point out the variety of differences regarding LC in terms of cultures.

1.6 Approaches for Fostering EFL Students' Linguistic Creativity

A study by Karin Inggårde (2011) showcases that high achievers in language programs are highly creative individuals, linking the success of a language learner with their level of creativity. In a language-focused domain, LC is a skill that can be taught and fostered through education (NACCCE, 1999). Considering the latter, language educational institutions, since the 21st century, have placed significant emphasis on the implementation of certain pedagogical approaches that aim at its cultivation (Formosa & Zammit, 2016). Therefore, the development of this aspect is highly dependent on the success or failure of the strategies employed in academia (Birkmaier, 1971).

In a study by Ginting (2022), "Linguistic Creativity and its implementation on English Language Teaching," he discusses how, in a foreign language learning setting, fostering LC entails for teachers to be patient as the latter is developed through stages. He advocates for the importance of implementing different strategies that are consistent with students' different levels of linguistic proficiency. He drew upon Chomsky's view that language acquisition, and therefore LC, is a gradual process of knowledge system cultivation. LC, therefore, in an early stage of linguistic proficiency, is manifested via students' awareness of linguistic rules and

their cognitive formulation of hypotheses about these rules. Teachers' overcorrection in such early stages hinders this process, as errors are an indicator of an evolving proficiency. Moreover, for students with higher levels of language competence, more complex structures of language should be introduced in the pursuit of fostering LC.

EFL classrooms are an optimal environment for fostering students' LC as they offer a thorough focus on the flexible nature of language as well as opportunities to explore such realm (Tin, 2013, as cited in Tumen-Akyildiz, 2024). Moreover, there is a lack of teachers who fully recognize the link between creativity and Language instruction (Lee, 2013, as cited in Tumen-Akyildiz, 2024). However, an informed teacher employs a range of strategies to simulate creative thinking and creative language expression (Richards, 2013). These strategies stem primarily from EFL teachers' positive attitudes towards encouraging and nurturing LC (Tanggaard, 2011). Firstly, as stated earlier, language by nature is inherently flexible; therefore, allowing students to use this property of language in creative manners should be of central focus in any language teaching and learning environment (Durdas et al., 2022). Such allowance is possible through the integration of creative writing possibilities like storytelling, and poetry writing, which intel students' usage of different language structural manipulation and word play to convey meanings in an original way (Wu & Chen, 2020). By integrating such strategies, teachers positively challenge both students' imaginative thinking and linguistic engagement, which contribute to overall foreign language development (Maley, 2018).

Secondly, the selection of topics for foreign language classes is of a diverse range that teachers should not overlook (Clarke, 2005). This choice should be based on students' interests and real-life scenarios, e.g., sports, technology, law, etc. (Stepanek, 2015). When students are given opportunities to explore intriguing concepts, their imagination and creative

expressions are fueled (Dandu & Pugazh, 2023). This entails that using authentic and creative materials in EFL classrooms boosts students' engagement.

Finally, studies show that teachers' feedback to students' LC provides them with a sense of appreciation, which encourages more creative output (Fisher & Williams, 2004). However, in order to encourage creative expression, feedback must be less rigid (Ginting, 2022). In that regard, there should be a shift of focus when assessing students' linguistic productions, from evaluating based on grammatical and structural criteria to an effectiveness and appropriateness one. That is, to give space and attention to free creative expression.

Conclusion

The ability to produce creative language is special to humans and has been a topic of study for decades now. For an EFL learner, LC is of special importance. It mirrors learners' linguistic competence and cognitive abilities, that is, to be able to make semantic associations and use language in novel, correct, appropriate, and valuable ways. Therefore, LC is a means to advanced proficiency. In that regard, language educational systems and instructors must pay close attention to foster such unique capacity by incorporating special activities and environments for creative and free language play. The latter is significant as it boosts engagement and the overall success of language education. This chapter then proclaims a selective review of literature found on this notion of LC in an EFL context, while underlining the need for pedagogical shifts for maximum benefit.

Chapter Two Artificial Intelligence in the Context of EFL

Introduction

In the current digital age, where many technologies are reshaping human life, Artificial Intelligence (AI) has emerged as a paramount tool capable of performing tasks that were once claimed to be performed only by human beings. Its impact extended to many sectors, including education, promising a complete transformation of the field. This suggests its potential benefits for language learners in EFL contexts. Accordingly, the present chapter sheds light on multiple elements related to the use of AI in English as a Foreign Language (EFL) settings. First, it defines AI in EFL contexts. Moreover, it explores its main applications. Furthermore, it discusses the benefits of using AI and its challenges and limitations. Additionally, it highlights the importance and necessity of AI literacy. Ultimately, it provides a glimpse of the role of using AI in fostering EFL students' linguistic creativity.

2.1 Defining Artificial Intelligence in the EFL Context

In 1956, Artificial Intelligence was officially recognized as a field of study during the Dartmouth Summer Research Project on Artificial Intelligence, held by Professor John McCarthy at Dartmouth College in New Hampshire, USA (Dick, 2019). It is a multifaceted concept that many researchers attempt to define (Russell & Norvig, 2021). The European Commission's High-Level Expert Group on AI (HLEG) presents one of the comprehensive definitions of AI, stating that it refers to "systems that display intelligent behaviour by analysing their environment and taking actions, with some degree of autonomy, to achieve specific goals" (2018, p. 1). Hence, AI systems are able to think and make decisions through the process of receiving, interpreting, and analyzing data in order to perform different tasks and achieve specific objectives.

In education, AI refers to the flexible employment of its tools inside the classrooms to promote teaching and learning experiences and outcomes, which facilitates the role of both teachers and students (Top Hat Glossary, 2023). That is, AI is a powerful tool with the

potential to transform teaching and learning experiences. Correspondingly, in EFL contexts, AI-driven tools are marking a profound shift in learning and teaching methods. Luckin et al. (2016) claim that these tools "offer the possibility of learning that is more personalized, flexible, inclusive, and engaging" (p. 11). This not only reflects the benefits of AI tools to students but also to teachers (Daud et al., 2025), due to its ability to facilitate the teaching process.

AI's major use in the field of EFL is primarily a form of Artificial Narrow Intelligence (ANI), also known as Weak AI. The latter is a type of AI that is limited to a set of fixed capabilities, aiming at performing certain tasks (IBM Data and AI Team, 2025). Sharma et al. claims that ANI "equals or exceeds human intelligence or efficacy at a specific task" (P. 3). Unlike other types of AI, which can learn from past experiences and enhance their performance, ANI is not capable of performing any task that is out of its scripted or programmed capabilities.

ChatGPT, which is one of the most powerful AI chatbots, "is considered a form of Narrow AI because it is limited to the single task of text-based chat" (IBM Data and AI Team, 2025). In recent years, this specific AI-driven application has gained huge fame in EFL settings due to its advantages. According to Walter (2024), ChatGPT has reshaped the educational area by providing a completely new degree of personalization in learning. He also highlights that it not only represents a basic improvement in education, but rather has the potential to become a paramount tool in the field of teaching and learning (2024). The latter idea emphasizes the significant role AI plays in language teaching and learning.

2.2 Key Applications of AI in EFL Settings

There are many AI applications in the field of EFL. Jiang (2022) summarized six (06) dominant forms of them based on conducting a thorough review of their use in the field: Automatic Evaluation Systems (AESs), Neural Machine Translation Tools (NMTs),

Intelligent Tutoring Systems (ITSs), AI Chatting Robots, Intelligent Virtual Environment (IVE), and Affective Computing (AC) in ITSs. Depending on their primary function, these different applications can be classified into four themes.

2.2.1 AI for Personalized Learning and Language Practice

AI is able to provide students with individualized language learning experiences. First, AI's intelligent tutoring systems (ITSs) aim at fostering personal tutoring and facilitating learning based on offering instant adaptive feedback and personalized instructional materials that are adapted to students' language proficiency level and learning preferences. ITSs are proven to enhance different aspects of EFL contexts, including grammar learning (Abu Ghali et al., 2018); problem-solving (Hafidi & Mahnane, 2018); and teachers' skills in adjusting online teaching modes and content by providing them with students' performance profiles (Nagro, 2021). There are different AI apps that rely on these systems, including Duolingo, which is a language learning application specialized in offering personalized language learning paths and AI-driven practice. Li and Wang (2020) claim that Duolingo can be helpful in providing context-dependent and interactive lessons to learn a language, in addition to instant feedback. Among the most significant features of ITSs is Affective Computing (AC). The latter is interested in enhancing students' learning motivation through analyzing their emotions, which can be an effective method, as Yu et al. (2022) illustrate that students' emotions impact their learning motivation. In other words, students' positive emotions may increase their motivation to learn. This emphasizes the crucial role AC may play in EFL contexts.

Figure 2.1.

Duolingo



Second, AI chatbots are able to promote intelligent human-written and spoken language communication (Haristiani, 2019), which refers to AI's ability to simulate real-life conversations to support language learners' practice of their writing and speaking skills. In accordance, a study conducted by Kim et al. (2019) proves that AI tools are able to improve learners' English language proficiency and promote learners' motivation, self-confidence, and interest in learning. An example of AI chatbots is ChatGPT, which is widely used for generating content, offering personalized learning plans, and promoting conversational skills. For instance, in their study, Xiao and Zhi (2023) reported that participants praised ChatGPT for being an interactive personal teacher and learning aid that offered rational feedback and guidance whenever needed for writing instruction related to the International English Language Testing System (IELTS).

Figure 2.2.

ChatGPT



2.2.2 AI for Automated Assessment and Feedback

AI applications offer the service of assessing students' inputs and providing them with feedback through automatic evaluation systems (AESs). These systems are commonly employed in writing and speaking contexts. They focus on analyzing inputs, such as essays and records, in order to evaluate them and provide automatic feedback based on big data and NLP technologies. In EFL settings, Grammarly is one of the examples of worthwhile applications that use AESs, it is also considered one of the most well-liked ones (Fernando & Suryaman, 2022). It offers instant feedback on the pronunciation and grammar mistakes of the

inputs, as well as the level of their clarity. Qian et al. (2021) stated that multiple teachers claim that in EFL writing instruction, AESs cannot substitute real human raters. This emphasizes that AI tools' capacity to simulate human abilities and performances is still limited.

Figure 2.3.

Grammarly



2.2.3 AI for Language Support and Comprehension

There are various AI tools that support language learning and comprehension by promoting students' different language skills. Among these AI tools are neural machine translation tools (NMTs). They represent an inclusive learning approach that provides tools empowered with the ability to generate an automatic translation. Examples of NMT tools currently utilized in language education include Google Translate and Quillbot etc. These tools may have several potential drawbacks, such as hindering learning motivation (Zhu et al., 2020). Nonetheless, they may play a crucial role in EFL contexts at many levels; they help in mastering lexico-grammatical knowledge (Bahri and Mahadi, 2016) and improve L2 writing and reading comprehension (Alhaisoni and Alhaysony, 2017). This places them as potential important aids for EFL learners.

Figure 2.4.

Google Translate



Figure 2.5.

Quillbot



2.2.4 AI for Immersive Learning Experiences

AI tools provide EFL students with engaging learning experiences through what is known as an intelligent virtual environment (IVE). Luck and Aylett highlight that IVE is a blend of clever methods and instruments, manifested in self-governing beings and agents, together with efficient ways to depict and interact with them in different ways (2000). That is, it is a concept that combines AI technologies with virtual environments through substituting the real world with a digital one, providing an interactive experience that is based on virtual reality (VR). Interestingly, many studies suggest that VR tools can enhance vocabulary learning and retention (Tai et al., 2022) and boost motivation for English learning, helping to reduce anxiety (Chien et al., 2020). However, some researchers have highlighted various challenges in using IVE tools; for instance, Cowie and Alizadeh (2022) point out affordability and limited network access as issues related to the use of IVE tools. These problems may negatively impact the usefulness of IVE for both teachers and students in the EFL field.

To sum up, AI's presence in the field of EFL has a huge weight; its systems offer different potential services, including personalizing students' learning process, assessing their inputs and providing feedback, offering an automated translation, and creating engaging learning environments (virtual environments). This underscores the significant benefits of AI applications in EFL contexts.

2.3 Potential Benefits of AI in the EFL Classroom

Eliot (2024) emphasizes the role AI plays in benefiting EFL learners' language skills. That is, AI tools may introduce multiple advantages when employed in EFL classrooms. First, they offer personalized learning experiences. AI-powered applications provide students with learning plans, content, and strategies that align with their preferences and learning style. This includes offering personalized feedback by examining each student's emotional state and actual learning process (Peng et al., 2019), which is related to IVE and AC, in addition to analyzing students' performance, interests, and learning preferences (Vera, 2023). AL-Othman (2024) suggested integrating AI in EFL classrooms as he considers it an effective tool for students' learning endeavors. This highlights that the provided individualized feedback, which is mainly based on students' personal characteristics, has the potential to enhance students' learning journey and ensure its success.

Second, AI tools provide instantaneous feedback, which has the potential to enhance students' language practice. Guo et.al claim that AI tools provide a flexible, supportive, and more engaging learning environment for students as they offer individualized recommendations to foster learners' English language proficiency, including oral communication skills, listening, reading, and writing skills (2022). The latter is based on an instant detection of students' mistakes while using the applications, which helps students to highlight their weaknesses and facilitates their language development journey.

Third, AI systems increase students' motivation and engagement through adaptive testing, which plays a crucial role in this area. According to Eliot, AI is capable of adjusting tests and assessments to accurately reflect students' competence level in order to avoid demotivating them or diminishing their interest (2024). It helps educators to highlight their students' strengths and weaknesses in order to adjust their teaching methods accordingly,

provide assistance, and foster the learning process (Rudolph et al., 2023), in addition to enhancing their overall continuous development as teachers (Chiu, 2023). This showcases AI tools' special ability to foster EFL students' motivation and engagement to learn by offering adaptive tests. The latter provides teachers with needed information to help them enhance their tutoring process and increase learning outcomes.

Fourth, Access to authentic-like communicative practice is another advantage of AI in EFL settings. According to Hsu (2024), AI chatbots and personal assistants have the potential to provide students with an immersive language practice environment. This is done by simulating natural conversations and exposing students to real-life situations. The latter results in improving students' language level, as Kim et al. (2019) confirm an enhancement in students' language knowledge, as well as skills, after using AI chatbots. This also reflects that AI offers students the opportunity to access different language digital materials whenever they want, enabling them to learn more effectively as well as flexibly.

2.4 Potential Challenges and Limitations of AI

The use of AI tools by EFL students may expose them to different potential negative effects. The latter is related to the multiple challenges and limitations of these tools that derive from the design, operation, and use of AI systems. They can be categorized into four main points, covering: lack of nuanced human understanding, students' overreliance on AI tools, data privacy and security, and AI's dependence on existing data.

Lack of nuanced human understanding is a profound limitation of AI systems. Despite being efficient in performing different tasks, AI tools are not equipped with the ability to capture the unique elements of natural human communication, which are essential for language learning, such as creativity, tone, emotional intelligence, and cultural sensitivity. For instance, in his study, Al-Othman highlights many issues regarding the use of AI tools, including "reduced human interaction", "limited critical and creative thinking skills", and

"decreased spontaneity in language use" (2024, p. 99). This displays that AI is not capable of fully replicating natural human conversation, that is, its generated content lacks natural nuances of human dialogues because AI itself is not as sophisticated as the human mind. It also suggests that the latter prevents AI tools from providing accurate feedback to students' inputs and performances, which can limit learners' ability to use English effectively in real-world contexts, emphasizing the need to balance the use of AI with human natural interactions.

Moreover, relying on AI may threaten students' unique human skills. Students' tendency towards an overreliance on AI reflects a complete dependence on AI-generated content, causing them to neglect their own knowledge and abilities, which may ultimately diminish those skills. Chan claims that using AI tools may cause deficiencies in students' higher-order thinking skills (2023), this effect may duplicate in case of a tendency towards using AI-generated answers instead of trying to make any effort or to learn from one's own mistakes, this includes critical thinking, problem-solving, brainstorming, originality, etc. The latter indicates the risks students may face when using AI in an imbalanced manner, which highlights the necessity for them to avoid over-reliance on AI tools.

Furthermore, there are concerns regarding users' data privacy and security. When using AI-powered tools, students are putting their own identity and security at risk. According to Alghamdy, AI can potentially misuse students' stored data or simply expose it, which puts students' data privacy and security in danger, especially since there is no clear explanation of the amount of data AI tools collect while using them, nor the exact type of this data (2023). That is, when using AI, students' personal information will be stored in AI systems and then can be easily misused or exposed without their consent. The latter necessitates the urgent need to emphasize the importance of AI literacy in educational contexts.

Lastly, AI's dependence on existing data to make decisions and generate content presents another drawback. AI tools learn and function based on vast amounts of existing inputs that may be biased or incomplete. According to Nivedhaa, AI systems produce poor and inconsistent results when they lack access to enough high-quality data that allows them to generalize well to novel or unknown scenarios (2024). This poses a significant concern regarding students' use of these tools, as AI-generated content may rely on unknown sources or incomplete data to function, which may lead to biased and misleading outcomes and answers. The latter emphasizes the danger of over-relying on them.

2.5 The Imperative of AI Literacy in EFL

AI literacy (AIL) is a concept of a paramount importance. It is defined by Chiu et al. as the knowledge one has about AI systems, including their mechanisms and influence, in addition to their ethical and responsible use in different situations (2024). In other words, AIL is a wide landscape that involves absorbing different skills and knowledge related to the concept of Artificial Intelligence from its nature to its ethical use.

In the field of EFL, AIL links AI tools and language learning and teaching. Firstly, according to Alzubi (2024), AIL in EFL settings refers to the skill of successfully employing AI tools to promote both language acquisition and competence. On the other hand, Ng et al. (2021) framed AIL by conceptualizing it into four major components of AIL, which were later expanded by Almatrafi et al. (2024) to include six key components, which are recognizing, knowing and understanding, using and applying, evaluating, creating, and navigating ethically. Hence, AI literacy in EFL settings refers to learners' and teachers' ability to recognize, know and understand, use and apply, evaluate, create, and navigate AI tools ethically in order to enhance their overall language learning or teaching.

Enhancing students' level of AIL is a significant step towards facing AI's doubleedged influence. Through its transformative influence on the field of EFL, AI has managed to enhance the field, but has brought a set of ethical deficiencies, which require serious consideration (Alghamdy, 2023). This includes engaging in academic misconduct, using AI as a crutch and not a tool, and displaying algorithmic biases. The latter necessitates teachers' and students' awareness and implementation of the ethical rules governing the use of AI.

First, as AI-powered tools are developing, students' tendency towards using them in their learning is increasing (Javaid et al., 2023). This may be due to the diversity and easy access and use of AI tools in EFL settings, such as Google Translate and ChatGPT etc. Ellison and Patel (2022) claim that because of the latter, students today are faced with multiple temptations to deviate from the path that leads to academic integrity. That is, there is a potential for them to engage in activities that are considered unethical such as plagiarism and cheating. This refers to students' tendency to copy others' work without modifications, claiming it to be their own instead of trying to produce something original. Such behaviors diminish their learning skills and expose them to serious punishing rules, which may extend to preventing them from pursuing their academic studies. This emphasizes the role AIL play in similar contexts.

Second, using AI as a crutch instead of a tool reopens the door on students' potential to over-depend on AI technologies. This reduces their cognitive abilities and overall language skills and leads them to engage in a form of passive learning (Merdassi & Belmekki, 2024). Hence, students need to perceive AI as no more than a facilitator and a supporting tool that would help them promote their knowledge and performance during their language learning journey, instead of a crutch. Accordingly, having a good level of AIL prevents them from falling into such ethical issues.

Third, AI's potential of engaging in algorithmic biases represents another serious topic that emphasizes the role of AIL. Wang et al. (2023) claims that AI applications can be programmed to favor one group over the other. This leads them to generate biased

information, providing students with misleading content or feedback. In accordance, Chiu (2023) claimed that it is important to make students learn skills like media literacy in order to be able to detect the accuracy of information presented by AI tools. The latter opens the door for emphasizing the necessity of introducing AIL in EFL classrooms.

All in all, AI is a unique technology with the potential to cause a complete transformation in the EFL field. It holds a great promise to enhance students' as well as teachers' language learning and teaching journey. However, due to its limitations and disadvantages, it may expose students to distinct challenges. Thus, students should adhere to the different ethical rules that govern the use of AI-powered systems.

2.6 The Role of AI in Fostering EFL Students' Linguistic Creativity

The adaptation of technological advancements such as AI in a language teaching and learning environment is proved to enhance and support a variety of language skills (Wang & Petrina, 2013). Despite its challenges and limitations in the field, the enhancements they bring can be noticed at many levels of EFL contexts, as many researchers have conducted studies to explore the impact of AI on different aspects and skills related to English language learning (Xu et al., 2022; Hsu et al., 2023). For instance, Xu et al. investigated the influence of utilizing AI-assisted language learning tools on students' overall learning achievement, concluding that these tools have a positive impact on English language learners' learning outcomes.

In the same vein, AI tools may influence EFL students' linguistic creativity. Some researchers consider AI as a creativity booster; for instance, Luckin et al. (2016) claim that the different services provided by AI tools, including personalized learning and instant feedback, can enhance students' creativity. Similarly, Chan and Hu (2023) claim that employing generative AI applications in EFL settings presents a potential transformative shift that offers novel ways to foster EFL students' linguistic creativity. Also, Williams (2023) forecasts the

potential shifts AI may bring in teaching and learning creative language use. Additionally, in their study, Mushaddiq et al. (2024) highlight that AI chatbots can effectively encourage creativity and foster engagement and enjoyment in EFL contexts. That is, AI tools may represent a potential contributor to the enhancement of EFL students' linguistic creativity. Nevertheless, AI tools can threaten EFL students' linguistic creativity by hindering their high-order abilities. For instance, Bouigha and Namous highlight that such technology might restrict students' creative thinking, weaken problem-solving abilities, and lead to an overreliance on them (2024). The latter reflects the importance of exploring this topic to increase the benefits of using AI to enhance students' linguistic creativity and develop the field of EFL.

Conclusion

AI is a trending technology with a profound influence on EFL fields. It is a double-edged sword that promises a huge progression in the field for learners and teachers. However, it presents serious ethical concerns that ought to be taken into consideration when utilizing AI-driven tools. This underscores the importance of AIL, particularly the ethical and responsible use of AI technologies, which should be taken into account. This chapter reviewed the existing theoretical background about one of the crucial and rapidly growing technologies of our time: Artificial Intelligence. It presented a definition of AI in general, then in EFL settings. Moreover, it listed its key applications in the field. Furthermore, it identified different potential benefits of AI use in EFL settings, in addition to potential challenges and limitations. Additionally, it highlighted the concept of AI literacy, underscoring the importance of adhering to the ethical considerations and guidelines governing the use of AI in EFL fields. Ultimately, it concluded by reflecting on the potential role AI plays in fostering EFL students' linguistic creativity.

Chapter Three The Effect of AI on EFL Students' Linguistic Creativity Enhancement

Introduction

Linguistic creativity, recognized as an important aspect of language, indicates the cognitive and linguistic skills of language users. This highlights its significance in an EFL setting. In light of recent discussions about AI developments and their implications across various fields, it is essential to consider their potential effects on EFL students' LC. Therefore, this study utilizes two questionnaires (one for teachers and another for students) to explore their perceptions of AI use and investigate the relationship between the use of AI and students' level of LC. This chapter begins by introducing the populations and samples and describing the data gathering tools. Subsequently, in two separate sections, it presents and discusses the collected data, concluding with a summary of the results for each section. Finally, the chapter closes with an extensive conclusion.

3.1 Research Methodology and Design

3.1.1 Research Method

This study follows a combination of qualitative and quantitative method to collect data. The selection of this method was based on its ability to provide an objective and accurate description of a population, situation, or phenomenon by systematically collecting both numerical and qualitative data, which highly serves the purpose of this research. It enables a simple and easy collection and analysis of both teachers' and students' attitudes towards the role of using AI tools in enhancing EFL students' LC from a wide sample.

3.1.2 Research Population and Sample

3.1.2.1 Teachers' Population and Sample

At the Department of English, University of Guelma, there is a total of sixty-one (61) EFL teachers. From the latter population, a sample of twenty-two (22) teachers was selected during the academic year 2024/2025. They were randomly chosen from different teaching levels and specialties to ensure the diversity and validity of answers.

3.1.2.2 Students' Population and Sample

A sample of three hundred and twenty (320) EFL students was chosen for this research from a population of nine hundred and forty-six (946) students at the Department of English, University of Guelma, during the academic year 2024/2025. The sample encompasses randomly selected students from both Licence and Master's degrees. Moreover, it was extended to collect various views from students with different backgrounds. The latter offers more general and varied insights on the use of AI tools to enhance students' LC.

3.1.3 Data Gathering Tools

The present research relied on two questionnaires as data collection tools: one for EFL teachers and another for EFL students. These data collection tools aim at exploring EFL teachers' and students' attitudes towards the role of AI tools in enhancing EFL students' linguistic creativity. Both questionnaires consist of four (4) sections, each comprising a different set of questions.

3.2 Teachers' Questionnaire

3.2.1 Description of the Questionnaire

The questionnaire is composed of twenty (20) questions based on the first two theoretical chapters (APPENDIX I). It includes different types of questions to gather both quantitative and qualitative data. Firstly, to collect quantitative data, a set of close-ended questions was used, like multiple choice questions and five (5) point Likert scale questions. Secondly, to collect qualitative data, open-ended questions were used to provide teachers with the ability to express their perceptions and attitudes towards the role of using AI tools in enhancing EFL students' LC. Teachers' questionnaire consists of four (4) sections: General Information, Linguistic Creativity, Artificial Intelligence Use, and the Role of AI Tools in Enhancing Students' LC.

Section One: General Information (Q1-Q2)

This section consists of two (2) questions that aim at collecting general information about the respondents. In (Q1), teachers were asked to state the number of years they have been teaching English at the University. (Q2) requires them to specify their field of specialization.

Section Two: Linguistic Creativity (O3-O10)

This section consists of eight (8) questions. (Q3) asks respondents to define LC. (Q4) requires them to say whether LC means linguistic competence, along with justifications. (Q5) entails for teachers to select the creative skills that they usually integrate into their teaching process. (Q6) asks them to rate EFL students' LC on a scale of 1-5, and to explain their answers. Similarly, (Q7) requires them to select the extent to which they think LC plays a crucial role in EFL education. (Q8) investigates whether teachers assess their students' LC. Accordingly, (Q9) asks those who claimed that they assess their students' LC to select the criterion they rely on when assessing. (Q10) aims at finding out whether they encourage their students' LC through providing constructive feedback.

Section Three: Artificial Intelligence Use (Q11-Q15)

Section three encompasses five (5) questions. (Q11) detects whether teachers are familiar with AI tools. (Q12) illustrates whether respondents are qualified to use AI tools. (Q13) explores the types of AI tools that teachers mostly rely on in their teaching. (Q14) investigates respondents' frequency of integrating AI tools in their teaching courses. (Q15) explores their perceptions towards different claims related to AI; its ability to simulate human intelligence, the importance of its integration in EFL contexts, EFL students' qualification to use AI tools, the benefits of AI tools for EFL students, and its challenges.

Section Four: The Role of AI Use in Enhancing EFL Students' LC (Q16-Q20)

This section consists of five (5) questions. (Q16) explores teachers' perceptions of AI's capacity to foster students' ability to produce original and creative expressions. Similarly, (Q17) investigates their perceptions on whether AI challenges students' LC. (Q18) requires them to rate the relationship between students' overreliance on AI and their low LC. (Q19) asks them to select the path students usually follow when using AI-generated answers, based on their classroom observation. (Q20) provides them with a space to write down further comments or suggestions.

3.2.2 Administration of the Questionnaire

This questionnaire has been randomly dispatched in hard copies on Sunday, May 4th, 2025, to twenty-four (24) teachers at the Department of English, University of Guelma. Correspondingly, twenty-two (22) teachers returned the questionnaires after answering them, while two (2) of them did not. The choice of dispatching it in hard copies was due to the difficulty of reaching teachers online. Respondents' personal information was not collected to guarantee the privacy of their answers and the anonymity of their identities.

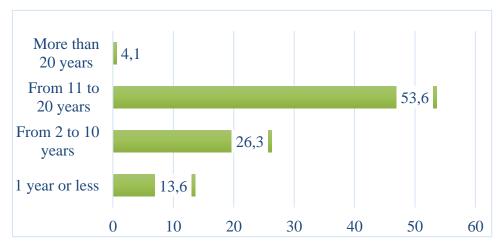
3.2.3 Questionnaire's Interpretation and Data Analysis

Section One: General Information

Q1- How long have you been teaching English at the University?

Chart 3.1.

Number of Years Teachers Have Been Teaching English at the University

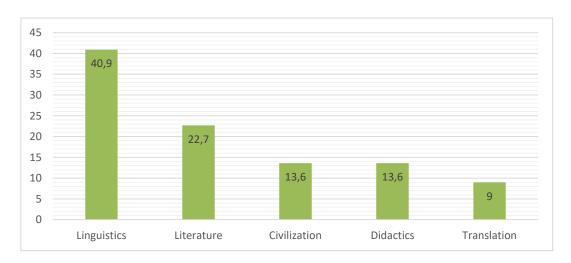


According to Chart 3.1, (53.6%) of teachers have been teaching English for a period between 11 to 20 years, (26.3%) from 2 to 10 years, (13.6%) for 1 year or less, and (4.1%) for more than 20 years. This is an indicator that the majority of respondents are experienced University teachers. The latter may ensure that they would provide professional, valuable, and thoughtful answers to this questionnaire.

Q2- What is your field of specialization?

Chart 3.2.

Teachers' Field of Specialization



As displayed in Chart 3.2, (40.9%) teachers are specialized in Linguistics, (22.7%) in Literature, (13.6%) of teachers in Didactics and another (13.6%) in Civilization, and finally (9%) in Translation. The latter indicates that the respondents are specialized in different fields. This heterogeneity of specialties ensures the diversity of answers, and therefore, the credibility of the research.

Section Two: Linguistic Creativity

Q3- How can you define Linguistic Creativity (LC)?

Table 3.1. *Teachers' Definitions of LC*

Options	Number of respondents	Percentage (%)
Provided definitions	21	95.5
Did not provide definitions	1	4.5
Total	22	100

Out of twenty-two (22) teachers, twenty-one (21) provided definitions for LC. These definitions are centered around the following central ideas:

- LC is the human ability to understand and produce novel and original language (words, phrases, sentences, texts), which holds no resemblance to what has been heard, seen, and/or said before.
- LC is a quality of all languages; its production follows a fixed set of linguistic principles; however, the usage of these laws is infinitely varied.
- LC is only possible through the use of different mental processes such as critical thinking skills, constructive skills, and creative skills etc.
- LC is goal-oriented. The latter is used for communicative purposes in a specific social context, which encompasses academic and artistic purposes.
- LC is evident in various linguistic phenomena and all language mediums, including language varieties, domains, and cultural dialects. It involves language structural play, creative writing, etc.

Other teachers have a deeper understanding of this notion. Firstly, they count it as a process rather than just a product, an idea reflected in the work of Wallas (1926). Secondly, they believe that LC is not only about "using" language creatively but also about "acquiring"

the language, a claim supported by Ginting (2022). The latter views positively support the gradual enrichment of EFL students' LC. However, a respondent counts this notion as "The perfect mastery of all four language skills and the capacity to perform all types of language tasks in different situations, including different fields", which suggests that to be linguistically creative, one has to be perfectly competent.

Q4- Does linguistic creativity (LC) mean linguistic competence? Please justify.

Chart 3.3.

Teachers' Perceptions on Whether LC Means Linguistic Competence

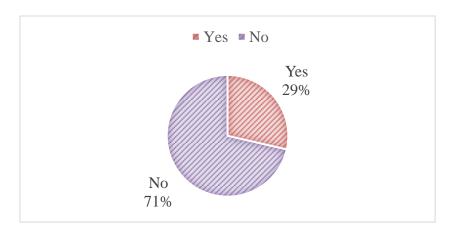


Chart 3.3 above displays that (71%) of respondents, which represents the majority, believe that linguistic creativity does not mean linguistic competence, that is, they are two distinct concepts. However, (29%) consider the two terms as being synonymous; i.e., refer to the same concept. This question received twenty (20) justifications.

Table 3.2.Teachers' Justifications for Whether LC and Linguistic Competence Mean the Same Concept

Options	Number of respondents	Percentage (%)
Justified answers	20	90.9
Unjustified answers	2	9.1
Total	22	100

•Teachers' Justifications for Selecting "No"

Teachers who supported the idea that LC and linguistic competence are not the same concept relied on the claim that the term linguistic competence refers to the knowledge one has about the language, while LC refers to one's ability to use this knowledge in a new way. This idea reflects Chomsky's perception of LC and linguistic competence (2006). Others expressed a similar idea by mentioning that linguistic competence is the individual's level of language mastery and ability to use this language effectively in different social situations to reach different goals. However, LC goes beyond mastering the language to using it in an original, novel, and imaginative way.

Respondents added that despite the fact that the two terms do not refer to the same concept, they remain related. They elaborated that linguistic competence is a part (alongside other competences) of LC, as one cannot be creative without being competent. In light of the latter claim, one of the respondents explained that LC and linguistic competence are not the same, but rather different concepts that complement each other. Another one commented that the two terms are related in the sense that competence provides the foundational rules of the language, and creativity bends those rules together for effect, concluding that linguistic competence ensures clarity, while LC enriches communication. Interestingly, another respondent justified his answer differently, saying that "Linguistic competence is more general and encompasses LC", which is a claim that is completely the opposite of the first one.

•Teachers' Justifications for Selecting "Yes"

To justify their responses, those who agreed that LC means linguistic competence relied on the same claim made by some of those who voted for "No". They claimed that one cannot be creative if he/she is not competent. That is, a moderate level of linguistic competence is needed to reach linguistic creativity and vice versa. This result highlights that

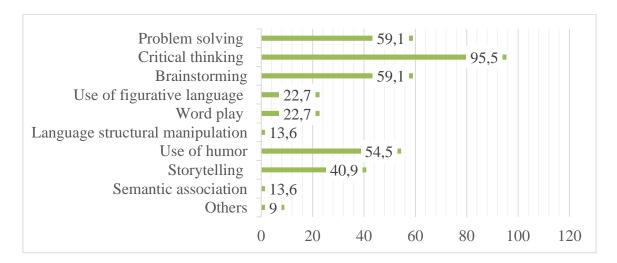
some respondents used the same claim to justify different answers. The latter suggests that probably these teachers hold the same views; however, they understood the question differently.

Moreover, some of them answered by stating that the two terms refer to the same concept because linguistic competence is the mastery of all skills and uses of language in different situations to achieve specific goals successfully. Then, they elaborated that LC is incorporated in linguistic competence; for instance, one respondent commented that "linguistic competence is the ability to use language creatively", referring to the claim that LC is a part of linguistic competence.

Q5- What creative skills do you usually integrate into your teaching?

Chart 3.4.

Creative Skills that Teachers Usually Integrate into Their Teaching



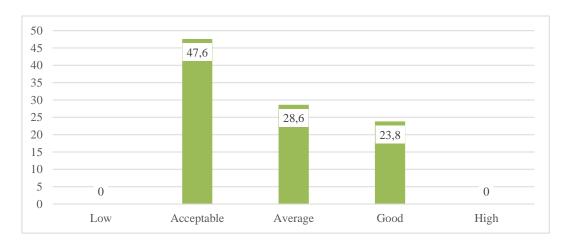
In answering this question, teachers were allowed to tick more than one option. As illustrated in Chart 3.4, EFL teachers by far (95.5%) mostly integrate critical thinking skills in their classrooms, while (59.1%) integrate problem solving skills, (59.5%) brainstorming skills, (54.5%) use of humor skills, (40.9%) storytelling skills, (22.7%) the use of figurative language skills, (22.7%) word play skills, (13.6%) language structural manipulation skills, and (13.6%) integrate semantic association skills. Moreover, a respondent added that he/ she

integrates role-play activities in his/her teaching. Furthermore, another respondent stated that these skills are mostly useful in oral and written expression classes. Hence, the answers to this question reflect that teachers have the habit of exposing their students to different aspects of linguistic creativity in their classrooms.

Q6- On a scale of 1 to 5, how would you rate EFL students' LC? (with 1 being low LC and 5 representing high LC)

Chart 3.5.

Teachers' Perceptions Towards EFL Students' LC



According to Chart 3.5, the majority of respondents (47.6%) rated EFL students' LC as average, (28.6%) of them consider it as acceptable, and (23.8%) as good. This highlights that teachers believe that EFL students' LC is neither excellent nor poor, but rather moderate. Some respondents provided explanations for their answers.

Table 3.3.Teachers' Explanations for Their Rating of Students' LC

Options	Number of respondents	Percentage (%)
Explained Answers	15	68.1
Unexplained Answers	7	31.9
Total	22	100

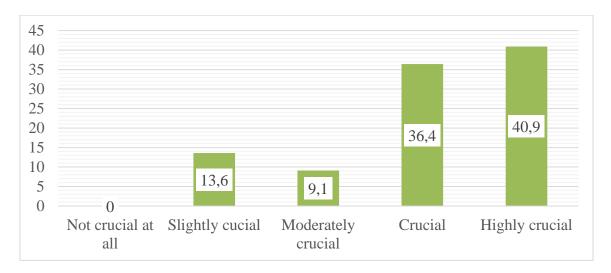
Firstly, those who rated it as acceptable claimed that students are not competent language users yet, due to many reasons, such as their poor linguistic capacities, which made it impossible for them to use language playfully and reach LC. They added that the majority of EFL students are lazy, careless, passive, and unmotivated to learn on their own. They claimed that only a small percentage of EFL students are linguistically creative. Some supported their points of view by adding that they hold such perceptions based on their classroom observation, which reflects that students do not participate in creative activities, do not manifest creative aspects when using language, and do not try to improve themselves at all.

Those who rated it as average claimed that they had noticed a moderate level of creativity in their students' use of language, as they showed a simple usage of language structure, and attempted to imitate what they hear from natives in movies, songs, and social media. Those who rated it as good claimed that they have observed that their students were adapting new vocabulary, and trying to master grammar and syntax rules to express new ideas and engage in creative writing. Additionally, one respondent commented that students' creativity depends on the teachers' intelligence in triggering and simulating their students' imagination. The latter reflects the important role teachers may play in supporting their students' linguistic creativity.

Q7- On a scale of 1 to 5, to what extent do you believe that LC plays a crucial role in EFL education? (With 1 being not crucial at all and 5 being highly crucial)

Chart 3.6.

Teachers' Perceptions Towards the Importance of LC in EFL Education

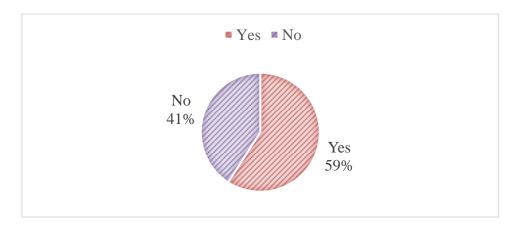


The results in Chart 3.6 illustrate instructors' perceptions of the extent of importance of LC in EFL education. A significant percentage of teachers (40.9%) believe that LC plays a highly crucial role, (36.4%) claim that it plays a crucial role, (13.6%) opted for playing a slightly crucial role, while (9.1%) ensure it plays a moderately crucial role. These results convey that the vast majority of teachers support the claim that LC is paramount for EFL education.

Q8- Do you assess your students' LC?

Chart 3.7.

Teachers' Assessment of Their Students' LC

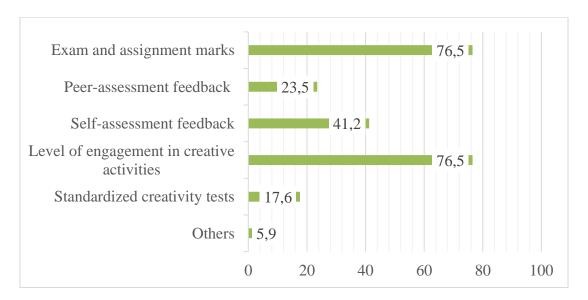


According to Chart 3.7, the majority of respondents (59%) voted for "Yes", highlighting that they tend to assess their students' LC. Whereas (41%) of them do not assess it at all. This indicates that the majority of teachers are aware of the importance and advantages of developing students' level of LC.

Q9- If yes, what criteria do you rely on when assessing it?

Chart 3.8.

Teachers' Relied on Criteria for Assessing Their Students' LC



This question allows teachers to tick more than one option. In Chart 3.8, the criteria that teachers believe are most reliable in assessing their EFL students' LC are both their exam and assignment marks, as well as their level of engagement in creative activities, each with (76.5%) of votes. Following that is by giving self-assessment feedback (41.2%), then by utilizing peer assessment feedback (23.5%). and only (17.6%) voted for the reliability of standardized creative tests. More criteria were suggested by teachers, as follows: presentations, role-play, theatre, anecdotes, group work, asking philosophical questions during lectures, developing fruitful discussions during presentations, etc. Furthermore, an instructor stated that the selection of activities, which teachers asses upon, is highly dependent on the subject matter being taught, adding that methodology classes are an example of a

subject that offers more chances to incorporate and evaluate LC, for example through the production of questionnaires, bibliographies, and research papers, whereas in linguistics classes there is not much chance. Consequently, it is observed that sixteen (16) teachers answered this question, although only thirteen (13) of them asserted to assessing LC in the previous question. This suggests the openness and positive attitudes they carry towards the importance of assessing LC.

Q10- Do you encourage your students' LC through giving them constructive feedback?

Chart 3.9. Teachers' Encouragement for Their Students' LC through Constructive Feedback

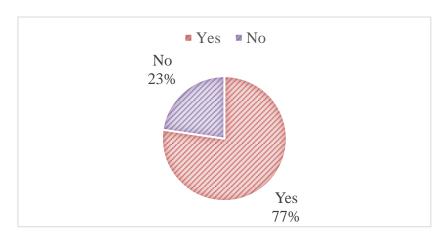


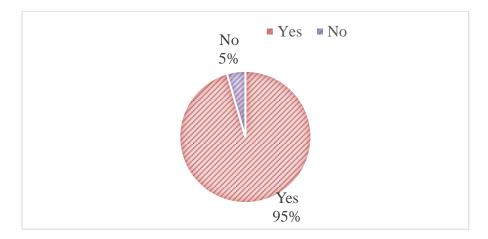
Chart 3.9 showcases that (77%) of respondents encourage their students' LC through constructive feedback, while (23%) of them said that they do not use this method. The former ensures that teachers perceive the level of their students' LC as a significant aspect of their language learning journey. It also highlights that they are making efforts to promote it by providing constructive feedback.

Section Three: Artificial Intelligence Use

Q11- Are you familiar with the use of AI tools?

Chart 3.10.

Teachers' Familiarity with AI Tools



According to Chart 3.10, the overwhelming majority of teachers (95%) are familiar with the use of AI tools. However, a small minority of them (5%) expressed their unfamiliarity with them. This highlights that teachers are highly aware of this new technology.

Q12- On a scale of 1 to 5, how qualified are you in using AI tools in EFL classrooms? (with 1 being not qualified at all and 5 being highly qualified)

Chart 3.11.

Teachers' Perceptions Towards Their Level of Qualification in Using AI Tools

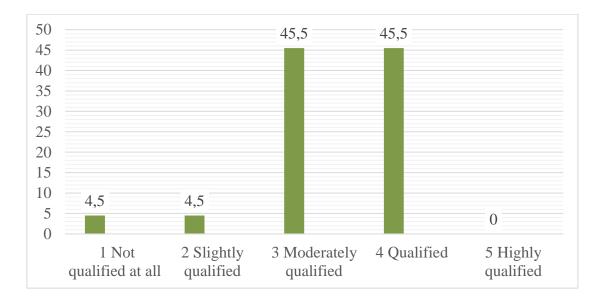


Chart 3.11 displays the extent to which teachers believe they are qualified to utilize AI in their classrooms. Ten (10) teachers (45.5%), voted for being qualified, and another ten (10) (45.5%), for being moderately qualified. While only one (1) teacher (4.5%) voted for being slightly qualified, and another one (4.5%) for being not qualified at all. Interestingly, none of the teachers described themselves as being highly qualified. This illustrates that the majority of teachers are, to a good extent, qualified in using AI in their EFL classrooms. The latter reflects their potential abilities in implementing them.

Q13- How frequently do you integrate AI tools in your teaching courses?

Table 3.4.Teachers' Frequency of AI Integration in Their Teaching Courses

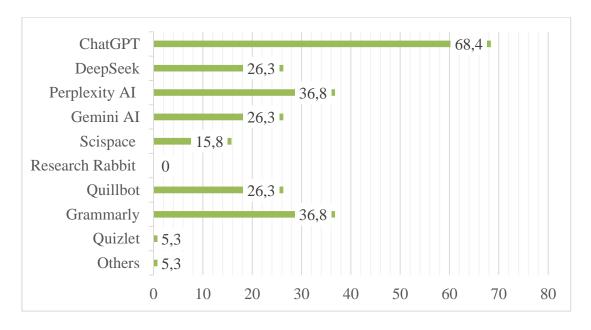
Options	Number of respondents	Percentage (%)
Always	1	5
Usually	2	10
Often	7	35
Rarely	7	35
Never	3	15
Total	20	100

In Table 3.14 above, the percentage to which EFL teachers integrate AI tools in their classrooms is illustrated as follows: (35%) of teachers often integrate them, (35%) rarely integrate them, (15%) never integrate them, (10%) usually integrate them, and only (5%) of them always integrate AI. This demonstrates that the usage of the latter is of subordinate importance. Hence, there is a diversity of pedagogical methods used in EFL classrooms, from traditional non-technological methods to more advanced ones using the most developed technology yet, i.e., AI.

Q14- Which of the following AI tools do you mostly rely on in your teaching?

Chart 3.12.

AI Applications that Teachers Rely on the Most

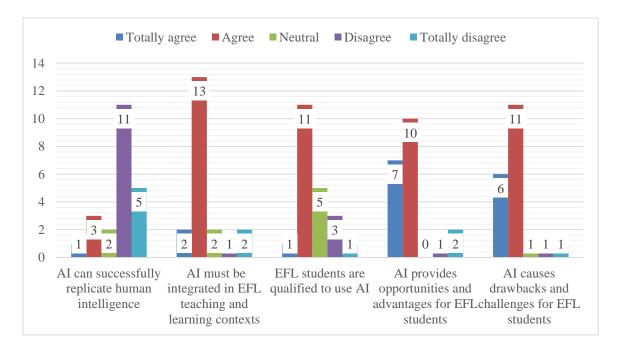


This question allows respondents to tick more than one option. As it is illustrated in Chart 3.12, ChatGPT was ranked first with (68.4%) of votes, Perplexity AI (36.8%) is ranked as the second widely used AI tool, Grammarly (36.8%), DeepSeek (26.3%), Gemini AI (26.3%), Quillbot (26.3%), SciSpace (15.8%), and Quizlet with (5.3%). Interestingly, Research Rabbit got zero votes. One respondent (5.3%) suggested "Black Box" as another reliable AI application. This indicates that the vast majority of teachers who rely on AI tend to rely more on ChatGPT in their teaching journey, probably for its high social standing.

Q15- To what extent do you agree or disagree with the following statements:

Chart 3.13.

Teachers' Degree of Agreement or Disagreement with Different Claims on AI Technology in EFL Settings



According to Chart 3.13, (Q7) received extremely different answers. To begin with, 11 respondents disagreed with statement (a), 5 of them totally disagreed, while 3 agreed, 1 totally agreed, and 2 remained neutral. This highlights that the majority of teachers believe that AI is not capable of simulating human intelligence. Moreover, 13 respondents agreed with statement (b), 3 of them totally disagreed, 2 disagreed, while 2 agreed, and 2 remained neutral. This showcases that teachers hold positive attitudes towards the integration of AI in EFL teaching and learning contexts. Furthermore, 11 respondents agreed with statement (c), 5 remained neutral, 3 disagreed, and 1 of them totally disagreed, while another totally agreed. This underscores that the majority of teachers believe that EFL students are qualified to use AI-generated tools. Additionally, 10 respondents agreed with statement (d), 7 of them totally agreed, while 1 disagreed, and 2 of them totally disagreed. This displays that the majority of teachers think that AI provides opportunities and advantages for EFL students. Finally, 11 of the respondents agreed with statement (e), 6 of them totally agreed, while 1 totally disagreed,

1 disagreed, and another one remained neutral. This indicates that the vast majority of teachers believe that AI may cause drawbacks and challenges for EFL students.

Section Four: The Role of Artificial Intelligence Use on Students' Linguistic Creativity

Q16- Do you believe that AI may foster students' ability to produce original and creative language? Please justify

Chart 3.14.

Teachers' Perceptions Towards AI's Capacity to Foster Students' Ability to Produce Original and Creative Language

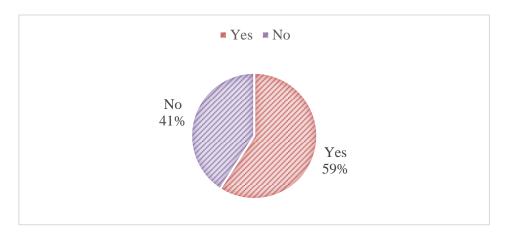


Chart 3.14 portrays that (59.1%) of teachers believe that AI has the capacity to foster students' production of original and creative language. However, (40.9%) believe that it does not have the latter capacity. This indicates that a good percentage of teachers perceive AI as a technology with the ability to foster EFL students' LC.

Table 3.5.Teachers' Justifications for Their Perceptions Towards AI's Capacity to Foster Students' Ability to Produce Original and Creative Language

Options	Number of respondents	Percentage (%)
Justified answers	19	86.3
Unjustified answers	3	3.7
Total	22	100

A total of nineteen (19) teachers have provided justifications for their answers. Firstly, instructors supporting the claim all agreed on a condition that in order for AI to foster students' original and creative language, it has to be used intelligently and in moderation. They held the following arguments:

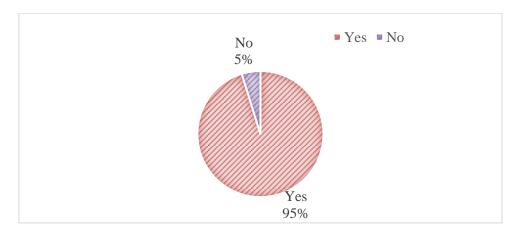
- AI facilitates the learning process by providing personalized learning experiences, guidelines, reliable sources to read, etc.
- AI encourages the expression and exploration of innovative ways of using a language.
 It also encourages independent thinking.
- AI acts as a model providing samples of creative writing, poems, and stories, which students take inspiration from.
- The usage of AI helps the development of students' linguistic skills, hence their LC.
- AI generates a variety of answers with different wording and different structures to the same question, which familiarizes students with the flexibility of a language.
- It assists students with vocabulary, especially domain-specific ones, which improves their LC.
- Students use AI to improve many aspects of their own products.

Secondly, teachers who disagree with the argument claim that AI in itself is mostly beneficial when used correctly; however, EFL students' usage is where the problem lies. Based on their observations, they state that students' goal when using AI is to copy readymade answers, focusing on the final "correct" product rather than the process of developing their own LC. Therefore, this overdependence hinders their critical and original thinking and limits their productivity.

Q17- In your opinion, do AI tools challenge students' LC? Please justify.

Chart 3.15.

Teachers' Perceptions Concerning the Possibility of AI to Challenge Students' LC



According to Chart 3.15, the overwhelming majority of respondents (95%) believe that AI tools challenge students' LC, while only (5%) of them believe the opposite. This is a strong indicator that teachers tend to believe that AI tools are creating a huge threat to students' LC, which, to a certain extent, contradicts their answers to question 16. However, this contradiction can be explained based on the assumption that their suggested condition under which AI may enhance students' LC, i.e. the correct use of AI tools, is not appropriately followed yet at the department of English, University of Guelma. This question received 21 justifications.

Table 3.6.Teachers' Justifications for AI's Ability to Challenge Students' LC

Options	Number of respondents	Percentage (%)
Justified answers	21	95.4
Unjustified answers	1	4.6
Total	22	100

On the one hand, almost all teachers agreed on the claim that AI tools challenge students' LC. They stated that AI kills and restricts students' LC and leads them to be passive and lazy because they use it blindly. Moreover, they underscored students' overreliance on

AI, elaborating that students do not use AI tools to improve themselves, but rather to copy and paste ready-made answers without even trying to understand them, which would totally prevent them from developing their LC. They added that this overdependence represents a real threat to EFL students. Accordingly, one respondent commented that students ought to learn how to use AI in order to maximize its benefits and minimize its drawbacks. On the other hand, teachers who claimed that AI does not challenge students' LC, based his claim on saying that it would not create any challenges if it is used moderately and ethically instead of blindly.

Q18- How would you rate the relationship between students' overreliance on AI and their low LC? Please justify.

- a. Strong
- b. Average
- c. Weak

Chart 3.16.

Teachers' Perceptions Towards the Relation Between Students' Overreliance on AI and Their Low LC

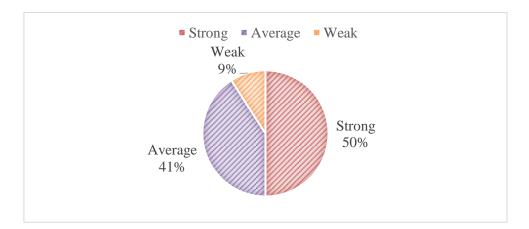


Chart 3.16 illustrates that (50%) of respondents believe that AI plays a strong role in causing students' low LC, (41%) that it plays an average role, and (9%) believe that it plays a weak role. These results convey that the majority of teachers perceive students' overreliance

on AI as a clear cause of their low LC, emphasizing the previous claim that AI threatens students' linguistic creativity if not moderately used.

Table 3.7.

Teachers' Justifications for the Relation Between Students' Overreliance on AI and Their Low LC

Options	Number of respondents	Percentage (%)
Justified answers	17	77.3
Unjustified answers	5	22.7
Total	22	100

A total of 17 teachers have justified their answers. Firstly, those supporting the strong correlation declared that students are not aware of the correct usage of AI; they blindly copy and paste ready-made answers, aiming for the "well-structured" "correct" product. This means relying on AI as a replacement for their efforts rather than an assistant, which makes them passive learners who do not think for themselves. As a conclusion, AI may destroy all types of critical thinking and linguistic mastery that a student previously had. Moreover, AI does not provide a real chance for students to be creative. Secondly, teachers who support the average correlation asserted that students are still in the phase of learning how to use AI. Although many use this technology blindly, a generalization is unfair. Thirdly, instructors supporting the weak correlation believe that this relationship highly depends on the students' abilities, alongside how they use AI if they use it just to check their answers, then it is a weak correlation. Finally, a teacher remarked that students of this generation are more influenced by AI than their teachers.

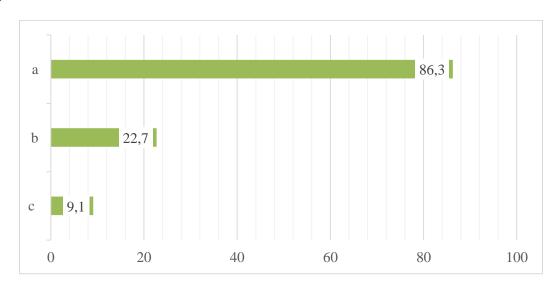
Q19- Based on your EFL students' observation, which path do students usually follow when using AI-generated answers?

a. Copy ready-made answers blindly without any modifications.

- b. Make slight changes (i.e. Use synonyms, change word order, omit some elements, etc.)
- c. Use them as an inspiration to create their original product.

Chart 3.17.

Teachers' Perceptions Towards the Path that Students Usually Follow When Using AIgenerated Answers



In answering this question, respondents were allowed to tick more than one option. According to Chart 3.17, option (a) is the most selected one by respondents (86.3%), while option (b) scored second with (22.7%) of votes, and option (c) third with (9.1%) of votes. These results display teachers' negative perceptions towards the way students are using AI tools, reflecting that students tend to over-rely on AI tools when learning.

Q20- If you have further suggestions or comments, please do not hesitate to write them below.

The final question of this survey serves as a space for respondents to freely express their thoughts on the research topic. Eleven (11) teachers took advantage of the latter and stated their opinions, which can be summarized in two standpoints. The first standpoint consists of teachers who hold the belief that, despite the advantages AI provides, it is used passively by students, which then represents a huge risk to their language acquisition and

skills. Furthermore, it is difficult to use AI to simulate LC. An extremist from this standpoint stated that he wishes AI would shut down soon. The second standpoint consists of teachers who hold a positive view of AI, illustrating the impressive qualities it possesses and the services it provides. Highlighting this, the correct use of the latter fosters the growth of crucial abilities, such as those required in creative projects, teamwork, facilitating communication, and adapting to shifting situations. According to those teachers, the benefits outweigh the negatives; therefore, EFL departments should include a module for AI in their curricula, training both teachers and students on how to use AI in order to maximize language acquisition as well as LC.

3.2.4 Summary of the Results and Findings from the Questionnaire

Teachers' responses to the questionnaire were collected and analyzed to gain insights into their attitudes towards the role of using AI in enhancing EFL students' linguistic creativity. The findings reveal that most teachers reported having over twelve years of experience in teaching English at the university, reflecting their deep expertise in the field. Their specialties span diverse areas related to EFL, which contributes to the richness of their perspectives.

The majority of teachers defined linguistic creativity as the process of using language in novel, original, and imaginative ways to achieve specific goals, involving various cognitive processes. They also distinguished LC from linguistic competence, viewing competence as one's knowledge about the language, while LC represents the ability to apply that knowledge creatively. Nonetheless, they acknowledged that these concepts are closely related and complementary.

Results showcase that teachers usually integrate creative skills into their EFL classrooms, highlighting critical thinking as the most frequently integrated creative skill. Moreover, they demonstrate that teachers perceive their students' LC level as acceptable.

Furthermore, the overwhelming majority agreed that LC plays a crucial role in EFL education. In accordance, teachers affirmed that they assess their students' LC through multiple criteria, primarily exam and assignment marks, along with students' engagement in creative activities. Most teachers also reported that they provide constructive feedback to support students' development based on their assessment results.

Regarding AI use, teachers expressed familiarity with its tools, identifying ChatGPT as their most preferred application to use in their teaching journey. They reported that they are, to a certain level, qualified to use them in their teaching. However, the frequency of AI integration differs from one teacher to another, with the majority using AI tools either often or rarely, indicating that these tools are not yet widely adopted by teachers.

Teachers supported AI's integration into EFL teaching and learning. They believe students are capable of using AI tools, recognizing the potential benefits AI offers. At the same time, they acknowledged that AI may pose challenges to students' learning journeys. Similarly, most teachers believe that AI can foster students' LC if used moderately; however, they also highlighted its significant drawbacks. Findings convey that the overwhelming majority of teachers believe that students' blind overreliance on AI restricts their creative output and leads to passive language use, therefore, a low level of LC. The latter is often due to students' lack of awareness about the proper use of AI tools and the fact that AI does not provide genuine opportunities for creative expression. In accordance, the vast majority of teachers claimed that students tend to copy AI-generated answers without modification, limiting their creativity.

In their final reflections, teachers expressed two contrasting viewpoints. The first supported the capabilities and benefits of AI, advocating for its integration. In contrast, the second one voiced concerns regarding the dangers of overreliance on this technology.

In conclusion, the findings reveal a spectrum of sometimes conflicting opinions among teachers regarding AI's impact on students' LC. While some oppose the fundamental nature of AI, others recognize its benefits when used moderately. According to EFL teachers at the University of Guelma's Department of English, the benefits and drawbacks of AI depend largely on how students use these tools. Hence, to ensure ethical and effective use, some recommend integrating a dedicated module on AI literacy within the department's curriculum.

3.3 Students' Questionnaire

3.3.1 Description of Students' Questionnaire

This questionnaire is composed of twenty-six (26) questions that are based on the first two theoretical chapters (APPENDIX II). It includes different types of questions to gather both quantitative and qualitative data. Firstly, to collect quantitative data, a set of close-ended questions were used, like multiple choice questions and five (5) point Likert scale questions. Secondly, to collect qualitative data, open-ended questions were used, aiming at providing students with the opportunity to freely express their perceptions and attitudes towards the role of using AI tools in enhancing EFL students' LC. This questionnaire consists of four (4) sections: General Information, Linguistic Creativity, Artificial Intelligence Use, and the Role of AI Tools in Enhancing students' LC.

Section One: General Information (Q1-Q3)

This section consists of three (3) questions that aim at collecting general information about the sample. In (Q1), students were asked to state the number of years during which they have been studying English. In (Q2), they were asked to judge their level of English language mastery. Furthermore, (Q3) asks students to select their frequency of using English in their daily life.

Section Two: Linguistic Creativity (Q04-Q12)

This section consists of nine (9) questions that are centered around the second variable, which is Linguistic Creativity. (Q4) aims at discovering whether students have been introduced to the concept of "Linguistic creativity" in their learning process. Furthermore, (Q5) is addressed to students who answered "yes" on the previous question, asking them to define LC, providing further examples. In (Q6), students were asked to state and justify their opinion on whether "LC" means "Linguistic Competence". (Q7) explores whether students perceive themselves as creative EFL learners. (Q8) attempts to uncover different creative skills that students usually engage in. (Q9) asks students to select the activities that inspire their creativity as EFL learners. Similarly, (Q10) requires students to select the aspects that challenge their creative learning process. (Q11) seeks to discover if students reflect on their LC development. Moreover, (Q12) addresses students who asses their LC seeking to explore their preferred bases of assessment.

Section Three: Artificial Intelligence Use (Q13-Q19)

This section consists of seven (7) questions that are centered around the first variable, which is Artificial Intelligence Use. (Q13) aims at detecting the language learning tools that students usually use to develop their English language proficiency. (Q14) attempts to highlight students' level of familiarity with AI tools on a Likert scale from one (1) to five (5), with 1 being not familiar at all and 5 being highly familiar. (Q15) investigates students' frequency of using AI tools while learning. (Q16) aims to detect which AI tools are mostly used by students. (Q17) entails selecting the usual purpose of using AI tools. (Q18) intends to uncover whether students agree or disagree with AI's capacity to successfully replicate human abilities. (Q19) also aims at specifying whether students agree or disagree with AI's ability to enhance their performance as EFL learners.

Section Four: The Role of Using Artificial Intelligence Tools in Enhancing EFL Students' Linguistic Creativity (Q20-Q26)

This section consists of seven (7) questions that aim at exploring students' attitudes towards the relationship between AI tools and LC in EFL settings. (Q20) requires students to select the extent to which AI tools impact the linguistic creativity of an EFL learner on a Likert scale from one (1) to five (5), with 1 being not impactful at all and 5 being highly impactful. (Q21) asks students to select the creative activities that they think AI tools have helped them improve. (Q22) investigates whether students have faced any challenges regarding their LC since using AI. (Q23) asks those who answered "Yes" on (Q22) to list some of the challenges they faced. (Q24) requires students to select the extent to which they follow the ethical guidelines governing the use of AI tools on a Likert scale from one (1) to five (5), with 1 representing "do not follow at all" and 5 representing "highly follow". Finally, (Q26) offers students a space to express any further suggestions or comments regarding the questionnaire or the topic.

3.3.2 Administration of the Questionnaire

For later stated purposes, this questionnaire has been dispatched in both a hard copy as well as a digital one. Firstly, the paper form was randomly dispatched starting from Monday, April 21st, 2025, to students from the First-year Licence, Second-year Licence, Third-year Licence, and First-year Master's degrees. This choice was based on students' tendency to prefer hard copies over digital ones. Respondents' personal information was not collected. Secondly, the digital copy was created specifically for Second-year Master students since they were no longer present at the University. The latter was administered online via Google Forms on Monday, April 28th, 2025. Regarding the online survey, respondents' emails were not collected in order to guarantee the privacy of their answers and the anonymity of their identities.

3.3.3 Questionnaire's Interpretation and Data Analysis

Section One: General Information

Q1- How long have you been studying English?

Table 3.8.Students' Studying Experience of English Language

Options	Number of respondents	Percentage (%)
8 years	30	9.3
9 years	28	8.7
10 years	104	32.5
11 years	54	16.8
12 years	66	20.6
More than 12 years	38	11.8
Total	320	100

According to Table 3.8 above, (32.5%) of students have been studying English for 10 years, (20.6%) for 12 years, (16.8%) for 11 years, (11.8%) for more than 12 years, (9.3%) for 8 years, and (8.7%) for 9 years. This indicates that the majority of students have been exposed to the English language for more than 10 years. The latter suggests that they are significantly competent language users who possess different language skills.

Q2- How would you judge your level in English language mastery?

Table 3.9.

Students' Level in English Language Mastery

Options	Number of respondents	Percentage (%)
Very good	66	20.6
Good	206	64.4
Average	46	14.4
Poor	2	0.6
Total	320	100

As it is indicated in Table 3.9, the majority of students (64.4%) claim that they have a good level in English language mastery, (20.6%) assume having a very good level, and (14.4%) declare having an average level. Two students described their level of English language mastery as poor. This reinforces the assumption that the majority of them have significant linguistic skills.

Q3- How often do you use English in your daily life?

Table 3.10.Students' Frequency of Using English in Their Daily Life

Options	Number of respondents	Percentage (%)
Always	98	31
Usually	118	37
Often	82	26
Rarely	18	5
Never	2	0.6
Total	320	100

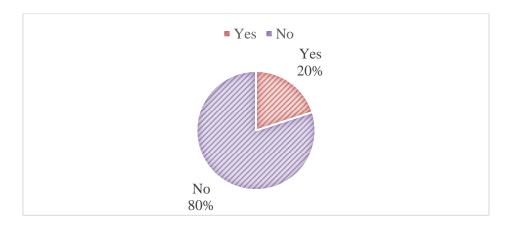
According to Table 3.10, students' frequency of using English in their daily life is noticeably different. Statistics show that (37%) of students usually use it, (31%) always use it, (26%) often use it, (5%) rarely use it, and two respondents never use it. This leads to the conclusion that the majority of respondents use English sufficiently in their daily life, which positively affects their language skills.

Section Two: Linguistic Creativity

Q4- Have you ever been introduced to the concept of "linguistic creativity" (LC) in your learning process?

Chart 3.18.

Students' Familiarity with the Concept of "Linguistic Creativity"



As illustrated in Chart 3.18, (80%) of students voted for never being introduced to the concept of LC, and a percentage of (20%) voted for being introduced to such a concept in their learning process. These results suggest that the EFL teaching and learning environment does not emphasize the notion of LC. However, respondents' answers to question 5 below highlight that students are, to a certain degree, familiar with LC, which draws us to the conclusion that, most probably, they have been introduced to such topic but under a different naming, such as "Creativity in Language/Language Use", or under no naming.

Q5- If yes, how would you define the term 'linguistic creativity' in the context of EFL learning? Please provide examples if possible.

Table 3.11 below displays that a majority of respondents (56.2%), who claimed that they have been introduced to the term linguistic creativity, provided a definition to this term.

Table 3.11.Students' Definitions of the Term "Linguistic Creativity"

Option	Number of respondents	Percentage (%)
Number of students who	36	56.2
provided a definition		
Number of students who	28	43.7
did not provide a definition		
Total number of students	64	100

who have been introduced

to LC

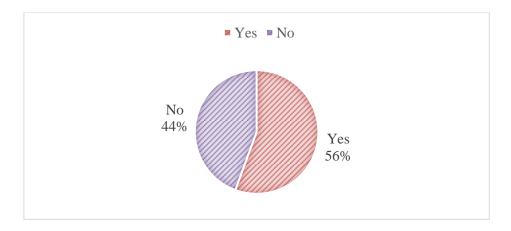
According to statistics, the majority of the respondents stated that it is the art of using language in a new, imaginative, and original way by adopting unique styles and playing with words. They included different examples of LC, such as the use of puns, metaphors, jokes, poems, playful expressions, and the creation of a new terminology like the term "Google it". Another respondent mentioned that it is a unique ability of humans that AI-generated tools cannot perform. Moreover, there was a definition corresponding with Chomsky's view and his theory of Universal Grammar, "the ability to create new sentences out of a limited number of grammar rules," while a second one correlates with Sampson's view, which defines true creativity as one that bends the rules. Additionally, one (1) of them was confused between the meaning of linguistic creativity and linguistic competence, mentioning that LC is "the fluency in writing and speaking the language". Also, another respondent claimed that it is only about playing with words in order to make people laugh. The rest of the respondents claimed that

they do not have a fixed definition of the term "linguistic creativity" because they are not certain of its meaning.

Q6- In your opinion, does linguistic creativity mean linguistic competence? Please justify.

Chart 3.19.

Students' Perceptions on Whether LC Means Linguistic Competence



The results under this question portray a close tie (See Chart 3.19). Fifty-six percent (56%) of students voted for "Yes", perceiving LC as Linguistic Competence, whereas (44 %) voted for the option "No". This underlines that more than half of the respondents do not perceive a difference between the two concepts.

Table 3.12.

Students' Justifications for Whether LC and Linguistic Competence Mean the Same Concept

Option	Number of respondents	Percentage (%)
Justified answers	102	32
Unjustified answers	218	68
Total	320	100

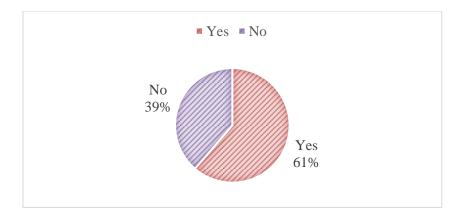
Students were asked to provide justifications for their answer. In light of the latter, a hundred and two (102) students (32%) had justified their answers. The majority stated that they perceive LC and Linguistic Competence as related concepts, alas not totally the same,

elaborating that Linguistic Competence is a crucial step towards LC, and in the same sense, LC is a show of linguistic competence. A similar but divergent view from the latter states that being creative with language does not mean full competence. There was also a presence of another view, which states that LC and Linguistic Competence are two different concepts. Linguistic competence is defined as the knowledge of the set of rules and vocabulary of a language, which is acquired through time. LC, on the other hand, is a property of the mind that is innate in some "gifted" individuals. These views suggest that although some students' ideas were correspondent with current views on LC and linguistic competence (Chomsky's views), other students still possess the ancient belief that LC is an attribute of a set of gifted people.

Q7- Do you consider yourself a creative EFL learner?

Chart 3.20.

Students' Self-perceptions as being Creative EFL Learners

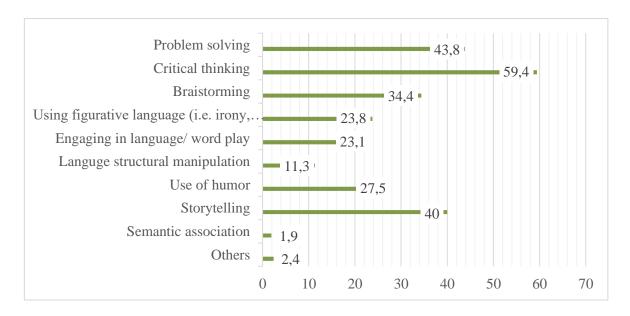


As it is highlighted in Chart 3.20 above, the vast majority of respondents (61.3%) consider themselves creative EFL learners, while a significant percentage (39%) do not perceive themselves as creative. This highlights students' positive perceptions of their abilities, and performances. It also underscores students' probable abilities to use language creatively.

Q8- Which of the following creative skills do you usually engage in?

Chart 3.21.

Creative Skills Which Students Usually Engage in

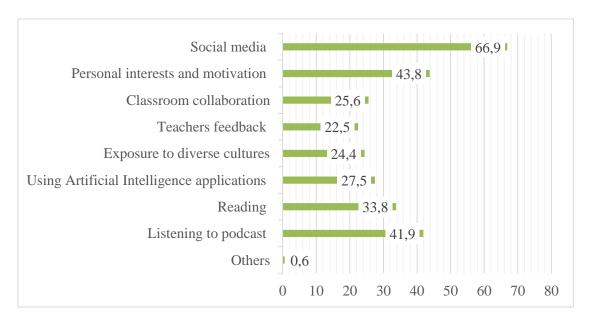


Students were allowed to tick more than one option. Chart 3.21 showcases the creative skills that EFL students at the University of Guelma, usually engage in. The latter displays that (59.4%) of students usually engage in critical thought, (43.8%) in problem solving, (40%) in storytelling, (34.4%) in brainstorming, (27.5%) in the use of humor, (23.8%) in using figurative language, (23.1%) engage in word play, (11.3%) in language structural manipulation, and only (1.9%) in semantic association. Others (2.4%) added meme-making and writing creative content. Interestingly, critical thinking, as well as problem solving are the most engaged in creative skills by students and the most integrated skills in EFL classrooms by teachers at the same time, as illustrated in question 5 of teachers' questionnaire. In the analysis of the results, it is detected that students engage in the cognitive properties of creativity more than in creative language use in itself. However, one can notice that their engagement in the production of novel expressions is primarily through storytelling and the use of humor, as they are closest to real-life scenarios. Right after comes using figurative language and lexical innovations, which take part in the discourse as well.

Q9- What inspires your LC as an EFL learner?

Chart 3.22.

Activities That Inspire EFL Students' LC

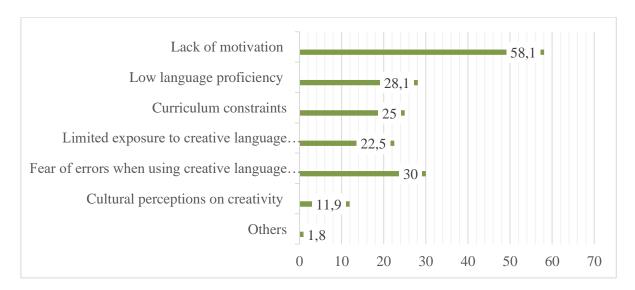


This question allows students to tick more than one option. Chart 3.22 above shows that "Social media" is ranked as the area that inspires students' LC the most (66.9%). Following social media, students chose different other options in the following order: Personal interests and motivation (43.8%), listening to podcasts (41.9%), reading (33.8%), using artificial intelligence apps (27.5%), classroom collaboration (25.6%), exposure to diverse cultures (24.4%), and teachers' feedback (22.5%). Additionally, (0.6%) added listening to music. This indicates that the majority of students tend to rely on tools other than AI to inspire their LC, mostly on social media, personal interests, motivation, and listening to podcasts.

Q10- What challenges your LC?

Chart 3.23.

Factors That Challenge Students' LC



In answering this question, students were allowed to tick more than one option. In Chart 3.23, we observe that (58.1%) of students, by far, most faced a challenge regarding LC is their lack of motivation. Other factors also stand as a challenge, (30%) of students are challenged by a fear of error when using creative language, (28.1%) by their low language proficiency, (25%) by curriculum constraints, (22.5%) by limited exposure to creative language, and (11.9%) by cultural perceptions on creativity. Another challenge was suggested (1.8%), which is the overreliance on AI. These results convey that some psychological phenomenon, alongside a linguistic deficiency, and environmental factors, all represent a concern for students' LC.

Q11- Do you reflect on your LC development?

Chart 3.24.

Learners' Reflection on their LC

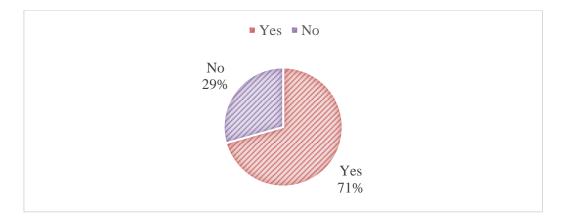
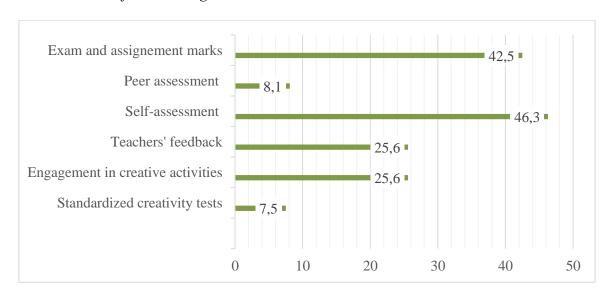


Chart 3.24 shows that the majority of respondents (71%) have the habit of reflecting on their linguistic creativity development, while (29%) are not familiar with this method. This highlights that the majority of students are aware of the importance of LC. Moreover, it sheds light on their motivation and willingness to improve their English language mastery. Additionally, it suggests probable future enhancement in their LC.

Q12- If yes, on what basis do you assess your level of linguistic creativity?

Chart 3.25.

Students' Criteria for Assessing Their LC



Students were allowed to tick more than one option. In Chart 3.25, students' answers regarding the basis they use for evaluating their level of LC were as follows: (46.3%) use self-

assessment, (42.5%) use exam and assignment marks, (25.6%) use teachers' feedback, (25.6%) assess themselves by their level of engagement in creative activities, (8.1%) by peer-assessment, and (7.5%) through standardized creativity tests. Although some students voted for not assessing their LC, those who do assess are highly dependent on their own evaluation, as well as their creative production in exams and assignments or engagement in creative tasks as a criterion of examination. However, a tendency to rely on teachers' feedback is also observed.

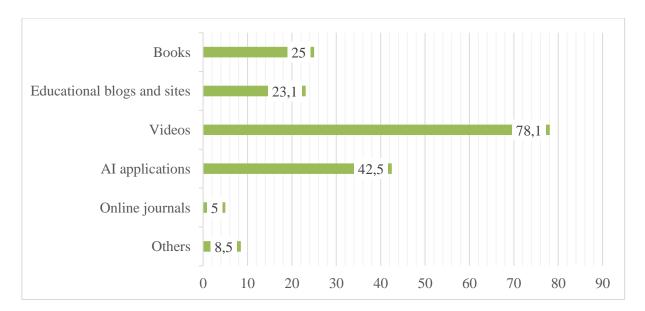
Section Three: Artificial Intelligence Use

Q13- What language learning tools do you usually use for developing your English language proficiency?

Chart 3.26.

Language Learning Tools that Students Usually Use for Developing Their English Language

Proficiency



In answering this question, students were allowed to tick more than one option. According to the data displayed in Chart 3.26, the majority of students selected using videos as the mostly used language learning tool for developing their language proficiency (78.1%), whereas, (42.5%) voted for the use of AI applications, (25%) the use of books, (23.1%) the

use of educational blogs and sites, and only a few, (5%), use online journals. These results convey that videos, probably due to their audiovisual nature, are students' most preferred tool to use for the development of their EFL. In addition, the use of AI applications scores second on the list, which is a clear indicator that AI plays a paramount role in students' English language development. Furthermore, (8.5%) of students proposed more options; firstly, tools that fall under the category of videos, such as movies, reels, TikTok, etc. Secondly, listed from most frequent to least, were: listening to music, playing (video) games, using social media (including practicing conversations with natives via social media), reading comics, and watching TV channels. The diversity of answers is a clear indicator of learners' different learning preferences.

Q14- On a scale of 1 to 5, how familiar are you with AI tools? (with 1 being not familiar at all and 5 being highly familiar).

Chart 3.27.

Students' Level of Familiarity with AI Tools

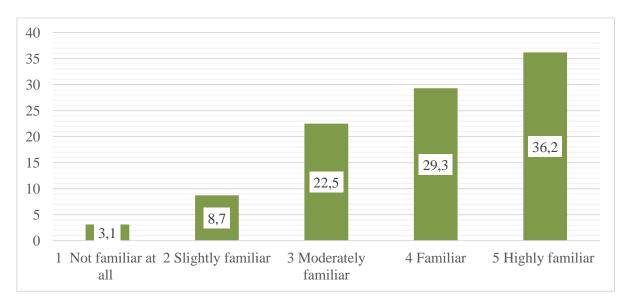


Chart 3.27 demonstrates students' level of familiarity with AI tools. According to it, a significant percentage of students (36.2%) are highly familiar with AI tools, (29.3%) are familiar, (22.5%) are moderately familiar, (8.7%) are slightly familiar, and only (3.1%) are

not familiar at all. Previous statistics underscore students' remarkable familiarity with AI tools, which can be linked to the fact that the vast majority of respondents belong to Gen Z, who are known for growing up in a digital era.

Q15- How often do you use AI tools while learning?

Table 3.13.Students' Frequency of Using AI Tools While Learning

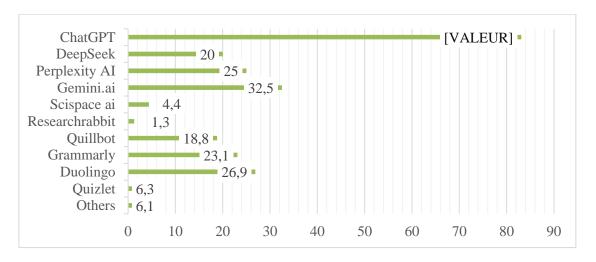
Options	Number of respondents	Percentage (%)
Always	96	30
Usually	136	42
Often	60	19
Rarely	26	8
Never	2	1
Total	320	100

The data represented in Table 3.13 shows a clear tendency for students to use AI while learning. In light of that, (42%) of students usually use AI, (30%) always use it, (19%) often use it, while (8%) rarely use it, and only (1%) never use it. These answers show that AI tools are frequently integrated into EFL students' learning, which suggests that this technology plays an integral part in their academic journey.

Q16- Among the listed AI tools below, which are the ones you mostly use in your learning process?

Chart 3.28.

AI Tools Mostly Used by Students

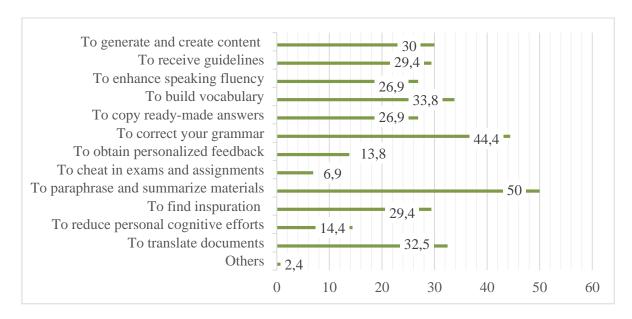


This question allows students to select more than one option. While a majority of students (83.1%), as illustrated in Chart 3.28, opted for the use of ChatGPT as the most frequently used AI application, a solid number of votes was distributed among other tools, Gemini AI (32.5%), Duolingo (26.9%), Perplexity AI (25%), Grammarly (23%), DeepSeek (20%), Quillbot (18.8%), Quizlet (6.3%), SciSpace AI (4.4%), and finally ResearchRabbit (1.3%) of votes. For this analysis, it is assumed that these choices were based on the tool's level of social standing/influence as well as students' personal preferences. In addition to all the above, students listed more AI tools which they prefer such as: Felo AI, Claude AI, Copilot, Luzia, Elsa, NoteGPT, Gamma AI, Mapify, Meta AI, NotebookLM, Humanize AI. The latter goes to show that a set of students are adequately familiar with this technology, to the point where they reach out to discover new AI applications that are not as socially accepted, however they meet their purposes.

Q17- What do you usually use AI tools for in EFL learning?

Chart 3.29.

Students' Purposes Behind Using AI Tools in EFL Learning



In answering this question, students were allowed to select more than one purpose for using AI tools. According to Chart 3.29 above, paraphrasing and summarizing materials is the most picked option by students (50%). The other options were rated as follows: to correct their grammar (44.4%), to build vocabulary (33.8%), to translate documents (32.5%), to generate and create content (30%), to find inspiration (29.4%), to receive guidelines (29.4%), to enhance their speaking fluency (26.9%), to copy ready-made answers (26.9%), to reduce personal cognitive efforts (14.4), to obtain personalized feedback (13.8%), and to cheat in exams and assignments (6.9%). Some respondents even suggested other purposes, including: Transforming PDF handouts into mind maps, getting more information about a topic, or getting advice. Accordingly, students primarily use AI tools to promote their language mastery, facilitate their learning journey, and gain inspiration rather than to conduct certain unethical academic behaviors.

Q18- Do you think that AI can successfully replicate human intelligence?

Chart 3.30.

Students' Perceptions Towards AI's Ability to Replicate Human Intelligence

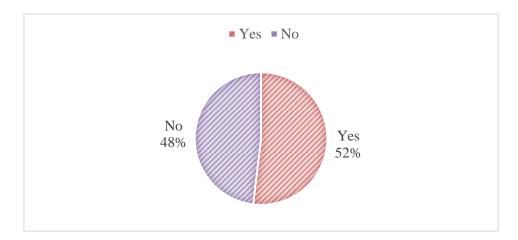


Chart 3.30 represents students' thoughts about whether AI is able to simulate human intelligence. Interestingly, more than half of the respondents (52%) believe that AI tools can replicate human intelligence, while (48%) believe the opposite. Yet, one can notice that the percentages of respondents who agree and disagree are very close, which reflects the divergence of students' perceptions towards this claim.

Q19- Do you think that the use of AI tools may enhance your performance as an EFL learner?

Chart 3.31.

Learners' Perceptions Towards AI's Ability to Enhance Their EFL Performance

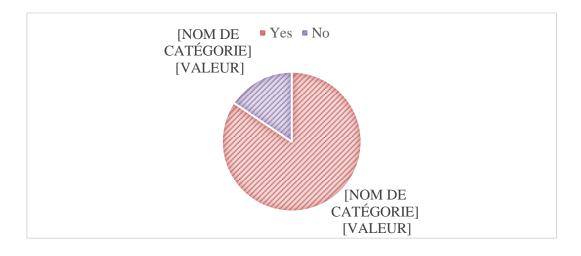


Chart 3.31 lays out students' perceptions towards AI's ability to enhance EFL students' performance. It shows that an overwhelming majority of respondents (84.4%) think that the use of AI tools may enhance their performance as EFL learners, while only (15.6%) did not agree with the latter claim. Some of them (42.5%) provided a clarification to their answers.

Table 3.14.Students' Justifications for AI's Ability to Enhance Their EFL Performance

Option	Number of respondents	Percentage (%)
Justified answers	136	42.5
Unjustified answers	184	57.5
Total	320	100

On the one hand, those who agreed stated that AI tools provide 24/7 free, simple and easy-to-use services that would help in upgrading one's English language level if used rationally and ethically. Firstly, these services may improve the four skills of language, especially writing and speaking skills, via specific tools designed to provide new vocabulary, and instant correction and personalized feedback concerning students' grammar, spelling, and pronunciation mistakes. Secondly, AI tools act as personalized assistants that can facilitate language learning and make it more effective, satisfy students' educational needs, and save their time and efforts in many different ways, such as: paraphrasing and summarizing materials, and providing an immense amount of information and language learning sources in a short amount of time. Thirdly, AI tools' services boost students' inspiration and creativity, which leads them to create captivating content.

On the other hand, those who disagreed mentioned that AI negatively impacts students' EFL performance for many reasons. Firstly, the majority of students do not use AI tools moderately, but rather over-depend on them. Accordingly, this over-reliance will

increase students' laziness and reduce their critical thinking, creativity, and ability to produce original work as it prevents students from making any efforts during learning. Secondly, there are many other useful methods to be used instead of AI tools, as it will always remain a machine that is not worthy of being compared to a human mind. The latter reflects the claims discussed in the challenges and limitations of AI (see chapter two), including AI's lack of nuanced human understanding, in addition to its ability to produce inconsistent or incorrect content due to the fact that it relies on existing data to generate content.

Section Four: The Role of AI Use in Enhancing EFL Students' Linguistic Creativity Q20- On a scale of 1 to 5, to what extent do you think AI tools impact the linguistic creativity of an EFL learner? (with 1 being not impactful at all and 5 being highly impactful).

Chart 3.32.

AI's Impact on EFL Learners' LC

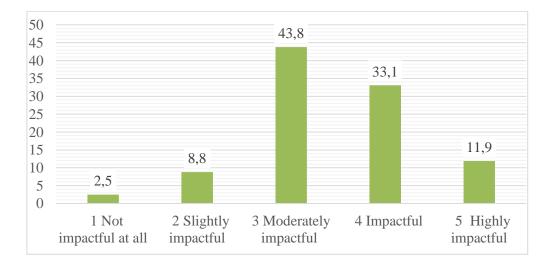
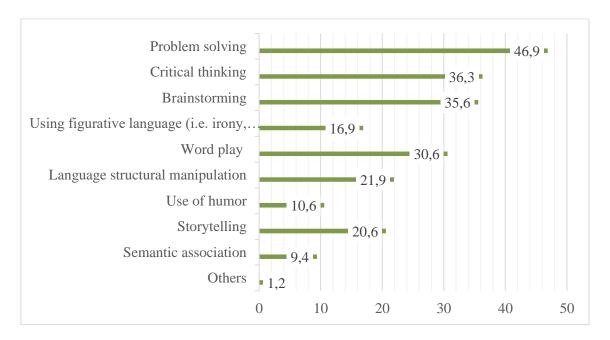


Chart 3.32 showcases students' perceptions about AI's influence on their LC. Statistics show that (43.8%) of respondents perceive AI tools as moderately impactful, (33.1%) as impactful, (11.9%) as highly impactful, (8.8%) as slightly impactful, and only (2.5%) of them think that they are not impactful at all. This highlights that the vast majority of learners believe that AI may influence creative linguistic expression, which suggests that AI tools can generate significant results when used to develop students' LC.

Q21- Among the following creative skills, which ones do you believe AI tools have helped you improve?

Chart 3.33.

Students' Creative Skills that AI Helped Improve

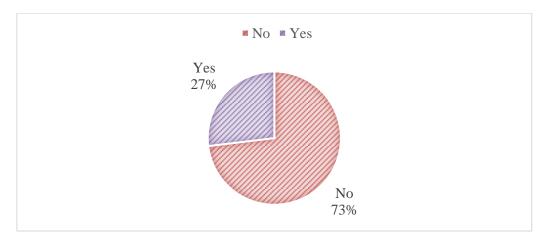


In answering this question, students were allowed to tick more than one option. As illustrated in Chart 3.33, Students believe AI has helped them improve many facets of their creative skills. The results were ordered as follows: (46.9%) believe it helped them improve their problem-solving skills, (36.3%) their critical thinking skills, (35.6%) their brainstorming skills, (30.6%) their word play skills, (21.9%) their skill of language structural manipulation, (20.6%) their story telling skills, (16.9%) helped them in using figurative language, (10.6%) in the use of humor, and (9.4%) in semantic association. Others suggested meme engineering, and improving language skills as a facet of their creative skills that AI have helped them improve. These results lead to the observation that students benefit from AI in different ways.

Q22- Since using AI, have you faced any challenges regarding your LC?

Chart 3.34.

Students' Perceptions on Whether They Have Faced Challenges Since Using AI



According to Chart 3.34, only (27%) of respondents have faced challenges regarding their linguistic creativity since using AI tools, while (73%) of them claimed the opposite. This demonstrates that students think that AI tools are safe, easy to use, and are influencing them positively. Moreover, it reveals that AI tools have a significant potential in improving EFL students' linguistic creativity.

Q23- If yes, list some of these challenges.

Table 3.15.Challenges Faced by Students Since Using AI

Options	Number of respondents	Percentage (%)
Number of students who	34	39.6
provided challenges		
Number of students who	52	60.4
did not provide challenges		
Total	86	100

According to Table 3.15, only (39.6%) of respondents, who claimed that they faced challenges since using AI, had provided answers for this question. The answers were of similar interests, stating that since AI provides the needed help without

much work, it minimizes the individual's need for applying critical thinking and developing an original form of expression. According to the answers, this "total" dependence on AI applications "stands as a threat to the human touch", as it diminishes their creative abilities. A respondent stated that when using AI, one realizes his "lack of linguistic creativity". This aligns with teachers' claims in multiple questions, including 16, 17, and 18, highlighting that AI's influence depends on the user. The latter underscores the potential risk of AI in hindering students LC when blindly used and emphasizes the significance of a moderate use.

Q24- On a scale of 1 to 5, to what extent do you follow the ethical guidelines governing the use of AI tools? (e.g., maintaining academic integrity, credibility, etc.) (with 1 being not follow at all and 5 being highly follow)

Chart 3.36.

Students' Level of Following the Ethical Guidelines Governing the Use of AI Tools

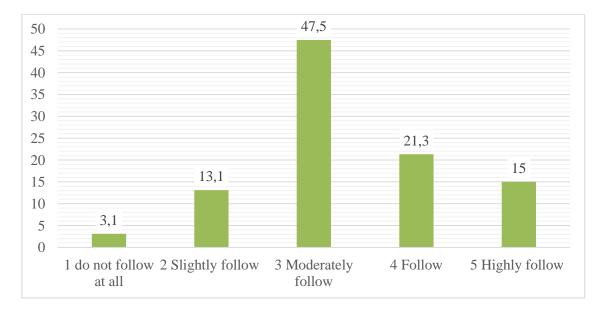


Chart 3.36 displays that (47.5%) of respondents moderately follow the ethical guidelines that govern the use of AI tools, (21.3%) follow them, (15%) highly follow them, (13.1%) slightly follow them, and only (3.1%) do not follow them at all. This demonstrates that the majority of students (83.8%) are familiar with the concept of AI literacy, that is, they are equipped with the needed skills to use AI tools ethically and rationally. Nevertheless, a

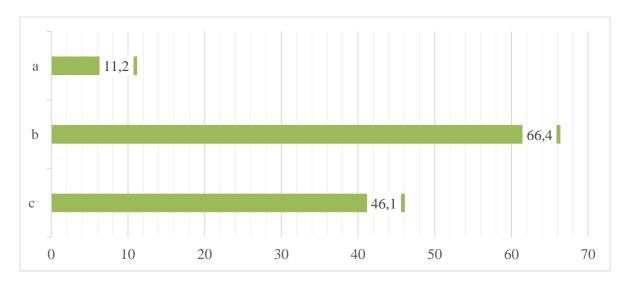
small minority (16.2%) showed a low level of AI literacy, which entails the obligation for them to reinforce it for the purpose of avoiding any type of academic misconduct.

Q25- When using AI-generated answers, do you usually

- a. Copy ready-made answers blindly without any modifications
- b. Make slight changes (i.e., use synonyms, change word order, omit some elements, etc.)
- c. Use them as an inspiration to create your original product

Chart 3.37.

Students' Attitudes When Using AI-Generated Answers



Students were allowed to tick more than one option. As illustrated in Chart 3.37, (66.4%) of students make slight changes when using AI-generated answers, (46.1%) use them simply as an inspiration to create their own product, while (11.2%) tend to copy and paste ready-made answers. The results convey that a majority of students make efforts to edit the automated answers or use them as an inspiration. However, a number of students violate the ethical guidelines governing the use of AI by copying automated answers with no change whatsoever. These results are in accordance with the previous question's findings (question 24). However, they stand in opposition to teachers' negative perceptions about the way

students use AI-generated answers, which are highlighted in their results in question 19 of teachers' questionnaire.

Q26- If you have further suggestions or comments, please do not hesitate to write them below.

Further suggestions were a mixture of positive views on AI, as well as the opposite. Respondents of the first standpoint stated that AI strengthens your work, supports your efforts, gives helpful instructions, and aids language creativity. These students showed support for the integration of AI alongside traditional methods of developing LC under the condition of following ethical use. However, respondents with the second viewpoint perceived AI as a threat to the human creative property, elaborating that AI, by nature, can never be creative on its own, and the overreliance on such technology numbs the brain's exceptional quality of creative production. A student with the latter view urged his colleagues not to let AI become a big part of their academics. Furthermore, a participant advised colleagues to engage in creative self-expression, dismissing the fear of committing errors, informing them that making errors is a part of their development.

3.3.4 Summary of the Results and Findings from the Questionnaire

This study explores teachers' and students' attitudes towards the role of AI tools in enhancing EFL students' linguistic creativity. Analysis of students' answers to the questionnaire can be illustrated in a set of points. The majority of students reported studying English for ten (10) years or more, suggesting their considerable level of language competency. Accordingly, most of them believe that they attain a good level of language mastery, which can be related to their usual use of English in their daily life.

Regarding linguistic creativity, the majority of students had not been formally introduced to the concept, which is further reflected in their different views on the latter. Most of the provided definitions were correspondent with current views on the term, "the creation

of novel and original expressions"; however, several respondents, alongside those who did not provide definitions, displayed their uncertainty about an exact meaning. Additionally, while some views suggested that linguistic creativity and linguistic competence are significantly different, a slim majority claimed that they have the same meaning. Some justified their answers by stating that LC and linguistic competence are merely two related concepts that serve as means to each other. Besides that, one particular point to note is the existence of ancient views on LC, that is, some students consider LC as an innate attribute of certain gifted people.

Findings showcase that the majority of EFL students consider themselves creative EFL learners, which highlights their probable abilities to use language creatively. Additionally, they primarily engage in tasks that are a part of the cognitive properties of creativity, including critical thinking, problem solving, and brainstorming. They reported that they rely on different tools to inspire their LC, mainly on: social media, personal interests and motivation, and listening to podcasts. Interestingly, although personal interests and motivation is ranked second in the tools that students mostly rely on to inspire their LC, the majority claimed that their lack of motivation is the main factor challenging their creative learning process, along with other factors, such as fear of errors, low language proficiency, and the overreliance on AI tools. Furthermore, results showcase that the majority of them are used to reflect on their LC development, relying mainly on self-assessment and exam and assignment marks, demonstrating a willingness towards improving their language skills.

Regarding AI use in EFL settings, results display students' reliance on AI applications as the second most used tool to support their language learning. The majority of respondents claimed that they are highly familiar with AI tools and that they usually integrate them into their learning process, particularly ChatGPT. They claimed using them for enhancing and facilitating their language learning journey, rather than for conducting certain unethical

behaviors, such as cheating. Furthemore, while a minority of students admitted their overdependence on auto-generated content, which led to a reduction in their productivity and cognitive efforts, the vast majority claim that AI may enhance their EFL learning performance, due to its special services created to improve various aspects of English language mastery.

In the final section, it is indicated that the vast majority of respondents acknowledge AI's impact on their level of LC. Results showcase that AI tools have remarkably helped them improve different creative skills, including problem-solving, critical thinking, brainstorming, word play, language structural manipulation, and storytelling. Nonetheless, some students admitted that they have faced a set of challenges since using AI due to their overreliance on it, which threatens their creative abilities. The latter reflects teachers' claims, underscoring the importance of using AI tools in a moderate manner in order for students to foster their level of LC.

Furthermore, according to the questionnaire answers, students report a moderate adherence to the ethical guidelines governing the use of AI tools, as the majority usually modify AI-generated answers before using them or using them as an inspiration to create their original product, which contradicts teachers' perceptions as they believe that students copy AI-generated answers without making modifications. The questionnaire concludes with some students expressing their willingness to use AI tools due to the advantages they offer, and others expressing their concerns about its potential to threaten students' creativity and originality.

To sum up, according to these results, the vast majority of students seem supportive and enthusiastic towards the use of AI tools in EFL settings. Correspondingly, they expressed their positive attitudes towards the role it plays in enhancing their LC. However, they also

highlighted the possible drawbacks that may come with the overreliance on AI tools in academia, underscoring the need to use them in a balanced and ethical manner.

Conclusion

Based on the obtained findings, which represent teachers' and students' perceptions towards the role of using AI in enhancing students' LC, one can answer the research questions. First, despite underlining their high tendency to cause problems in the field of EFL, a majority of both students and teachers support the use of AI-powered tools. However, teachers emphasize that this use should be balanced, ethical, and moderate to achieve better outcomes and prevent any threats to students. Moreover, concerning their integration in EFL settings, it is noticed that the majority of students highly incorporate AI tools into their learning, whereas teachers are less inclined to integrate them into their teaching processes.

Second, the majority of students and teachers acknowledge AI's capacity to foster EFL students' LC. Throughout the analysis and interpretation of the results, it is highlighted that the latter can take place if students use AI tools moderately and ethically without overrelying on them, as the majority of teachers think that there is a strong relationship between EFL students' over-reliance on AI and their low LC. This suggests that EFL students and teachers at the University of Guelma are aware of the challenges and drawbacks associated with AI, to the extent that some of them are strongly opposed to it. However, the majority support the potential role it can play in enhancing EFL students' LC under a highly crucial condition: a moderate and ethical use.

GENERAL CONCLUSION

1. Pedagogical Implications

Creativity in language expression is the utmost goal for language acquisition; to know how to manipulate language to convey correct and appropriate ideas while using a set of fixed grammar shows the creative potential and flexibility of language and the human mind. This notion is shown to play a crucial role in EFL education. Similarly, AI is shown to be of central interest. Since its recent advancements, it has paved the way for a whole new realm of pedagogical teaching and learning methods. The latter, being described as a double-edged sword, brings advantages as well as drawbacks to the context at hand, which creates a gap of knowledge on the nature of influence it has on students' LC. The results of this study show teachers' and students' positive attitudes toward the use of AI, and accordingly, its ability to enhance students' LC, under the condition of correct use. In light of the latter, there is a list of pedagogical implications that need to be adapted by EFL teachers and students to prioritize the benefits of AI on LC.

Teachers, as instructors, play the biggest role in the success of their courses; a role of influencing, motivating, and teaching their students. Therefore, their skills and knowledge should be under constant improvement. Firstly, throughout the study, LC has been portrayed as a common theme in EFL classrooms; however, some students still hold the belief that creativity is an innate property of gifted individuals. Hence, teachers need to draw on this misconception by redefining LC as a capacity of all people. Moreover, results also convey that among the challenges students face regarding this notion is the limited exposure to creative possibilities alongside curriculum constraints; therefore, teachers need to build a space for flexible linguistic expression to support LC. By focusing on such skills, students would apply various critical thinking processes, which enhance their confidence and therefore their academic performance. Furthermore, teachers' constructive feedback is a crucial aspect

not to overlook; results of the study illustrate that teachers' feedback is one of the inspiring factors for students' LC.

In today's digital world, most students are utilizing AI technology. Regardless of how they use it, teachers need to align their methods with its current developments to engage students' interests. Using AI in an EFL classroom enhances language comprehension, as it provides exposure to various forms of expression that inspire students. Moreover, with a proper understanding of AI literacy, students can develop their critical thinking skills.

In a similar vein, students should engage in creative expression activities like using figurative language, structural manipulation, and word play, without fearing errors. Furthermore, students should be educated on the correct use of AI, as well as the policy governing its use. To guarantee the latter, it is high time for EFL departments to integrate a course for teaching AI literacy into their curriculum.

2. Limitations of the Study

The whole decisions and steps of conducting the current study were generally convenient, that is, they served the aims of the research successfully. However, there is a set of points that ought to be highlighted in relation to its limitations. These points can be summarized in two main themes.

Firstly, the data presented by the end of this study reveal teachers' and students' perceptions towards AI and its role in enhancing students' LC after answering the questionnaires, without offering a clear idea about the exact impact of using AI on their LC. Correspondingly, the research findings and conclusions are built on respondents' subjective viewpoints, which do not guarantee the real influence AI has on EFL students' LC. This is due to the possibility that their provided answers are influenced by many factors, depending on the respondent's personality, characteristics, and conditions. The factors can include their academic knowledge, experience, environment, subjectivity and bias, degree of honesty, in

addition to interests and preferences. As a result, the latter suggests that the study's findings are not conclusive.

Secondly, the nature of the employed data collection tool, i.e., the questionnaire, opens the door for many probable challenges, which can affect the reliability and validity of the respondents' provided answers. Respondents tend to answer the questions depending on their own understanding, which may lead them to provide an answer that is different from the real meaning and aim of the researcher's question. Additionally, respondents may not devote adequate time and effort to answer the questionnaire, but rather try to answer it as quickly as possible. This can reflect the fact that some respondents did not provide answers for some questions in this study's questionnaire, which could be because they did not know the answer, did not want to answer, or did not notice them as they were moving quickly through the questions. The latter may affect the quality and honesty of their provided answers.

3. Recommendations for Further Research

For the sake of gathering more reliable and valid data, researchers who are willing to work on the same gap of knowledge, or the same area of study, are required to take into account a highly crucial suggestion. First and foremost, dispatching questionnaires or conducting interviews with the sample is a beneficial process; however, a quasi-experiment study has to be conducted to detect AI's exact influence on EFL students' LC and draw a reliable conclusion by the end of the research. This entails generating a reliable test with a flexible and useful scale in order to measure students' LC before and after the use of AI tools. Moreover, the experiment should last for an appropriate amount of time, ranging from three to four weeks at least. Additionally, the sample has to incorporate more than one group from different levels, which are randomly chosen. Yet, in case of insufficient time constraints, it is advisable to focus on a single level, for instance, First-year Master students, in order to guarantee the success of the quasi-experiment study.

REFERENCES

- Abrams, M. H., & Harpham, G. G. (2011). A Glossary of Literary Terms. Wardsworth.
- Abu Ghali, M. J., Abu Ayyad, A., Abu-Naser, S. S., & Abu Laban, M. (2018). An Intelligent Tutoring System for Teaching English Grammar. *International Journal of Academic Engineering Research*, 2(2), 1-6.
- Algeo. J. (1991). Fifty Years among the New Words: A Dictionary of Neologisms, 1941-1991.

 Cambridge University Press.
- Alghamdy, R. Z. (2023). Pedagogical and Ethical Implications of Artificial Intelligence in EFL Context: A Review Study. *English Language Teaching*, 16(10), 87. https://doi.org/10.5539/elt.v16n10p87
- Alhaisoni, E., & Alhaysony, M. (2017). An Investigation of Saudi EFL University Students'

 Attitudes Towards the Use of Google Translate. *International Journal of English*Language Education, 5, 72-82. doi: 10.5296/ijele.v5i1.10696
- Almatrafi, O., Johri, A., & Lee, H. (2024). A Systematic Review of AI Literacy Conceptualization, Constructs, and Implementation and Assessment Efforts (2019-2023). *Computers & Education Open*, 6, 100173. https://doi.org/10.1016/j.caeo.2024.100173
- Al-Othman, A. A. M. (2024). Using Artificial Intelligence in English as a Foreign Language Classrooms: Ethical Concerns and Future Prospects. *Arab World English Journal*, *10*, 85-104. https://doi.org/10.24093/awej/call10.7
- Alves-Oliveira, P., Arriaga, P., Xavier, C., Hoffman, G., & Paiva, A. (2021). Creativity

 Landscapes: Systematic Review Spanning 70 Years of Creativity Interventions for

 Children. *The Journal of Creative Behavior*, 56(1), 16-40.

 https://doi.org/10.1002/jocb.514

- Alzubi, A. A. F. (2024). Generative Artificial Intelligence in the EFL Writing Context:

 Students' Literacy In Perspective. *Qubahan Academic Journal*, 4(2), 59-69.

 https://doi.org/10.48161/qaj.v4n2a506
- Amabile, T. M. (1982). Social Psychology of Creativity: A Consensual Assessment Technique. *Journal of Psychology and Social Psychology*, 43(5), 997-1013. https://psycnet.apa.org/doi/10.1037/0022-3514.43.5.997
- Anh, D., Raviv, L., & Galke, L. (2024). Morphology Matters: Probing the Cross-linguistic Morphological Generalization Abilities of Large Language Models through a Wug Test. In T. Kuribayashi, G. Rambelli, E. Takmaz, P. Wicke, & Y. Oseki (Eds.), Proceedings of the Workshop on Cognitive Modeling and Computational Linguistics (pp. 177-188). Association for Computational Linguistics. https://doi.org/10.18653/v1/2024.cmcl-1.15
- Ahn, T. Y., & Lee, S.M. (2016). User Experience of a Mobile Speaking Application with Automatic Speech Recognition for EFL Learning. *British Journal of Educational Technology*, 47(4), 778-786. doi: 10.1111/bjet.12354
- Araki, M. (2015). Polymathic Leadership: Theoretical Foundation and Construct

 Development [Master's thesis, Pontificia Universidade Catolica].
- Baghoussi, M. (2021). Teacher-Centred Approach Prevalence in Algerian Secondary-School EFL Classes: The Case of English Teachers and Learners in Mostaganem District. *Arab World English Journal (AWEJ), 12*(2), 268-278.
- Bahri, H., & Mahadi, T. S. T. (2016). Google Translate as a Supplementary Tool for Learning Malay: A Case Study at University Sains Malaysia. *Advances in Language and Literary Studies*, 7(3), 161-167. doi: 10.7575/aiac.alls.v.7n.3p.161

- Baskara, R., & Mukarto, M. (2023). Exploring the Implications of ChatGPT for Language Learning in Higher Education. *Indonesian Journal of English Language Teaching and Applied Linguistics*, 7(2), 343-358. https://www.ijeltal.org/index.php/ijeltal
- Birgili, B. (2015). Creative and Critical Thinking Skills in Problem-based Learning Environments. *Journal of Gifted Education and Creativity*, 2(2), 71-80. https://files.eric.ed.gov/fulltext/ED563985.pdf
- Birkmaier, E. M. (1971). The Meaning of Creativity in Foreign Language Teaching. *The Modern Language Journal*, 55(6), 345-353. https://doi.org/10.1111/j.1540-4781.1971.tb03604.x
- Boden, M. A. (2004). The Creative Mind: Myths and Mechanisms. Routledge.
- Bouigha, K., & Namous, A. (2024). Teachers' and Students' Perception about the Effects of Using ChatGPT, Grammarly, and Quillbot on
- Students' Writing Skills. university center of abdalhafid boussouf-MILA.
- Brochhagen, T., Boleda, G., Gualdoni, E., & Xu, Y. (2023). From Language Development to Language Evolution; A Unified View of Human Lexical Creativity. *Science*, 381(6656), 431-436. https://doi.org/10.1126/science.ade7981
- Bybee, J. L. (2013). Usage-based Theory and Exemplar Representations of Constructions. In G. Trousdale & T. Hoffmann (Eds.), *The Oxford Handbook of Construction Grammar*. Oxford University Press. https://doi.org/10.1093/oxfordhb/9780195396683.013.0004
- Campbell, M., & Rosenhan, C. (2023). Assessment and Creativity through a Translingual Lens: Transdisciplinary Insights. *Applied Linguistics Review*.
- Carter, R. (2015). Language and Creativity: The Art of Common Talk (1st Ed.). Routledge.

- Chan, C. K. Y., & Hu, W. (2023). Students' voices on generative AI: Perceptions, benefits, and challenges in higher education. International Journal of Educational Technology in Higher Education, 20(1), 43.
- Chan, C.Y. (2023). A Comprehensive AI Policy Education Framework for University

 Teaching and Learning. *International Journal of Educational Technology in Higher Education*, 20, 1-25 https://doi.org/10.1186/s41239-023-00408-3
- Chien, S.Y., Hwang, G.J., & Jong, M. S.Y. (2020). Effects of Peer Assessment within the Context of Spherical Video-Based Virtual Reality on EFL Students' English-Speaking Performance and Learning Perceptions. *Computers & Education*, 146(3), 103751. doi: 10.1016/j.compedu.2019.103751
- Chiu, T. K. F., Ahmad, Z., Ismailov, M., & Sanusi, I. T. (2024). What Are Artificial Intelligence Literacy and Competency? A Comprehensive Framework to Support them. *Computers* & *Education Open*, 6, 100171. https://doi.org/10.1016/j.caeo.2024.100171
- Chiu, T. K. F. (2023). The impact of Generative AI (GenAI) on Practices, Policies and Research Direction in Education: A Case of ChatGPT and Midjourney. *Interactive Learning Environments*, 32(10), 6187-6203. https://doi.org/10.1080/10494820.2023.2253861
- Chomsky, N. (1957). Syntactic Structures. Routledge.
- Chomsky, N. (1965). Aspects of the Theory of Syntax (50th Ed.). The MIT Press.
- Chomsky, N. (1970). *Language and Freedom* [Lecture]. University Freedom and the Human Sciences Symposium, Loyola University, Chicago. https://chomsky.info/wp-content/uploads/state02.pdf
- Chomsky, N. (2006). Language and Mind. Cambridge University Press.

- Clarke, M. A. (2005). Creativity in Modern Foreign Languages Teaching and Learning.

 Higher Education Academy.
- Conti. G. (2015, July 17). Redefining Creativity in the Foreign Language Classroom [blog post]. https://gianfrancoconti.com/2015/07/17/redefining-creativity-in-the-foreign-language-classroom/
- Cook, G. (2000). Language play, Language Learning. Oxford University Press.
- Coulson, S. (2001). Semantic Leaps: Frame-Shifting and Conceptual Blending in Meaning

 Construction. Cambridge University Press.
- Council of Europe. (2007). Common European Framework of Reference for Languages:

 Learning, teaching, assessment. Cambridge University Press.

 https://rm.coe.int/1680459f97
- Cowie, N., & Alizadeh, M. (2022). The Affordances and Challenges of Virtual Reality for Language Teaching. *International Journal of TESOL Studies*, 4(3), 50-65. doi: 10.46451/ijts.2022.03.05
- Cremin, T. (2009). Teaching English creatively. Routledge.
- Crystal, C. (2001). Language and the Internet. Cambridge University Press.
- Csikszentmihalyi, M. & Sawyer, K. (2014). *Creative Insight: The Social Dimension of a Solitary Moment.* In: The Systems Model of Creativity. Springer, Dordrecht.
- Dandu, H., & Pugazh, P. (2023). Language Creativity with Reference to Artificial Intelligence in Educational Institutions, a Review Paper. *TIJER-International Research Journal*, 10(3), 698-701.
- Daud, A., Aulia, A. F., Muryanti, Harfal, Z., Nabilla, O., & Ali, H. S. (2025). Integrating

 Artificial Intelligence into English Language Teaching: A Systematic Review.

 European Journal of Educational Research, 14(2), 677-691.

 https://doi.org/10.12973/eu-jer.14.2.677

- Deshors, S. C., Gotz, S., & Laporte, S. (2016). Linguistic Innovations: Rethinking Linguistic Creativity of Non-Native English Speakers. *International Journal of Learner Corpus Research*, 2(2), 131-150. https://doi.org/10.1075/ijlcr.2.2.01des?locatt=mode:legacy
- Dick, S. (2019). Artificial Intelligence. *Harvard Data Science Review*, 1(1). https://doi.org/10.1162/99608f92.92fe150c
- Drach, M. (1981). The Creative Aspect of Chomsky's Use of the Notion of Creativity. *The Philosophical Review*, 90(1), 44-65. https://doi.org/10.2307/2184372
- Duranti, A. (1997). Linguistic Anthropology. Cambridge University Press.
- Durdas, A., Harbuza, T., Radchenko, Y., & Starosta, H. (2022). Teaching Foreign Languages

 Efficiently: The Role of Creative Writing. *Continuing Professional Education: Theory*Practice, 3. https://doi.org/10.28925/1609-8595.2022.3.4
- EdYouFest. (2023, January 18). *The Power of Language: Unleashing Creativity and Fostering Effective Communication in English Teaching* [Blog post]. https://www.edyoufest.org/post/the-power-of-language-unleashing-creativity-and-fostering-effective-communication-in-eng-teaching
- Eliot, L. (2024). Advantages and Disadvantages of AI in the EFL Classroom. *In* The Asian Conference on Education 2023: Official Conference Proceedings. 491-499. https://doi.org/10.22492/issn.2186-5892.2024.43 https://doi.org/10.22492/issn.2186-5892.2024.43
- Ellis, A. S. (1986). *A Historical Overview of Creativity with Implications for Education* (Publication No. 3592) [Master's thesis, Portland State University]. Dissertations and Theses. https://doi.org/10.15760/etd.5476
- Ellis, M. (2024, October 24). Figurative Language Examples: 6 Common Types and Definitions. *Grammarly Blog*. https://www.grammarly.com/blog/writing-tips/figurative-language/

- Ellison, A. M., & Patel, M. V. (2022). Success in Navigating your Student Research

 Experience: Moving forward in STEMM. Springer Nature.
- Fauconnier, G., & Turner, M. (2002). The Way We Think: Conceptual Blending and the Mind's Hidden Complexities. Basic Books.
- Fernando, E. K., & Suryaman, M. (2022). Appropriating Grammar as a Tool in Writing Activities: Student"s Perception. Journal of English Language and Education, 7(2), 1-8. https://doi.org/10.31004/jele.v7i2.232
- Fisher, R., & Williams, M. (2004). *Unlocking Creativity: A Teacher's Guide to Creativity Across the Curriculum* (1st Ed.). Routledge.
- Fiveable. (2024, August 1). Lexical Innovation. *English Grammar and Usage*. https://library.fiveable.me/key-terms/english-grammar-usage/lexical-innovation
- Formosa, M. & Zammit, S. (2016). Colouring Outside the Lines. In D., Xerri & O. Vassallo (Eds.), *Creativity in English Language Teaching* (pp. 25-34). ELT Council.
- Gentner, D. (1983). Structure-Mapping: A Theoretical Framework for Analogy. Cognitive Science, 7(2), 155-170. https://doi.org/10.1016/S0364-0213(83)80009-3
- Gibbs, R. W., Jr. (1994). The Poetics of Mind: Figurative Thought, Language, and Understanding. Cambridge University Press
- Ginting, D. (2022). *Linguistic Creativity and Its Implications on ELT*. (PDF) Linguistic Creativity and Its Implications on ELT
- Glăveanu, V. P. (2017a). From Fantasy and Imagination to Creativity: Toward "Psychology with Soul" and a "Psychology with Others". In B. Wagoner, I. Bresco de Luna, & S. H. Awad (Eds.), *The Psychology of Imagination: History, Theory and New Research Horizons* (pp. 175-189). Information Age Publishing.
- Goldberg, A. (2005). Constructions at work: The Nature of Generalization in Language.

 Oxford University Press.

- Guilford, J. P. (1967). The Nature of Human Intelligence. McGraw-Hill.
- Gumhold, M. R. (2018). Creativity as the Key to Linguistic Competence and Life Skills.

 Humanising Language Teaching Magazine.

 https://www.hltmag.co.uk/oct18/creativity-as-the-key-to-linguistic-competence**
- Guo, K., Wang, J., & Chu, S. K. W. (2022). Using Chatbots to Scaffold EFL Students

 Argumentative Writing. Assessing Writing, 54(2), 100666. doi: 10.1016/j.asw.2022.100666
- Hafidi, M., & Mahnane, L. (2018). Implementing Flipped Classroom that Used an Intelligent Tutoring System into the Learning Process. *Computers & Education*, 124(1), 62-76. doi: 10.1016/j.compedu.2018.05.011
- Halliday, M. A. K. (1978). Language as Social Semiotic: The Social Interpretation of Language and Meaning. Edward Arnold.
- Haristiani, N. (2019). Artificial Intelligence (AI) Chatbot as Language Learning Medium: An Inquiry. *Journal of Physics Conference Series*, 1387(1), 012020J. doi: 10.1088/1742-6596/1387/1/012020
- Hasan, M. A., Noor, N. F. M., Rahman, S. S. B. A., & Rahman, M. M. (2020). The Transition from Intelligent to Affective Tutoring System: A Review and Open Issues. *IEEE Access*, 8, 204612-204638. doi: 10.1109/ACCESS.2020.3036990
- Hennessey, B. A., & Amabile, T. M. (2010). Creativity. *Annual Review of Psychology*, 61, 569-598. https://psycnet.apa.org/doi/10.1146/annurev.psych.093008.100416
- High-Level Expert Group on Artificial Intelligence. (2018). A definition of AI: Main capabilities and scientific disciplines. In the *European Commission*. Directorate-General for Communication. https://ec.europa.eu/futurium/en/system/files/ged/ai_hleg_definition_of_ai_18_december_1.pdf

- Hoffmann, T. (2018). Creativity and Construction Grammar: Cognitive and Psychological Issues. *Zeitschrift für Anglistik und Amerikanistik*, 66(3).
- Hoffmann, T. (2019). Language and Creativity: A Construction Grammar Approach to Linguistic Creativity. *Linguistics Vanguard*, 5(1), 20190019. https://doi.org/10.1515/lingvan-2019-0019
- Hsu, T. C., Chang, C., and Jen, T. H. (2023). Artificial Intelligence Image Recognition Using Self-Regulation Learning Strategies: Effects on Vocabulary Acquisition, Learning Anxiety, and Learning Behaviours of English Language Learners. *Interactive Learning Environments*. 1–19. doi: 10.1080/10494820.2023.2165508
- Hsu, L. (2024). Exploring EFL learners' Acceptance and Cognitive Absorption at VR-Based Language Learning: A Survey and Experimental Study. *Heliyon*, *10*(3), e24863. https://doi.org/10.1016/j.heliyon.2024.e24863
- IBM Data and AI Team. (2025, April 17). Understanding the Different Types of Artificial Intelligence. *IBM*. Retrieved April 23, 2025, from https://www.ibm.com/think/topics/artificial-intelligence-types
- Inggårde, K. (2011). *Creativity and EFL Learning: An empirical study in a Swedish upper-secondary school*. (Degree Project in English Studies). Högskolan Dalarna. https://www.diva-portal.org/smash/get/diva2:713883/FULLTEXT01.pdf
- Ismayilzada, M., Circi, D., Sälevä, J., Sirin, H., Köksal, A., Dhingra, B., Bosselut, A., Atman, D., & van der Plas, L. (2024). *Evaluating Morphological Compositional Generalization in Large Language Models* (arXiv:2410.12656). arXiv. https://doi.org/10.48550/arXiv.2410.12656
- Iswandari, D. C., Prayogo, J. A., & Cahyono, B. Y. (2017). Effect of Environmental Problembased Learning on the Indonesian EFL Students' Environment-related Vocabulary

- Mastery and Writing Ability. *Theory and Practice in Language Studies*, 7(8), 608-616. http://dx.doi.org/10.17507/tpls.0708.02
- Javaid, M., Haleem, A., Singh, R. P., Khan, S., & Khan, I. H. (2023). Unlocking the Opportunities through ChatGPT Tool towards Ameliorating the Education System. BenchCouncil Transactions on Benchmarks Standards and Evaluations, 3(1) 100115 doi: 10.1016/j.tbench.2023.100115
- Jiang, R. (2022). How Does Artificial Intelligence Empower EFL Teaching and Learning Nowadays? A Review on Artificial Intelligence in the EFL Context. Frontiers in Psychology, 13. https://doi.org/10.3389/fpsyg.2022.1049401
- Jones, R. H. (Ed.). (2016). *The Routledge Handbook of Language and Creativity* (1st Ed.). Routledge.
- Kaufman, J.C. & Beghetto, R.A. (2009). Beyond Big and Little: The Four C Model of Creativity. *Review of General Psychology*, 13(1), 1-12. http://dx.doi.org/10.1037/a0013688
- Glaveanu, V.P. & Kaufman, J.C. (2019). A Review of Creativity Theories: What Questions

 Are We Trying to Answer? In J. C. Kaufman & R. J. Sternberg (Eds.), *Cambridge Handbook of Creativity*, (2nd ed., pp. 27-43). Cambridge University Press. http://dx.doi.org/10.1017/9781316979839.004
- Kholid, S. H., & Syafrizal. (2023). The Influence of Language Attitude and Linguistic Intelligence on Creative Thinking. *EduLine: Journal of Education and Learning Innovation*, 3(4), 576-585. https://doi.org/10.35877/454RI.eduline2177
- Kim, N.Y., Cha, Y., & Kim, H.S. (2019). Future English Learning: Chatbots and Artificial Intelligence. *Korea Open Access Journals*, 22(3), 32-53. https://www.kci.go.kr/kciportal/landing/article.kci?arti_id=ART002505056

- Laila, R. (2022). Language Creativity in the Study of Indonesian Language as a Learning Media. *Journal of Language, Indonesia Literature and Teaching, 15*(2), 12-18. https://doi.org/10.55222/metamorfosis.v15i2.796
- Lakoff, G., & Johnson, M. (1980). Metaphors We Live By. University of Chicago Press.
- Liao, Y.H., Chen, Y.L., Chen, H.C., & Chang, Y.L. (2018). Infusing Creative Pedagogy into an English as a Foreign Language Classroom: Learning Performance, Creativity, and Motivation. *Thinking Skills and Creativity*, 29, 213-223. https://doi.org/10.1016/j.tsc.2018.07.007
- Li, L. (2016). Thinking Skills and Creativity in Second Language Education: Where Are We Now? *Thinking Skills and Creativity*, 22, 267-272. https://doi.org/10.1016/j.tsc.2016.11.005
- Lotze, N. (2018). Goodbye to Classroom Teaching? Artificial Intelligence in Language

 Learning (C. Cave, Trans.). *Goethe-Institut e. V., Redaktion Magazin Sprache*.

 https://www.goethe.de/ins/in/en/spr/mag/21290629.html
- Luck, M., & Aylett, R. (2000). Applying Artificial Intelligence to Virtual Reality: Intelligent

 Virtual Environments. *Applied Artificial Intelligence*, 14(1), 3-32. doi:

 10.1080/088395100117142
- Luckin, R., Holmes, W., Griffiths, M., & Forcier, L. B. (2016). Intelligence Unleashed: An Argument for AI in Education. Pearson. https://www.pearson.com/content/dam/corporate/global/pearson-dot-com/files/innovation/Intelligence-Unleashed-Publication.pdf
- Lynch, M. (2024, May 8). Teaching students about neologisms. *Pedagogue*. https://pedagogue.app/teaching-students-about-neologisms/
- Maley, A., & Peachey, N. (Eds.). (2015). Creativity in the English Language Classroom.

 British Council.

- Maley, A. (2018). Creative Writing for Language Learners (and Teachers). British Council.
- Malip, N. K., & Abdul Aziz, A. (2022). The Influence of L1 in ESL Learners' Writing.
 International Journal of Academic Research in Business and Social Sciences, 12(7),
 1823-1839. http://dx.doi.org/10.6007/IJARBSS/v12-i7/14120
- Merdassi, N., & Belmekki, A. (2024). Striking the Balance of AI Use in EFL Education:

 Maximizing Benefits, and Minimizing Risks. *ATRAS*, 5(3), 69-79.

 https://doi.org/10.70091/atras/ai.4
- Monib, W. K., & Hadi, H. U. R. (2025). Determinant Factors Influencing English Speaking

 Skill among Undergraduates: Challenges and Remedial Strategies. *Journal of English Language Pedagogy, Literature, and Culture, 10*(1).

 https://files.eric.ed.gov/fulltext/EJ1460111.pdf
- Mourtaga, K. R. (2006). Some Reading Problems of Arab EFL Students. https://www.semanticscholar.org/paper/Some-Reading-Problems-of-Arab-EFL-Students-Mourtaga/aadfe6f9c765bb86e863f0cc38df5efc54993a27
- Mushaddiq, M., Noni, N., Abdullah, A., & Tahir, M. (2024). Exploring EFL Students' Creativity and Engagement with AI Chatbot in Web-Based English Course. *GLENS: Global English Insights Journal*, 2(1), 19-27. https://doi.org/10.61220/glens.v2i1.591
- Nagro, S. A. (2021). The Role of Artificial Intelligence Technologies in Improving the Behavior and Practices of Faculty Members when Switching to E-Learning in Light of the COVID-19 Crisis. *International Journal of Education and Practice*, 9 (4), 687-714. doi: 10.18488/journal.61.2021.94.687.714
- National Advisory Committee on Creative and Cultural Education (NACCCE). (1999). All our futures: Creativity, culture, and education. *DFEE*.

- Ng, D. T. K., Leung, J. K. L., Chu, S. K. W., & Qiao, M. S. (2021). Conceptualizing AI Literacy: An Exploratory Review. Computers and Education: Artificial Intelligence, 2, 100041.
- Nivedhaa N, A comprehensive review of AI's Dependence on Data, International Journal of Artificial Intelligence and Data Science (IJADS), 1(1), 2024, pp. 1-11.
- Noels, K. A., Pelletier, L. G., Clément, R., & Vallerand, R. J. (2000). Why Are You Learning a Second Language? Motivational Orientations and Self-Determination Theory.

 *Language Learning, 50(1), 57-85. https://psycnet.apa.org/doi/10.1111/0023-8333.00111
- Oudeyer, P. Y., Gottlieb, J., & Lopes, M. (2016). Intrinsic Motivation, Curiosity, and Learning: Theory and Applications in Educational Technologies. *Progress in Brain Research*, 299, 257-284. https://doi.org/10.1016/bs.pbr.2016.05.005
- Pàsztor, A., Molnár, G., & Csapó, B. (2015). Technology-based Assessment of Creativity in Educational Context: The Case of Divergent Thinking and its Relation to Mathematical Achievement. *Thinking Skills and Creativity*. 18, 32-42. https://doi.org/10.1016/j.tsc.2015.05.004
- Peng, H., Ma, S., & Spector, J. M. (2019). Personalized Adaptive Learning: An Emerging Pedagogical Approach Enabled by a Smart Learning Environment. *Smart Learning Environments*, 6(1), 1-14.
- Phothongsunan, S. (2023). Fostering Creativity in the EFL Classroom. *Journal of Multidisciplinary in Humanities and School Science*, 6(3), 1319-1324.
- Pinker, S. (1994). *The Language Instinct: How the Mind Creates Language*. Harper Perennial Modern Classics.
- Pinker, S. (1999). Words and Rules: The Ingredients of Language. Basic Books.
- Pipes, A. (2023). Researching Creativity in Second Language Acquisition. Routledge.

- Qian, L., Yang, Y., & Zhao, Y. (2021). Syntactic Complexity Revisited: Sensitivity of China's AES-generated Scores to Syntactic Seasures, Effects of Discourse-Mode and Topic.

 *Reading and Writing, 34(1), 681-704. doi: 10.1007/s11145-020-10087-5
- Raimes, A. (1983). Techniques in Teaching Writing. Oxford University Press.
- Ranta, E. (2022). From Learners to users- errors, innovations, and universals. *ELT Journal*, 76(3), 311-319. https://doi.org/10.1093/elt/ccac024
- Rebbouh, R. (2016). *The Impact of Language Anxiety on EFL Students' Speaking Skill* [Master's Thesis, University of Biskra]. Dspace Biskra.
- Rhodes, M. (1961). An Analysis of Creativity. *Phi Delta Kappa International*, 42(7), 305-310. http://www.jstor.org/stable/20342603
- Richards, J. C. (2013). Creativity in Language Teaching. *Iranian Journal of Language Teaching Research*, 1(3), 19-43. https://ijltr.urmia.ac.ir/article_20431_64df30b4b96c25e989b517df96132199.pdf
- Rudolph, J., Tan, S., & Tan, S. (2023). War of the Chatbots: Bard, Bing Chat, ChatGPT, Ernie and beyond. The new AI gold rush and its impact on higher education. *Journal of Applied Learning and Teaching*, 6(1). https://doi.org/10.37074/jalt.2023.6.1.23
- Runco, M. A., & Jaeger, G.J. (2012). The Standard Definition of Creativity. *Creativity Research Journal*, 24(1), 92-96. https://doi.org/10.1080/10400419.2012.650092
- Russell, S., & Norvig, P. (2021). *Artificial Intelligence: A Modern Approach* (4th ed.). Pearson Education.
- Sampson, G. (2016). Two Ideas of Creativity. In M. Hinton (Ed.), *Evidence, Experiment and Argument in Linguistics and Philosophy of Language* (pp. 15-26). Peter Lang Verlag.
- Sarkawt, M. Q., & Hanife, B. B. (2023). An Analysis of Englsh as a Foreign Language Undergraduate Students' Written Errors. *Forum for Linguistic Studies*, *5*(3), 1881. http://dx.doi.org/10.59400/fls.v5i3.1881

- Selinker, L. (2009). Interlanguage. *International Review of Applied Linguistics in Language Teaching*, 10(1-4), 209-232. https://doi.org/10.1515/iral.1972.10.1-4.209
- Sharma, R.C., Kawachi, P., & Bozkurt, A. (2019). The Landscape of Artificial Intelligence in Open, Online and Distanc Education: Promises and Concerns. *Asian Journal of Distance Education*, 14(2), 1-2. https://www.researchgate.net/publication/337925960_The_Landscape_of_Artificial_Intelligence_in_Open_Online_and_Distance_Education_Promises_and_Concerns
- Short, M. (1996). Exploring the Language of Poems, Play and Prose (2nd Ed.). Longman.
- Simonton, D. K. (2012). Taking the U.S. Patent Office Criteria Seriously: A Quantitative Three-Criterion Creativity Definition and Its Implications. *Creativity Research Journal*, 24(2-3), 97-106. https://doi.org/10.1080/10400419.2012.676974
- Spencer, A. (2003b). Morphological productivity. *Journal of Linguistics*, 39(2), 391-417. https://doi.org/10.1017/s0022226703212056
- Stein, M. I. (1953). Creativity and Culture. *The Journal of Psychology*, *36*(2), 311-322. https://doi.org/10.1080/00223980.1953.9712897
- Stepanek, L. (2015). A Creative Approach to Language Teaching: A Way to Recognize,

 Encourage and Appreciate Students' Contribution to Language Classes. In A. Maley &

 N. Peachey (Eds.), Creativity in the English Language Classroom (pp. 98-103).

 British Council.

 https://www.teachingenglish.org.uk/sites/teacheng/files/pub_F004_ELT_Creativity_FI

 NAL_v2%20WEB.pdf
- Tai, T. Y., Chen, H. H. J., & Todd, G. (2020). The Impact of a Virtual Reality App on Adolescent EFL Learners' Vocabulary Learning. *Computer Assisted Language Learning*, 35(4), 892-917. https://doi.org/10.1080/09588221.2020.1752735

- Tanggaard, L. (2011). Stories about Creative Teaching and Productive Learning. *European Journal of Teacher Education*, 34(2), 219-232. https://doi.org/10.1080/02619768.2011.558078
- Tomasello, M. (2003). Constructing a Language: A Usage-Based Theory of Language

 Acquisition. Harvard University Press
- Top Hat Glossary. (2023, November 23). AI in Education Definition and Meaning. Retrieved April 8, 2025, from https://tophat.com/glossary/a/ai-in-education/
- Torrance, E. P. (n. d.). Torrance Tests of Creative Thinking. *APA PsycTests*. https://psycnet.apa.org/doi/10.1037/t05532-000
- Tumen-Akyildiz, S. (2024). Enhancing or hindering? AI's Role in Sparking Creativity in Language Teaching: Insights from Private high EFL Teachers. *International e-Journal of Educational Studies*, 8(18), 234-254. https://doi.org/10.31458/iejes.1502509
- Ubaydullaeva, M. B. (2022). Linguistic Creativity in the Language System and Discourse. *Journal of Positive School Psychology*, 6(11), 3121-3127.
- Vera, F. (2023). Integrating Artificial Intelligence (AI) in the EFL Classroom: Benefits and Challenges. *Transformar*, 4(2), 66-77. https://orcid.org/0000-0002-4326-1660
- Vergara, T. P., Urzola, M. E. C., & Hernandez, H. D. J. (2023). *Psychological Aspects of Human Behavior*. Universidad Cooperativa de Colombia.
- Vygotsky, L. (1962). Thought and Language. MIT Press.
- Vygotsky, L. (2004). Imagination and Creativity in Childhood. *Journal of Russian & East European Psychology*, 42(1), 7-97. https://doi.org/10.1080/10610405.2004.11059210
- Wallas, G. (1926). The Art of Thought. Harcourt, Brace & Company.
- Walter, Y. (2024). Embracing the Future of Artificial Intelligence in the Classroom: The Relevance of AI Literacy, Prompt Engineering, and Critical Thinking in Modern

- Education. *International Journal of Educational Technology in Higher Education*, 21(1), 1-29. https://doi.org/10.1186/s41239-024-00448-3
- Wang, S., Sun, Z., & Chen, Y. (2023). Effects of Higher Education Institutes' Artificial Intelligence Capability on Students' Self-Efficacy, Creativity and Learning Performance. *Education and Information Technologies*, 28(5), 4919-4939. https://link.springer.com/article/10.1007/s10639-022-11338-4
- Wang, Y. F., & Petrina, S. (2013). Using Learning Analytics to Understand the Design of an Intelligent Language Tutor-Chatbot Lucy. *International Journal of Advanced Computer Science and Applications (IJACSA)*, 4(11). https://doi.org/10.14569/IJACSA.2013.041117
- Wang, X. (2016). The Effect of Language Ability in Creativity Assessment [Master's thesis, University of Minnesota].
- Weick, K. E. (1995). Sensemaking in Organizations. Sage Publications.
- Weisberg, R. S. (2015b). On the Usefulness of "Value" in the Definition of Creativity.

 *Creativity Research Journal, 27(2), 111-124.

 https://doi.org/10.1080/10400419.2015.1030320
- Williams, T. (2023). GPT-4's launch 'another step change' for AI and higher education. *The Times Higher Education*. Retrieved from https://www.timeshighereducation.com/news/gpt-4s-launch-another-step-change-ai-and-higher-education
- Wuerschinger, Q. (2021). Lexical Innovation on the Web and social media: Emergence,

 Diffusion, and Social Variation in the Use of English Neologisms (Doctoral dissertation, Universität München]. https://doi.org/10.5282/edoc.32672

- Wu, J., & Chen, D. T. V. (2020). A Systematic Review of Educational Digital Storytelling.
 Computers & Education, 147, 103786.
 https://doi.org/10.1016/j.compedu.2019.103786
- Xiao, Y., & Zhi, Y. (2023). An exploratory study of EFL learners" use of ChatGPT for language learning tasks: Experience and perceptions. Languages, 8(3), 212. https://doi.org/10.3390/languages8030212
- Xu, X., Dugdale, D. M., Wei, X., and Mi, W. (2022). Leveraging Artificial Intelligence to Predict Young Learner Online Learning Engagement. *American Journal of Distance Education*. 37, 185–198. doi: 10.1080/08923647.2022.2044663
- Yu, H., Peng, H., & Lowie, W. M. (2022). Dynamics of Language Learning motivation and Emotions: A Parallel-Process Growth Mixture Modeling Approach. *Frontiers in Psychology*, 13, 899400. doi: 10.3389/fpsyg.2022.89940
- Ziche, P. (2023). Creativity and Genious as Epistemic Virtues: Kant and early Post-Kantians on the Teachability of Epestimic Virtue. *Metaphilosophy*, *54*, 268-279. https://doi.org/10.1111/meta.12612

APPENDIX I

TEACHERS' QUESTIONNAIRE

Dear Teachers,

This questionnaire has been selected as a data collection tool to explore the attitudes of EFL teachers at the Department of English, University of Guelma, towards the role of using Artificial Intelligence tools in enhancing students' linguistic creativity. Therefore, as EFL teachers, you are respectfully invited to answer this questionnaire by ticking the appropriate option and/or providing complete statements where required. Your responses will be held anonymously. We would appreciate your efforts in answering this questionnaire. Thank you in advance for your cooperation.

Hafidi Tassabih Nor Elhouda

Kemouguette Aya

Department of Letters and English Language

University of 8 Mai 1945 – Guelma

Academic Year: 2024/2025

Section I: General Information

1.	How long have you been	teaching English at the University?
a.	1 year or less	
b.	From 2 to 10 years	
c.	From 11 to 20 years	
d.	More than 20 years	
2.	What is your field of spe	cialization?

Section II: Linguistic Creativity

3.	How can you define "linguistic creative	vity" (LC)?
4.	Does linguistic creativity (LC) mean li	inguistic competence?
a.	Yes	
b.	No	
Ple	ease justify.	
•••		
•••		
5.	What creative skills do you usually int	regrate into your teaching?
a.	Problem-solving	
b.	Critical thinking	
c.	Brainstorming	
d.	Use of figurative language	
(i.e	e., irony, metaphor, simile, etc.)	
e.	Word play	
f.	Language structural manipulation	
g.	Use of humor	
h.	Storytelling	
i.	Semantic association	
j.	Others	
	If others, please specify.	

		• • • • • • • • • • • • • • • • • • • •				•••••	
6.	On a scale	of 1-5, how	would you	rate the lir	nguistic crea	ntivity (LC)	
	(with 1 repre	esenting low	LC and 5 re	epresenting l	high LC).		
		1	2	3	4	5	
Ex	plain please.						
	1 1						
•••	•••••	•	• • • • • • • • • • • • • • • • • • • •				
7	To what and	da	haliare 4ha	4 I Clore	a amadal na	lo de EDI d	
7.	To what ext				a cruciai ro	ie in EFL 6	
	being least c	rucial and 5	being most				
		1	2	3	4	5	
0	D	. 1	4 2 1 60				
8.	Do you asse	ss your stud —	ents' LC?				
a.	ı. Yes						
b.	No [
9.	If yes, what	criteria do y	ou rely on v	when assessing	ng your stud	ents' LC?	
a.	Exam and as	ssignment m	narks				
b.	Peer assessn	nent feedbac	ck				
c.	Self-assessm	nent feedbac	ek				
d.	Their level of	of engageme	ent in creativ	e activities			
e.	Standardized	d creativity t	tests				

f. Others						
If others, plea	If others, please specify.					
10. Do you e	ncourage y	our students' L	C through giv	ing them const	ructive feedback	τ?
a. Yes						
b. No						
Section III:	Artificial I	ntelligence Us	e			
11. Are you f	amiliar wit	th the use of Al	I tools?			
a. Yes						
b. No						
12. On a sca	le of 1-5, l	now qualified	are you in usi	ng AI tools in	EFL classroom	s? (with 1
being not	qualified a	and 5 highly qu	alified)			
	1	2	3	4	5	
13. Which of	the follow	ing AI tools do	you mostly re	ely on in your t	eaching courses	?
a. ChatGPT						
b. DeepSeel						
c. Perplexit	y AI					
d. Gemini A	ı [
e. SciSpace	AI [

f.	ResearchRabbit					
g.	Quillbot					
h.	Grammarly					
i.	Quizlet					
j.	Others					
If o	others, please spec	rify.				
•••						
14	. How frequently o	lo you integrate AI tools in your teaching courses?				
a.	Always					
b.	Usually					
c.	Often					
d.	Rarely					
e.	Never					
15	15. To what extent do you agree or disagree with the following statements:					

	Totally				Totally
Statements	agree	Agree	Neutral	Disagree	disagree
a. Artificial Intelligence can successfully					
replicate human intelligence.					
b. AI must be integrated into an EFL					
teaching and learning environment.					
c. EFL students are qualified to use AI.					

d.	AI provides opportunities and advantage	S				
	for EFL students.					
e.	AI causes drawbacks and challenges fo	r				
	EFL students.					
	Section IV: The Role of Artificial Intellig	gence Use o	on Studen	ts' Linguis	tic Creativi	ty
	16. Do you believe that AI may foster s	students' al	oility to p	produce ori	ginal and c	reative
	language?					
	a. Yes					
	b. No					
	Please justify.					
	17.1	. 1	~			•••••
	17. In your opinion, do AI tools challenge	students' LC	J.			
	a. Yes					
	b. No					
	Please justify.					
		• • • • • • • • • • • • • • • • • • • •		• • • • • • • • • • • • • • • • • • • •		
	18. How would you rate the relationship b	etween stud	dents' ove	erreliance o	n AI and the	eir low
	LC?					
	a. Strong					
	b. Average					
	c. Weak					

Ple	ease clarify.	
•••		
19.	Based on your EFL students' observation, which path do	students usually follow when
	using AI-generated answers?	
a.	Copy ready-made answers blindly without any modifications	
b.	Make slight changes	
(i.e	e., Use synonyms, change word order, omit some elements, etc	·.)
c.	Use them as an inspiration to create their original product	
20.	If you have further suggestions or comments, please do not h	esitate to write them below.
		Thank you

APPENDIX II

STUDENTS' QUESTIONNAIRE

University of 08 Mai 1945- Guelma	University	of	08	Mai	1945-	Guelma
-----------------------------------	------------	----	-----------	-----	-------	--------

Department of English

2024/2025

STUDENTS' QUESTIONNAIRE

Dear student,

This questionnaire has been selected as a data collection tool to explore the attitudes of EFL students at the Department of English, University of 8 Mai 1945, Guelma. Therefore, as EFL students, you are respectfully invited to answer this questionnaire by ticking the appropriate option and/or providing complete statements where required. Your responses will be held anonymously. We would appreciate your efforts in answering this questionnaire. Thank you in advance for your cooperation.

Hafidi Tassabih Nor Elhouda

Kemouguette Aya

Section I: General Information

Se	ction 1: General Information				
1.	How long have you been studying English?				
	years.				
2.	2. How would you judge your level in English language mastery?				
a.	Very good				
b.	Good				
c.	Average				
d.	Poor				
3.	How often do you use English in	n your daily life?			

a.	Always	
b.	Usually	
c.	Often	
d.	Rarely	
e.	Never	
Se	ction II: Linguistic Creativity	
4.	Have you ever been introduced	to the concept of 'Linguistic Creativity' (LC) in your
	learning process?	
a.	Yes	
b.	No	
5.	If yes, how would you define the	e term "Linguistic Creativity" in the context of EFL
	learning? Please provide examp	les if possible.
•••		
•••		
6.	In your opinion, does linguistic	creativity mean linguistic competence?
a.	Yes	
b.	No	
Ple	ease justify.	
••••		
••••		
7.	Do you consider yourself a crear	tive EFL learner?
a.	Yes	
b.	No	

8.	Which of the following creative skills d	lo you usually engage in?
a.	Problem-solving	
b.	Critical thinking	
c.	Brainstorming	
d.	Using figurative language	
(i	.e., irony, metaphor, simile, etc.)	
e.	Engaging in word play	
f.	Language structural manipulation	
g.	Use of humor	
h.	Storytelling	
i.	Semantic association	
j.	Others	
If o	others, please specify.	
• • •		
•••		
9.	What inspires your LC as an EFL learner	er?
a.	Social media	
b.	Personal interests and motivation	
c.	Classroom collaboration	
d.	Teachers' feedback	
e.	Exposure to diverse cultures	

f.	Using Artificial Intelligence applications	
g.	Reading [
h.	Listening to podcasts	
i.	Others	
If o	others, please specify.	
•••		
10	. What challenges your LC?	
a.	Lack of motivation	
b.	Low language proficiency	
c.	Curriculum constraints	
d.	Limited exposure to creative language materials	
e.	Fear of errors using creative language skills	
f.	Cultural perceptions on creativity	
g.	Others	
If o	others, please specify.	
•••		
11	. Do you reflect on your LC development?	
a.	Yes	
b.	No	
12	. If yes, on what basis do you assess your level of	LC?

a.	Your exam and assignment mark	S	
b.	Peer assessment		
c.	Self-assessment		
d.	Teachers' feedback		
e.	By engaging in creative activities	S	
f.	Through standardized creativity	tests	
g.	Others		
If o	others, please specify.		
• • •			
Sa	-4: TTT. A4:0: -: -1 T4 -11: 1		
36	ction III: Artificial Intelligence	Use	
			usually use for developing your English language
			usually use for developing your English language
	What language learning tools do proficiency?		usually use for developing your English language
13. a.	. What language learning tools do proficiency?		usually use for developing your English language
13. a. b.	What language learning tools do proficiency? Books		usually use for developing your English language
13.a.b.c.	What language learning tools do proficiency? Books Educational blogs and sites		usually use for developing your English language
13.a.b.c.d.	What language learning tools do proficiency? Books Educational blogs and sites Videos		usually use for developing your English language
13.a.b.c.d.	What language learning tools do proficiency? Books Educational blogs and sites Videos AI applications		usually use for developing your English language
a. b. c. d. e.	What language learning tools do proficiency? Books Educational blogs and sites Videos AI applications Online journals		isually use for developing your English language
a. b. c. d. e.	What language learning tools do proficiency? Books Educational blogs and sites Videos Al applications Online journals Others		usually use for developing your English language

14. On a scale of 1 to 5, how familiar are you with AI tools? (With 1 being not familiar at all and 5 being highly familiar)

1	2	3	4	5

15.	. How often do you use AI tools v	while learning?
a.	Always	
b.	Usually	
c.	Often	
d.	Rarely	
	Never	
		w, which are the ones that you mostly use in your learning
	process?	
a.	ChatGPT	
b.	DeepSeek	
c.	Perplexity AI	
d.	Gemini AI	
e.	SciSpace AI	
f.	ResearchRabbit	
g.		
	Grammarly	
	Duolingo	

j.	Quizlet	
k.	Others	
If o	others, please specify.	
•••		
17.	. What do you usually use AI tools for?	
a.	To generate and create content	
b.	To receive guidelines	
c.	To enhance speaking fluency	
d.	To build your vocabulary	
e.	To copy ready-made answers	
f.	To correct your grammar	
g.	To obtain personalized feedback	
h.	To cheat in exams and assignments	
i.	To paraphrase and summarize materia	ls
j.	To find inspiration	
k.	To reduce personal cognitive efforts	
1.	To translate documents	
m.	Others	
If	others, please specify.	
•••		

18.	Do you think	that AI can	successfull	y replicate l	numan skills	and abilitie	es?
a.	Yes						
b.	No						
19.	Do you think	that the use	e of AI tools	may enhan	ce your perf	formance as	an EFL learner?
a.	Yes						
b.	No						
Ple	ease clarify yo	our answer.					
• • •							
					• • • • • • • • • • • • • • • • • • • •		
Sec	ction IV: The	Impact of	Artificial I	ntelligence	Use on Stud	lents' Ling	uistic Creativity
20.							the LC of an EFL
	learner? (Wi	th 1 being n	ot impactful	at all and 5	being highl	y impactful)
		1	2	3	4	5	
21	Among the f	following cr	eative skills	which one	do vou bel	ieve AI too	ls have helped you
21.	_	ionowing ci	cative skins	, winch one	do you bei	ieve M too.	is have helped you
	improve?						
a.	Problem-sol	ving					
b.	Critical think	king					
c.	Brainstormin	ng					
d.	Using figura	tive languag	ge				
(i.e	(i.e., irony, metaphor, simile, etc.)						
e.	Word play						

f.	f. Language structural manipulation	
g.	g. Use of humor	
h.	h. Storytelling	
i.	i. Semantic association	
j.	j. Others	
If o	If others, please specify.	
22	22. Since using AI, have you faced any challenges re	egarding your LC?
a.	a. Yes	
b.	b. No	
23	23. If yes, please list some of these challenges.	
24	24. When using AI-generated answers, do you usual	ly:
a.	a. Copy ready-made answers blindly without any m	nodifications
b.	b. Make slight changes	
(i.e	(i.e., use synonyms, change word order, or omit som	e elements, etc.)
c.	c. Use them as an inspiration to create your original	l product
25	25. On a scale of 1 to 5, to what extent do you follow	w the ethical guidelines governing the use
	of AI tools? (e.g., maintaining academic integrated	grity, credibility, etc.) (with 1 being not
	follow at all and 5 being highly follow)	

1	2	3	4	5

,	Thank you
	•••••
	•••••
ociow.	
below.	
20. If you have any further suggestions of comments, please do not hesitate to	y write them
26. If you have any further suggestions or comments, please do not hesitate to	o write them

RESUMÉ

Dans le domaine de l'apprentissage des langues, l'impact de l'intelligence artificielle (IA) sur divers phénomènes linguistiques est un sujet d'étude pertinent, car les systèmes d'apprentissage montrent des signes d'intégration de l'IA. Cette intégration a amené les contextes d'enseignement et d'apprentissage à s'interroger sur son impact sur la créativité linguistique (CL) des apprenants ; il est donc grand temps d'examiner l'influence potentielle de l'IA sur ce phénomène. Cette recherche vise donc à explorer les attitudes des enseignants et des étudiants d'anglais comme langue étrangère (ALE) quant au rôle de l'IA dans l'amélioration de la créativité linguistique des étudiants d'anglais comme langue étrangère (ALE). À cet égard, une approche mixte a été adoptée : deux questionnaires ont été administrés aux enseignants et aux étudiants d'ALE de l'Université de Guelma pour l'année universitaire 2024/2025, afin de recueillir des données quantitatives et qualitatives. Par conséquent, les résultats analysés révèlent que les enseignants et les étudiants d'ALE ont une attitude positive envers l'utilisation de l'IA pour améliorer la CL des étudiants d'ALE, à condition qu'ils en fassent un usage éthique et modéré. Pour garantir cette dernière, les départements d'ALE ont besoin d'intégrer un cours consacré à l'apprentissage de l'IA dans leur cursus. Mots clés : Intelligence artificielle, anglais langue étrangère, créativité linguistique, attitudes des enseignants et des étudiants.

ملخص

يُعد تأثير الذكاء الاصطناعي على الظواهر اللغوية المختلفة محورًا مهمًا في مجال تعلم اللغة، نظرًا لأنه يظهر تكاملا مع أنظمة التعلم. وقد جعل هذا الأخير سياقات التدريس والتعلم تتساءل عن تأثيره على الإبداع اللغوي لمتعلمي اللغة؛ وبالتالي، فقد حان الوقت لمناقشة مسار التأثير المحتمل للذكاء الاصطناعي عليه. لذلك، يهدف هذا البحث إلى استكشاف مواقف أساتذة وطلبة اللغة الإنجليزية كلغة أجنبية تجاه دور الذكاء الاصطناعي في تعزيز الإبداع اللغوي لطلاب اللغة الإنجليزية كلغة أجنبية وفي هذا الصدد، تم استخدام نهج مختلط الأساليب حيث تم الاعتماد على استبيانين لجمع بيانات كمية ونوعية تخص أساتذة وطلبة اللغة الإنجليزية كلغة أجنبية في جامعة قالمة للسنة الدراسية 2025/2024. تكشف النتائج التي تم تحليلها أن أساتذة وطلبة اللغة الإنجليزية كلغة أجنبية لديهم مواقف إيجابية تجاه استخدام الذكاء الاصطناعي لتعزيز الإبداع اللغوي لطلاب اللغة الإنجليزية كلغة أجنبية، شريطة أن يتبعوا الاستخدام الأخلاقي والمعتدل. ومنه، تحتاج أقسام اللغة الإنجليزية كلغة أجنبية أن تدمج مقررا دراسيا ضمن مناهجها الدراسية مخصص لتدريس مهارات الذكاء الاصطناعي. الكلمات المفتاحية: الذكاء الاصطناعي، اللغة الإنجليزية كلغة أجنبية، الإبداع اللغوي، مواقف الأساتذة والطلبة.